

## **China**

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### **Yunnan Rural Revitalization Demonstration Project Project Design Report**

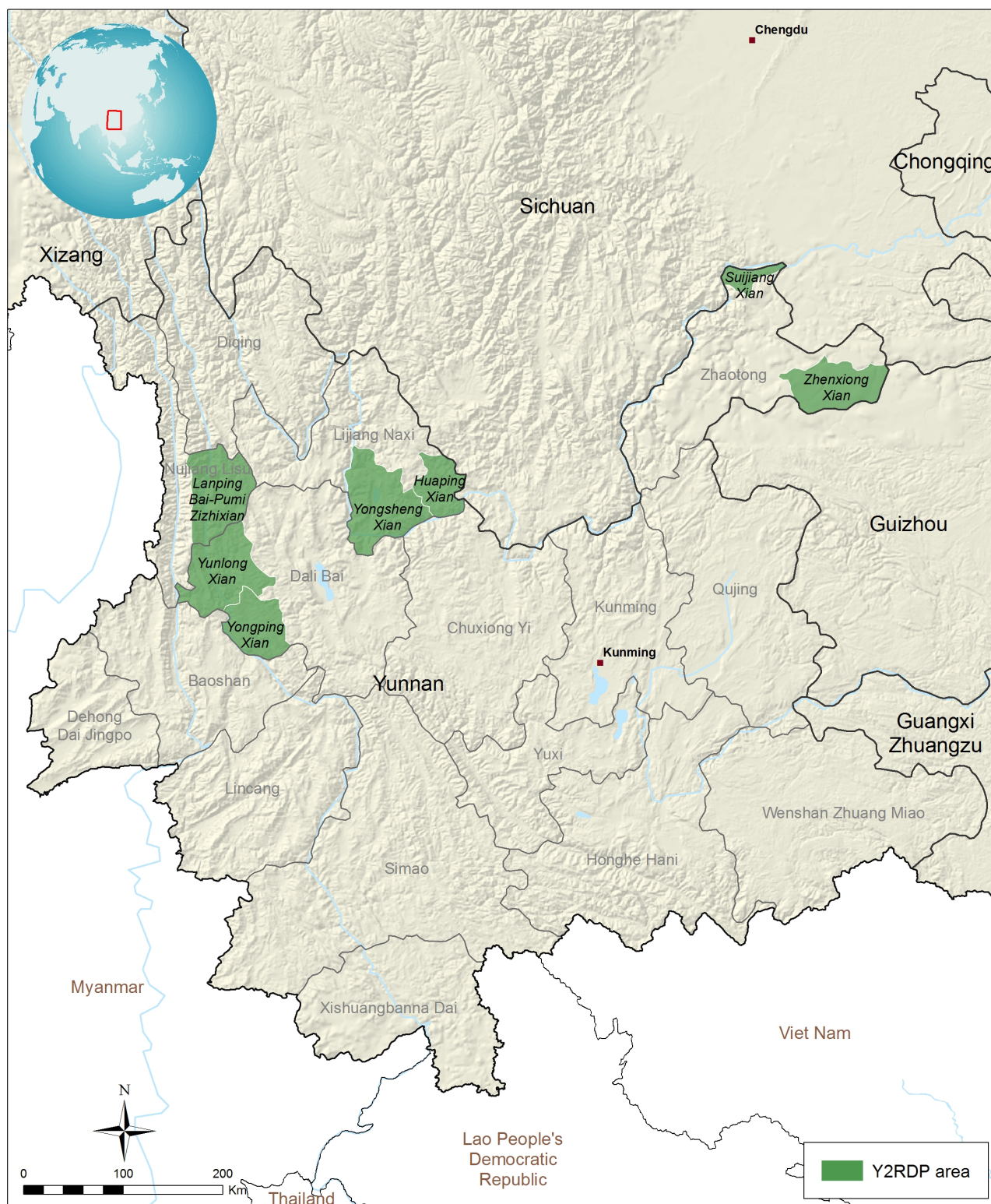
#### **Main report and annexes**

Mission Dates: 16 to 25 September 2019  
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Programme Management Department



## Map of the Project Area



The designations employed and the presentation of the material in this map do not imply the expression of any opinion whatsoever on the part of IFAD concerning the delimitation of the frontiers or boundaries, or the authorities thereof.

Map compiled by IFAD | 31-07-2019

## Abbreviations and Acronyms

<b>AII</b>	Agricultural Information Institute
<b>AWPB</b>	Annual Work Program and Budget
<b>CAAS</b>	China Academy of Agricultural Science
<b>CAFI</b>	China Academy of Financial Inclusion
<b>CIIC</b>	China Internet Information Center
<b>COSOP</b>	Country Strategic Opportunity Programme
<b>CPMO</b>	County Project Management Office
<b>DA</b>	Designated Account
<b>DARA</b>	Department of Agriculture and Rural Affairs
<b>DLI</b>	Disbursement-linked indicator
<b>DOF</b>	Department of Finance
<b>EIRR</b>	Economic Internal Rate of Return
<b>GPIG</b>	Global Poverty Reduction & Inclusive Growth Portal
<b>H2RDP</b>	Hunan Rural Revitalization Demonstration Project
<b>IPRAD-SN</b>	Innovative Poverty Reduction Program: Specialised Agribusiness Development in Sichuan and Ningxia
<b>IPRCC</b>	International Poverty Reduction Center in China
<b>IRF</b>	Integrated Risk Framework
<b>JIMAAPP</b>	Jiangxi Mountainous Areas Agribusiness Promotion Project
<b>KM</b>	Knowledge Management
<b>MARA</b>	Ministry of Agriculture and Rural Affairs
<b>MOF</b>	Ministry of Finance
<b>M&amp;E</b>	Monitoring & Evaluation
<b>MRV</b>	Measuring, Reporting and Verification System
<b>NDRC</b>	National Development and Reform Commission
<b>O&amp;M</b>	Operation & Maintenance
<b>PDRC</b>	Provincial Development and Reform Commission
<b>PforR</b>	Program for Results
<b>PLOG</b>	Program of Loans and Grants
<b>PMO</b>	Project Management Office
<b>PPMO</b>	Provincial Project Management Office
<b>QLMAPRP</b>	Qinghai Liupan Mountain Area Poverty Reduction Project
<b>RBL</b>	Result-based lending
<b>SDG</b>	Sustainable Development Goal
<b>SME</b>	Small and medium enterprises
<b>SPRAD-SS</b>	Sustaining Poverty Reduction through Agribusiness Development in South Shaanx
<b>SSADEP</b>	Shiyan Smallholder Agribusiness Development Project
<b>UNDAF</b>	United Nations Development Assistance Framework
<b>UNSDCF</b>	United Nations Sustainable Development Country Framework
<b>Y2RDP</b>	Yunnan Rural Revitalization Demonstration Project



## In line with IFAD11 mainstreaming commitments, the project has been validated as:

☒ Gender transformational ☒ Youth sensitive ☐ Nutrition sensitive ☒ Climate finance

IFAD Adaptation Finance	N/A
IFAD Mitigation Finance	N/A
Total IFAD Climate-focused Finance	\$0

## Executive Summary

### 1. Context

#### A. National context and rationale for IFAD involvement

##### a. National Context

- 1. The poverty context:** The government of China is planning to eradicate extreme rural poverty, measured against the prevailing national poverty standards (i.e. approximately US\$1.90/day), by 2020 - making China the first developing country to achieve SDG1, ten years ahead of the global target. However, sustaining this achievement, reducing inequalities (between coastal and western provinces, urban and rural areas, and among population, i.e. relative poverty), and avoiding that the people moved out of poverty fall back into poverty will remain priorities for the government in the years following 2020.
- 2. The rural development context.** China is going through a fundamental transformation in rural areas. Over the past decades, China has experienced a massive migration of the active workforce from the rural to the urban areas due to the gap between the urban and rural salaries and the limited income-generating opportunities in the rural areas. Rural villages today are characterized by a population which mainly comprises elderly, some middle generation women taking care of the elderly parents, young children, and sick and/or people with disabilities. Rural families from poverty vulnerable households are often dependent on the remittances provided by migrant worker family members, complemented by some income from production and local labour. In response to this situation, the government has recently coined a "rural revitalization" strategy (2017), a long-term, comprehensive strategy which aims at rebalancing the existing divide between urban and rural areas by accelerating the development of rural areas and making them attractive for living. Key strategies for pursuing and sustaining poverty reduction efforts and developing rural areas include: agricultural "industrialization" (i.e. the development of lead "industries" through the support of agro-enterprises and cooperatives), creation of employment opportunities, and comprehensive infrastructure development - among other strategies.
- 3. Provincial context:** Yunnan has consistently been a priority area of the Chinese government's poverty reduction program given it hosts the largest share of poor people in the country (11% of the national poor in 2018). In 2018, 88 out of 129 counties (mostly in the Western and North-East parts of the province) were still classified as nationally-designated poor counties. Although absolute poverty will be eradicated in these counties by 2020, many rural households will remain vulnerable and with limited income opportunities.

##### b. Special aspects relating to IFAD's corporate mainstreaming priorities

- 1. Gender and youth:** Ageing population, youth migration and feminization of the workforce are becoming common phenomenon in China's rural areas, including in the project area. About 55% of the workforce in the project area is engaged in migrant labour; more than half of the migrant workers are represented by youth between 15 and 34 year old of age. To revert this trend, a central pillar of the new rural revitalization strategy focuses on creating new employment opportunities in the rural areas to retain or attract back the active population to the rural areas, particularly young people. The project will contribute to this objective by (i) providing incentives and support to entrepreneurs and investors (particularly young and - considering women represent the majority of the workforce in the rural areas - women) to start their own business in the project area (Ref. Sub-component A.2); and (ii) facilitating women participation in supported cooperatives, including leading roles (Ref. Sub-component A.1).
- 2. Climate change:** The project area is moderately vulnerable to the effects of climate change. Future projections forecast that mean temperatures will further increase, total annual precipitation will increase, and seasonal variation will increase. This will result in more frequent and intensified extreme weather events. The project will contribute to reduce the risks and impacts associated to the changing of weather and climate conditions, in particular increase in variability and unpredictability, by strengthening the capacity of the government and beneficiaries to assess climate risks (including through better access to climate information and weather forecasts), and plan and decide accordingly, and improving the climate-resilience of the infrastructure system (Ref. Activity A.1.7 and Component B). 47% of IFAD financing can be considered as "climate finance".

3. **Nutrition:** Together with the enormous progress in poverty reduction over the past forty years, China made significant progress in improving the food security and nutritional status of its people. Similarly, Yunnan made significant progress in reducing malnutrition in the rural areas: stunting, prevalence of underweight, and wasting among children under 5 were less than 4%, about 1%, and about 0.7% respectively in 2018. Reducing child malnutrition is given high importance in the Yunnan Child Development Plan (2011-2020), and clear targets, in terms of prevalence of severe malnutrition, prevalence of moderate to severe anemia, and anemia prevalence of primary and secondary students, are set for the province. Data from project area the overall situation in the project area is not alarming and in line with the objectives of the provincial development plan. The project will contribute to improved nutrition outcomes by improving access to safe drinking water in the project area (Ref. Activity B.2.2).

### c. Rationale for IFAD involvement

1. **The development problem:** Although absolute poverty is expected to be eradicated in China by 2020, the areas that were classified as "poverty priority areas", including the proposed project area, will remain vulnerable and with limited income-generating opportunities. These areas are characterized by strong rural-urban migration, particularly among the youth, ageing population, and feminization of the workforce. Traditional small farms, with low value addition and ad hoc market outlets, cannot provide a reliable source of income, or require too much work to remain an attractive livelihood opportunity, also considering the remittances the family receives. As a result, a significant part of the population is moving out of agriculture - without however reliable alternative income opportunities. Preventing that the families that were brought out of poverty prior to 2020 fall back into poverty, and securing economic development of these areas in order to make them attractive for living will remain a challenge in the years after 2020. While the current mainstream approach for rural poverty reduction, notably *chaniye fupin* (poverty reduction through "industrialization", i.e. the development of lead "industries" through the support of agro-enterprises and cooperatives), has delivered results, and it will remain a central element of the new rural revitalization strategy, it has also shown several shortcomings: (i) the 'one-village-one-crop-one-enterprise' model which is implicit in the *chaniye fupin* model has several risks, including insufficient diversification on both the supply and demand side, and financial unsustainability due to the excessive reliance on government subsidies; (ii) using dragonhead enterprises (i.e. large enterprises pulling a value chain) as the main entry point for linking poor smallholders to market has not always been successful, with the result that several smallholders were transformed in land rent earners with little or no connection to agricultural activities - eventually forcing them to move out of agriculture; and (iii) cooperative development as an alternative entry point to achieve poverty reduction through industrialization also presented several shortcomings. The current situation offers an opportunity to re-think and adjust the current *chaniye fupin* model, and/or introduce and test new models and approaches, focusing on enhanced inclusiveness of vulnerable households, women and youth.
2. **Rationale for IFAD involvement:** While in the past IFAD was primarily considered as a source of concessional financing, in recent years IFAD has been increasingly viewed and appreciated as a development partner, whose "added value" lies in its capacity (through its loans) to introduce, test and pilot innovative approaches that, if successful, could inform policymaking and be replicated and/or mainstreamed in government programs - or shared to other developing countries through south-south cooperation. The current situation offers a unique opportunity for IFAD to support the government in re-thinking and improving the *chaniye fupin* model, addressing some of its shortcomings, and adjusting it to a post-2020 scenario: making it more fair, inclusive, and less demanding on public finance. IFAD has consistently supported the government in pursuing its poverty reduction agenda, working in the most marginal and vulnerable areas of the country. In recent years, IFAD has thematically focused on improving access of smallholders to markets by promoting inclusive value-chain and cooperative development, and on increasing the resilience of rural populations to climate change. IFAD has thus the credibility and the experience to support the government in improving its poverty reduction through agribusiness development models. The project is conceived as a "demonstration" project, which will introduce several innovative approaches to test their applicability in the project area's context, learn lessons, and induce replication of those models and approaches that demonstrate themselves successful and/or inform policy-making.

### B. Lessons learned

1. The design of the project benefited from lessons captured in the Evaluation Synthesis Report on Cooperatives of the Country Program Evaluation (2014), and the experience of several IFAD- and World Bank-funded projects, including SSADEP, JiMAAPP, QLMPRP, IPRAD, and SPRAD.

### 2. Project Description

#### C. Project objectives, geographic area of intervention and targeting strategy

1. **Project goal and development objective:** The project goal is to sustainably maintain the poor and vulnerable households in the project area out of poverty. The development objective is to enhance the income generating opportunities for the poor and vulnerable households in the project area, and the inclusiveness of the benefit-sharing mechanisms from agro-industries.

2. **Expected outcomes:** Expected outcomes include: (i) participation of poor and vulnerable households in rural economic growth enhanced; (ii) business opportunities for rural households enhanced; (iii) economic opportunities for women and youth enhanced; (iv) resilience to the negative effects of climate change enhanced.
3. **Project area:** The project will be implemented in seven currently nationally-designated poor counties within the four municipalities/prefectures of Zhaotong, Dali, Lijiang and Nujiang in the North-East and Western part of Yunnan province. Criteria for the selection of the counties included: poverty incidence, presence of industries with a market potential, and commitment of the local government to the objectives and proposed approach of the project.
4. **Targeting strategy:** The project will adopt the following targeting strategy:
  1. **Geographical targeting:** the project will target current or former nationally-designated poor counties, or counties with high poverty incidence, and - within these counties - priority will be given to relative backward villages and communities, i.e. villages and communities with a relatively high concentration (higher than county average) of registered- or formerly registered-poor.
  2. **Poverty targeting:** within the project area, focus will be given on relative poor (i.e. households who have been registered at least once in the National Poor Registration System since 2014).
  3. **Gender, youth and ethnic minorities targeting:** among the project beneficiaries, specific focus will be given to vulnerable groups (i) women; (ii) youth; and (iii) ethnic minorities.
5. **Beneficiaries:** In all, the project is expected to directly benefit an estimated 91,770 individuals, out of which about 25% are formerly registered poor, 50% women, 30% youth, and 60% belong to ethnic minorities (i.e. direct beneficiaries). The project is expected to indirectly benefit about 414,540 people, inside the project area with 88,200 households.

#### D. Components and sub-components

1. **Component A: Supporting Inclusive Rural Development:** This component aims at favouring the economic development of the project area, by (i) promoting improvements in one of the Government's currently adopted poverty reduction model and approach: *chanye fupin*, i.e. poverty reduction through "industrialization" (the development of lead "industries" through the support of agro-enterprises and cooperatives); and (ii) stimulating additional and more diversified income opportunities in the project areas, by providing services and stimulating local entrepreneurship, and attracting new investors in agricultural or (rural/resource-based) non-agricultural activities. This component is organized along three sub-components:
  1. **Sub-component A.1: Improving *chanye fupin* models:** This sub-component will support the piloting/demonstration of innovative/improved *chanye fupin* models, with specific focus on promoting/strengthening the role of cooperatives as vehicle/entry point for pursuing inclusiveness through agribusiness development. Supporting women cooperative members and managers will be given particular emphasis. One of the activities under this sub-component will be implemented **piloting a result-based lending approach**: disbursement for this activity will be triggered by the number of cooperatives that meet defined operational standards that make them 'pro-poor' (disbursement-linked indicator), as confirmed by an independent third-party verification agency.
  2. **Sub-component A.2: Stimulating entrepreneurship/attracting investors:** This sub-component will provide incentives and support to entrepreneurs and investors (particularly young and women) to start their own business in the project area, thus retaining young business-minded people in the project area - or attracting them from other areas.
  3. **Sub-component A.3: Improving access to finance:** This sub-component will stimulate financial service innovations to improve access to finance in the project area in support of Sub-component A.1 and A.2.
2. **Component B: Climate-proofed public infrastructure planning and development:** This component aims at improving and expanding the infrastructure systems in the project area through a combination of physical improvements, institutional strengthening and technical assistance to improve road access, water security, and prevent soil erosion, and reduce the risks and the impacts associated to changing weather and climate conditions and promote a sustainable and climate resilient agricultural production. This component is organized along two sub-components:
  1. **Sub-component B.1: Improving infrastructures' climate resilience:** This sub-component will support the improvement of climate-risk assessment, planning and decision-making, and the development and improvement of the underdeveloped and/or deteriorated water irrigation, water harvesting and water delivery systems in the project area.

2. **Sub-component B.2: Improving rural infrastructure system:** This sub-component will address some of the major gaps in the current infrastructure system in the project area, which may limit or constrain the implementation of the proposed project activities: incomplete rural road network, lack of drinking water and/or segmented, unlevelled and sloping agricultural land, etc. All infrastructures supported under this sub-component will be climate-proofed.
3. **Component C: Project Management, Knowledge Management, M&E, and Policy:** This component will support the planning, coordinating, monitoring, reporting and overall management functions of the project management offices (PMOs) at provincial and county level. An important partnership will be established with the Agricultural Information Institute, Center of International Agricultural Research of the Chinese Academy of Agricultural Science (AII-CAAS) for the provision of support in monitoring and evaluation functions, knowledge management, and policy engagement.

## E. Theory of Change

1. **Industrialization as key strategy for poverty reduction and rural revitalization:** Promoting thriving "industries" (i.e. agribusiness development) and linking them with farmers for income generation has been the primary approach in government poverty reduction programs (i.e. *chanyie fupin*, poverty reduction through industrialization). Agricultural "industrialization" remains a central pillar in the new rural revitalization strategy. However, persistent challenges remain in tackling poverty issues, sustaining poverty reduction results, and promote economic development in the so called "deep poverty" areas, such as those targeted by the project. **The current base scenario:** In the current base scenario, the project area and the relative poor and vulnerable households still face a mixture of constraints: (i) limitation in income-generating opportunities; (ii) outflow of rural labour force to urban areas and limited household resources for investments in agriculture or other economic activities; (iii) increasing trend of feminization of the agricultural workforce; (iv) limited scale of household land holding, preventing them from being competitive; and (v) inability of smallholders to effectively operate collectively and enter value chain. Furthermore, (vi) increasing rainfall variability and frequency of unusual weather events and other risks (price fluctuation & epidemics) are seen as growing uncertainties to agricultural production in the project area. **The shortcomings of the current approach:** While "industrialization" remains a key strategy for poverty reduction and for revitalizing the rural areas, the current approach which focuses on reaching the smallholder households through "dragonhead enterprises" has several shortcomings, does not always bring the desired results and/or guarantee sustainability. There are evident gaps in inclusiveness (linking to more poor farmers and households), fairness and equality (in benefit sharing), efficiency (of government support), and sustainability (lasting of relationship). At the same time, while strengthening the role and capacity of farmer cooperatives can offer a more viable approach to achieve the objectives of poverty reduction through industrialization and for sustaining the results, cooperative development in China also presented some major shortcomings: in many cases cooperatives are established (and controlled) by enterprises and/or large farmers, rather than by the spontaneous coordination of small farmers, resulting in little participation and control of the small farmers over the cooperative. Finally, the government also recognized that, while aiming largely to realize the immediate milestone of poverty eradication, many of the efforts and practices were not adequately thought through or will not be equally effective after 2020.
2. **Turning the challenges into opportunities:** The current situation offers an opportunity to introduce and test alternative approaches that could have potential value in informing the government on its pursuit for rural revitalization and sustainable poverty reduction. **The proposed approach:** The project would introduce improvements in the current *chanyie fupin* model, placing greater emphasis on the principles of diversification, inclusiveness, equality and sustainability. Through the proposed project interventions, rural villages and cooperatives, and proactive smallholder farmers (including youth, women and ethnic minorities) will be supported in developing initiatives around sustainable agriculture as well as rural-based non-farm opportunities. This will incorporate organizational innovations (e.g. shorter supply chains or digital payment mechanisms), along with improved agricultural practices that reduce the need for chemical inputs and take care of the environment and adapt to climatic risks. The project activities would also invest in improving productive and managerial capacities of women and increase their participation in decision making roles in community institutions. **How the approach will be operationalized:** This will be achieved through: (i) capacitating genuine cooperatives (rather than dragonhead enterprises) as the main entry point to link poor farmers to markets, and piloting alternative *chanyie fupin* models (Ref. Sub-component A.1); (ii) stimulating additional and more diversified income opportunities in the project areas by providing services and stimulating local entrepreneurship (especially among women and young farmers/migrant returnees), and attracting new investors in agricultural or (rural/resource-based) non-agricultural activities (Ref. Sub-component A.2); (iii) stimulating financial service innovations to improve access to finance in support of Sub-component A.1 and A.2 (Ref. Sub-component A.3); (iv) addressing some of the major gaps in the current infrastructure system in the project area (e.g. road access, water scarcity, etc.) which may limit or constrain the implementation of the proposed project activities, while at the same time reducing the risks associated to climate change (Ref. Component B).

## F. Alignment, ownership and partnerships

1. **Alignment with national priorities and strategies:** The project is well aligned with the national priorities and strategies as it will (i) contribute to the government's objective of sustaining the poverty reduction achievements in the years following 2020, in line with the principles of the rural revitalization strategy, where "sustaining poverty eradication efforts" represents a key priority in the strategy; (ii) promote agricultural industrialization, create employment opportunities, and develop the infrastructure system, in line with the rural revitalization strategic approach; (iii) contribute to make the project area economically more attractive, thus retaining migrant workers, and possibly attracting people back to the rural areas; and (iv) promote environmental sustainability, in line with the government's concepts of 'ecological civilization' and 'ecologically-balanced development'. The project is in addition aligned with and is expected to contribute to the Yunnan Young League's 'Action Plan of Youth Contribution to Rural Revitalization (2019-2022)'.
2. **Alignment with Sustainable Development Goals (SDGs):** The objective and activities of the proposed project are aligned with and will contribute to the Agenda 2030, and, more specifically to SDG1 (eradicating poverty), SDG2 (ending hunger and malnutrition, achieving food security and promoting sustainable agriculture), SDG5 (achieving greater gender equality and empower women), SDG10 (reducing inequality within China), SDG13 (reducing the impacts of climate change), and SDG15 (managing sustainably natural resources and halting and reducing land degradation).
3. **Alignment with COSOP 2016-2020:** The project is the third investment operation to be designed under the current 2016-2020 COSOP, and it well reflects the recent trend of focusing IFAD support towards enhancing income opportunities and increasing resilience by promoting and strengthening cooperatives, giving more emphasis to improving access to markets and value-chains, and resilience to climate change. The project supports the COSOP 2016-2020 strategic objectives 1 (Increase smallholders' capacity and opportunities to access markets) and 2 (Strengthen environmental sustainability and climate resilience), and particularly thematic area of focus 1.A (Support inclusive and safe value chain development), 1.B (Support inclusive cooperatives), 1.C (Support inclusive financial services), and 2.B (Mainstreaming environmental and climate resilience considerations). The project is also fully aligned with and supports the three COSOP 2016-2020 strategic thrusts (i.e. innovation, knowledge management to inform policy, and scaling-up). The project is conceived as a "demonstration" project, which will introduce several innovations (e.g. innovative *chanyie fupin* models, inclusive finance models, disbursement against results, climate-proofed design of infrastructure, etc.) to test their applicability in the project context, learn lessons, and promote replication of the models and approaches that demonstrate themselves successful.
4. **Alignment with UNDAF 2016-2020 and draft UNSDCF 2021-2025:** The project is in line with and contributes to the priority areas of the UNDAF 2016-2020, and particularly with priority area 1 (Reduction of Poverty and Equitable Development)/ outcome 1 (more people, particularly the vulnerable and disadvantaged, enjoy improved living conditions and increased opportunities for economic, social and cultural development), and priority area 2 (Improved and Sustainable Environment)/ outcome 2 (more people enjoy a cleaner, healthier and safer environment as a result of improved environmental protection and sustainable green growth). The project is also in line and is expected to contribute to the strategic priorities of the draft UNSDCF 2021-2025, currently under preparation, and particularly to strategic priority 1/ outcome 2/ output 2.1 (China demonstrates a strengthened enabling environment to stimulate public and private investment and support to overcome income inequality, particularly in rural areas), and strategic priority 2/ outcome 3/ output 3.1 (Farmers, fishers, and livestock owners - both male and female - have enhanced skills, ability, and access to adopt and implement sustainable and resilient practices in their work), and output 3.2 (The Government has strengthened capacity, resources, and incentives to develop, implement and enforce sustainable agriculture, production and consumption, and biodiversity conservation policies at national and local levels).
5. **Alignment with IFAD' Strategic Framework 2016-2025 and with IFAD11 mainstreaming agenda:** The objective and activities of the project are in line with the IFAD Strategic Framework 2016-2025 goal and strategic objectives, particularly strategic objective 2 (increase poor rural people's benefits from market participation) and strategic objective 3 (strengthen the environmental sustainability and climate resilience of poor rural people's economic activities). The project directly supports three of the four IFAD-11 thematic priorities, as it promotes gender empowerment, foster opportunities for the youth, and addresses or reduces the impacts of climate change.
6. **Alignment with Transition Framework:** The strategic approach of the IFAD country program in China (as elaborated in the COSOP 2016-2020) is in line and supports the principles of the Transition Framework (2018) in terms of adoption of a mix and diversified lending and non-lending instruments (e.g. investments, knowledge/policy dialogue, SSTC, etc.), increase co-financing (particularly domestic co-financing), and alignment with partners approach (e.g. contribution and alignment to/with UNDAF/UNSDCF). Specifically, the proposed project implements several of the principles and elements of the Transition Framework. In particular, it will (i) pilot one of the new proposed products under IFAD11 (i.e. the result-based lending, RBL), with the objective of informing IFAD on the applicability of this instrument widely across its portfolio; (ii) contribute to informing policy-making: a strategic partnership with the Chinese Academy of Agricultural Sciences (CAAS) will be established precisely to extract and document knowledge from the project and utilising it to inform policy making; and (iii) significantly contribute to increase co-financing, particularly domestic co-financing: the project is expected to mobilise resources in a 1:2.1

ratio, 50% above the IFAD11 target of 1:1.4 (and almost three-times above the 1:0.8 target for domestic co-financing), and above the COSOP target of 1:1.5.

## G. Costs, benefits and financing

### a. Project costs

1. **Project costs:** The total project cost is estimated at US\$ 234.5 million, including contingencies. The total base cost is US\$ 224.8 million; physical and price contingencies account for an estimated US\$ 9.7 million (i.e. 4.3% of the total base cost or 4.1% of the total project cost). Project costs are allocated among the three components as follows: (A) Supporting Inclusive Rural Development (49% of the total project cost); (B) Climate-proofed public infrastructure planning and development (47% of the total cost); and (C) Project Management, Knowledge Management, M&E, and Policy (4% of the total cost).

### b. Project financing/co-financing

1. **Project financing and co-financing:** IFAD will contribute to the project with a loan for a total amount of US\$ 74.8 million (32% of the total project cost). The Government will contribute US\$ 115.3 million (49% of the total cost), and participating enterprises and cooperatives are expected to contribute approximately US\$ 41.7 million (18% of the total cost). The beneficiaries' contribution is expected to be approximately US\$ 2.8 million (1% of the total cost). Costs by expenditure account are presented in Table 1 in Annex 3.
2. **Co-financing ratio:** The IFAD loan has a co-financing ratio of approximately 1:2.1. This is 50% above the IFAD11 target of 1:1.4 (and almost three-times above the 1:0.8 target for domestic co-financing).
3. **Climate financing:** As per the multilateral development banks' methodologies for tracking climate change adaptation and mitigation finance, the total amount of IFAD climate finance for this project is calculated as US\$ 35.16 million, which represents 47% of the total IFAD project amount.

### c. Summary of economic and financial analysis

1. **Results of the financial analysis:** The financial viability of the project has been assessed on the basis of a number of indicative economic activities that could be supported by the project. Results of the financial analysis, with- and without-project scenarios, of the different productive models show positive cash-flows even after the project closure, and reasonable financial returns in the range of 9-45%.
2. **Results of the economic analysis:** Project benefits have been estimated over a period of 20 years using a discount rate of 5%. The results of the economic analysis suggest that the project is economically viable, with an economic internal rate of return (EIRR) of 15.3% for the base case scenario, with a net present value (NPV) of US\$ 199 million.
3. **Results of the sensitivity analysis:** The results of the sensitivity analysis suggest that the project is relatively robust to changes in input prices and investment costs, while more sensitive to changes in benefits and output prices.

### e. Sustainability

1. **Sustainability:** There are several elements in the project that are likely to ensure post-project sustainability of the supported activities and generated benefits: (i) *Economic viability*, as suggested by the results of the economic analysis; (ii) *Alignment with national policies, strategies and priorities*: The project is fully aligned with and embedded in the key policies, strategies and priorities of the country. It is thus expected that the Government will continue to ascertain political commitment towards the project objectives, and ensure adequate human and financial resources to ensure that the project achievements are sustained after project completion; (iii) *Institutional sustainability and sustainable partnerships*: The project activities will be implemented by permanent government institutions and/or existing service providers in the project area, which will continue to exist and provide their services after project completion; (iv) *Beneficiary ownership and empowerment*: Ownership and commitment of beneficiaries (cooperatives, enterprises, investors, etc.) will be guaranteed through the business plan development and selection process, where agribusiness entities and investors are expected to present their own business ideas, and expected to take a financial risk by mobilizing their own resources, which the project will simply match through co-financing arrangements. Likewise, infrastructure (water and roads) ownership and organization of operation, maintenance and management will be supported prior to any infrastructure investment; (v) *Financial viability*: Financial viability will be one of the criteria for the selection of the business plans to be financed by the project. The results of the financial analysis of the different productive models that could be supported by the project show positive cash-flows even after the project closure, and reasonable financial returns; (vi) *Moving away from subsidizing production towards responding to market demand*: The project avoids building on the conventional 'subsidization' strategy which focused on subsidising production of predefined commodities, and is promoting a shift towards a more 'market-driven' approach, which focused on market demand, instead.



Sustainability of activities supported by the project will thus not depend on subsidies provided through the project, but will be ensured by the capacity of the supported entities to adequately respond to market demands; (vii) *Mainstreaming climate considerations into infrastructure development, and ensure O&M arrangements*: The anticipated effects of climate change will be taken into consideration in the planning and design process of the infrastructures to be supported by the project, and the anticipated impacts of climate change integrated into the technical specification of the infrastructure to mitigate climate risks. The establishment of Water Users Associations and Operation and Maintenance Associations, and the preparation of O&M plans are pre-conditions to any infrastructure investment supported by the project.

### 3. Risks

#### H. Project risks and mitigation measures

1. **Project risks:** Annex 9 presents the Integrated Risk Framework (IRF), with financial management risks reviewed in the financial management section below. In general, most of the identified risks (i.e. political and governance, macroeconomic, sector strategies, procurement, stakeholders) have low probability and low impact, except for risks inherent to institutional capacity, which are rated medium, and environmental and social risks, which are rated minor to moderate and are discussed in more details in Section I. Appropriate mitigation measures are identified and reported in Annex 9.
2. **Implementation readiness:** Implementation readiness is not considered a major risk (risks of delayed start-up are considered low). Yunnan has extensive experience in implementing foreign-funded projects, including IFAD-funded projects (the last one, YARIP, was completed in 2018). The PMO has experience in implementing an ADB-funded project. Geographical dispersion of project counties is common in internationally-financed project, and does not represent a factor that affects implementation readiness. In order to further mitigate the risks of start-up delays, provision for retroactive financing is made to the project to finance start-up activities and facilitate prompt execution of the project.

#### I. Environment and Social category

1. **Environment and Social category:** The project is classified as Category B. The Project has minor to moderate risks of adverse environmental impacts. All possible impacts are reversible in nature, and can be readily remedied by appropriate preventive actions and/or mitigation measures as outlined in the ESMP.

#### J. Climate Risk classification

1. **Climate Risk classification:** The potential climate risk of this project is classified as "moderate". To further reduce the potential negative impacts of climate change on the project investments, the project would adopt adaptation measures, e.g. (i) the project will refrain from investments in headworks (i.e. intake weirs), which are prone to flood damage; (ii) all physical infrastructures, and particularly on-farm irrigation works and rural roads, will be climate-proofed.

### 4. Implementation

#### K. Organizational Framework

##### a. Project management and coordination

1. **Lead implementing agency:** The Provincial Department of Agriculture and Rural Affairs (DARA) has been appointed as lead implementing agency. Specifically, the Farmland Enhancement Division within DARA would take lead responsibility for project design, management, supervision and evaluation, and will act as the Provincial Project Management Office (PPMO). Additional support will be mobilized from the Division of Cooperative Economy of DARA, and other divisions whenever needed.
2. **County Project Management Offices:** Major implementation responsibilities of the project lie with the counties. County Project Management Offices (CPMOs) will be established at the County Bureau of Agriculture and Rural Affairs. Relevant technical bureaus in the counties (such as water conservancy, meteorological, transportation bureaus, etc.) will be mobilized to support the project implementation in the related activities of the project as per need.
3. **Project Joint Meeting:** At provincial level, a coordinating committee comprising at least the Provincial Department of Finance (DOF), the Provincial Department of Agriculture and Rural Affairs (DARA), the Provincial Development and Reform Commission (PDRC), and the Provincial Office of Poverty Alleviation may be established to provide overall guidance and coordination of the project implementation. Involvement of the Women Federation, Youth League, the Meteorological Service, and Work Bureau is also recommended. Similar coordination committees led by the county mayors should be established at county level.
4. **Independent third-party Verification Agency:** An independent third-party verification agency will be contracted

by the project to verify that the disbursement-linked indicator target set for the activity that would pilot the result-based lending approach (A.1.1 - Promoting pro-poor farmer cooperatives) (i.e. number of cooperatives that meet defined operational standards) is achieved.

5. **Role of the Agricultural Information Institute of the Chinese Academy of Agricultural Science:** IFAD and the Agricultural Information Institute, Center of International Agricultural Research of the Chinese Academy of Agricultural Science (AII-CAAS) are entering into an agreement by which CAAS would provide support to IFAD in monitoring and evaluating the IFAD portfolio in China, extracting relevant knowledge from IFAD portfolio, and utilizing it to inform policy making. Within this context, the project would enter into an agreement with AII-CAAS for carrying out major functions related to M&E, knowledge management and policy dialogue, i.e. carrying out baseline, midline, and endline surveys, analysis of data, impact evaluations, policy notes, etc.
6. **Role of MARA:** In order to facilitate the possible scaling up of successful innovations promoted through the project beyond Yunnan province, and inform national policies, DARA is invited to strengthen the linkages with the Ministry of Agriculture and Rural Affairs (MARA). A budget for policy activities under Component C has been included to favour and provide sufficient resources to implement activities aimed - among alia - to this purpose.

## L. Learning, and KM

### a. Learning and Knowledge Management

1. **Learning and knowledge management (KM):** The project knowledge management strategy would be built on the following key elements: (i) an effective M&E framework will be established to monitor implementation progress, and would provide the evidence for learning; (ii) a baseline, mid-line, and endline survey will be conducted at the beginning, mid-term, and completion of the project; (iii) workshops at different levels will be held regularly to share knowledge, experiences, innovations, and best practices; (iv) study tours, exposure and exchange visits, both in the country and outside the country will be encouraged as a vehicle for sharing knowledge; (v) an agreement with the Agricultural Information Institute, Center of International Agricultural Research of the Chinese Academy of Agricultural Science (AII-CAAS) will be signed for the provision of support in M&E, and knowledge management.

### b. Innovation and scaling up

1. **Innovations:** One of the main objectives of the project is to introduce, test, pilot, and demonstrate innovative models, approaches, mechanisms, that - if successful - could be replicated and scaled-up, inform policy-making - or shared with other developing countries through south-south cooperation. Anticipated innovations include: (i) *Innovative chanyie fupin models:* The project will introduce and pilot an upgraded *chanyie fupin* model, where the role and capacity of farmer cooperatives to act as vehicle/entry point for pursuing inclusiveness through agribusiness development will be piloted. The project would promote cooperative standardization (i.e. the adoption of 'best operational standards' by cooperatives); the adoption of value-chain approaches by agro-business entities; business plans as strategic development tool for agro-business entities; and benefit-sharing mechanisms that allow active participation of the target group in the economic success of the cooperative and stimulate individual engagement in the cooperative's economic activity (Ref. Sub-component A.1); (ii) *Traceability systems:* The project will support the adoption of a traceability system at county level, a trusted system to ensure that food safety requirements are met and eventual breaches identified, thus generating consumer trust in food standards and certification (Ref. Sub-component A.1); (iii) *Business incubation centers:* The project will support the setting-up and operationalization of business incubation centers, platforms to support entrepreneurship programs and business start-up (Ref. Sub-component A.2); (iv) *Inclusive finance models:* The project will stimulate financial service innovations to improve access to finance in the project area (Ref. Sub-component A.3); (v) *Climate proofed design of infrastructure:* The project will support the improvement of the capacity to assess climate-risks, and plan and make investment decisions accordingly, and the integration of climate considerations into the design and technical specification of the infrastructures, to reduce their vulnerability to the anticipated impacts of climate change (Ref. Component B); (vi) *Disbursement against results:* The project will introduce on a pilot basis an innovative mechanism for disbursement, i.e. disbursing project funds allocated for a sub-set of activities (Ref. Activity A.1.1) against the achievement of agreed and independently verifiable targets or milestones that are considered important towards contributing to the achievement of the project objectives. The achievements of the agreed targets or milestones, or disbursement linked indicators (DLIs), will be verified by an assigned independent agency following agreed verification protocols. The disbursement against results will be piloted on a small scale by the project, and replication at a larger scale could be considered at mid-term on the basis of the positive results and lessons generated during implementation.
2. **Policy engagement and scaling-up:** The project is conceived as a 'demonstration' project, which will introduce several innovative approaches to test their applicability in the project area's context, learn lessons, and induce replication of those models and approaches that demonstrate themselves successful and/or inform policy-making. The policy engagement and scaling-up framework relies on the following elements: (i) *Champions:* The project will closely engage national and provincial stakeholders as champions to learn and replicate ideas and experiences derived from the project. Central level agencies such as the Ministry of Finance, (MOF) the National Reform and Development Commission (NDRC), and the Leading Group Office of Poverty Alleviation and Development (LGOP)

place great expectations on the capacity of IFAD-funded projects to introduce innovations and good practices that can be replicated or inform policy-making, and will closely observe the progress and results of the project. The Ministry of Agriculture and Rural Affairs (MARA) has a special interest on a number of features in the project, that may inform its policies and programs; (ii) *Drivers*: There is a mix of (i) market forces associated to the growing demand for safe and high quality food; and (ii) genuine policy interest from the government, particularly from the Ministry of Agriculture and Rural Affairs (MARA), in observing how some of its policies and strategies can be best operationalized or adjusted; (iii) *Pathway*: The pathway for policy engagement and scaling-up would include the following steps: (a) regular monitoring of project progress and results, which will provide evidence for learning; (b) learning and stocktaking of lessons and best practices, including through possible research/analytical works, impact assessments, etc. - this function will be supported by the Agricultural Information Institute of the China Academy of Agricultural Science (AII-CAAS), with which the project would enter into an agreement; (c) workshops, seminars and other learning events at different levels will be held regularly to share knowledge, experiences, innovations, and best practices and inform policy-makers. AII-CAAS is expected to play a critical role to disseminate relevant lessons from the project and inform policy-making; (d) *IFAD's role*: IFAD will contribute by providing the necessary expertise, contributing to the monitoring of the results and to the knowledge management that will catalyze the scaling-up process.

## 1. Context

### A. National context and rationale for IFAD involvement

#### a. National Context

1. **The poverty context:** The government of China is planning to eradicate extreme rural poverty, measured against the prevailing national poverty standards (i.e. approximately US\$1.90/day), by 2020 - making China the first developing country to achieve SDG1, ten years ahead of the global target. However, sustaining this achievement, reducing inequalities [1] (between coastal and western provinces, urban and rural areas, and among population, i.e. relative poverty), and avoiding that the people moved out of poverty fall back into poverty will remain priorities for the government in the years following 2020.
2. **The rural development context.** China is going through a fundamental transformation in rural areas. Over the past decades, China has experienced a massive migration of the active workforce from the rural to the urban areas due to the gap between the urban and rural salaries and the limited income-generating opportunities in the rural areas. Rural villages today are characterized by a population which mainly comprises elderly, some middle generation women taking care of the elderly parents (the so-called "left-behind women", who represent about 60% of the labour force in rural areas), young children, and sick and/or people with disabilities. Rural families from poverty vulnerable households are often dependent on the remittances provided by migrant worker family members, complemented by some income from production and local labour. Today, 42% of the population is registered in rural areas. This percentage is expected to drop to 31% by 2030, furthering the urban-rural divide, unless measures are taken to economically develop the rural areas. In response to this situation, the government has recently coined a "rural revitalization" strategy (2017), a long-term, comprehensive strategy which aims at rebalancing the existing divide between urban and rural areas by accelerating the development of rural areas and making them attractive for living. Key strategies for pursuing and sustaining poverty reduction efforts and developing rural areas include: agricultural "industrialization" (i.e. the development of lead "industries" through the support of agro-enterprises and cooperatives), creation of employment opportunities, and comprehensive infrastructure development - among other strategies.
3. **Provincial context:** Yunnan has consistently been a priority area of the Chinese government's poverty reduction program given it hosts the largest share of poor people in the country (11% of the national poor in 2018). In 2018, 88 out of 129 counties (mostly in the Western and North-East parts of the province) were still classified as nationally-designated poor counties. Although absolute poverty will be eradicated in these counties by 2020, many rural households will remain vulnerable and with limited income opportunities.

#### b. Special aspects relating to IFAD's corporate mainstreaming priorities

4. **Gender and youth [2]:** Ageing population, youth migration and feminization of the workforce are becoming common phenomenon in China's rural areas, including in the project area. About 55% of the workforce in the project area is engaged in migrant labour; more than half of the migrant workers are represented by youth between 15 and 34 year old of age.

Even though women represents the majority in the workforce in the project counties, women lead less than 5% of cooperatives and women have low participation in leadership roles in male-led cooperatives. Women hold less than 17% of leadership positions in the village. The household is regarded as the member of farmer's cooperatives as the basic production unit, yet, the household head (culturally the man), is registered as the member representing the household.

To revert this trend, a central pillar of the new rural revitalization strategy focuses on creating new employment opportunities in the rural areas to retain or attract back the active population to the rural areas [3], particularly young people. The project will contribute to this objective by (i) providing incentives and support to entrepreneurs and investors (particularly young and - considering women represent the majority of the workforce in the rural areas - women) to start their own business in the project area (Ref. Sub-component A.2); and (ii) facilitating women participation in supported cooperatives, including leading roles (Ref. Sub-component A.1).

5. **Climate change:** The average atmospheric temperature in China has increased by 0.9°C in the past 100 years. It is predicted that, with the continued intensification of climate change, the occurrence of extreme weather events and natural disasters will continue to increase. As poverty areas often coincide with climate and ecologically vulnerable areas, the effects of climate change will have a higher impact on rural, marginalized and natural resource-dependent households, who have higher exposure and lower adaptive capacity - increasing their overall vulnerability. The project area is moderately vulnerable to the effects of climate change. From 1961 to 2010, mean temperature in the project area has increased at a rate of 0.16°C per 10 years. Precipitations decreased in spring and autumn, and increased in summer. Frequency and intensity of extreme weather events increased, causing more seasonal

droughts and floods, with an adverse impact on soil erosion. Future projections forecast that mean temperatures will further increase, total annual precipitation will increase, and seasonal variation will increase. This will result in more frequent and intensified extreme weather events. The project will contribute to reduce the risks and impacts associated to the changing of weather and climate conditions, in particular increase in variability and unpredictability, by strengthening the capacity of the government and beneficiaries to assess climate risks (including through better access to climate information and weather forecasts), and plan and decide accordingly, and improving the climate-resilience of the infrastructure system (Ref. Activity A.1.7 and Component B). According to international methodologies for tracking climate change adaptation and mitigation finance, 47% of IFAD financing can be considered climate finance.

6. **Nutrition:** Together with the enormous progress in poverty reduction over the past forty years, China made significant progress in improving the food security and nutritional status of its people. Prevalence of undernourishment decreased from 24% in 1992 to 9% in 2016. Malnutrition prevalence in children under 5 years decreased from 38% to 9% (measured as height for age) and from 19% to 3% (weight for age) in the period 1987-2010. Stunting, underweight, and wasting among children under 5 years were 8%, 2% and 2% respectively in 2013. China's value in the Global Hunger Index fell from 25.1 in 1990 (serious hunger level), to 7.6 in 2018 (low hunger level). Similarly, Yunnan made significant progress in reducing malnutrition in the rural areas: stunting, prevalence of underweight, and wasting among children under 5 were less than 4%, about 1%, and about 0.7% respectively in 2018. Reducing child malnutrition is given high importance in the Yunnan Child Development Plan (2011-2020), and clear targets, in terms of prevalence of severe malnutrition, prevalence of moderate to severe anemia, and anemia prevalence of primary and secondary students, are set for the province. Delivery is mainly driven by the 'programs on health management for children under 6 years'. Limited data from the three project counties visited during design (i.e. Suijiang, Yunlong, and Yongping) showed that complementary foods are reasonably available, and that some of the targets (e.g. prevalence of moderate to severe anemia of children under 5 maintained under 12%) have already been achieved, suggesting the overall situation in the project area is not alarming and in line with the objectives of the provincial development plan. The project will contribute to improved nutrition outcomes by improving access to safe drinking water in the project area (Ref. Activity B.2.2).

### c. Rationale for IFAD involvement

7. **The development problem:** Although absolute poverty is expected to be eradicated in China by 2020, the areas that were classified as "poverty priority areas", including the proposed project area, will remain vulnerable and with limited income-generating opportunities. These areas are characterized by strong rural-urban migration, particularly among the youth, ageing population, and feminization of the workforce. Traditional small farms, with low value addition and ad hoc market outlets, cannot provide a reliable source of income, or require too much work to remain an attractive livelihood opportunity, also considering the remittances the family receives. As a result, a significant part of the population is moving out of agriculture - without however reliable alternative income opportunities. Preventing that the families that were brought out of poverty prior to 2020 fall back into poverty, and securing economic development of these areas in order to make them attractive for living will remain a challenge in the years after 2020. While the current mainstream approach for rural poverty reduction, notably *chaniye fupin* (poverty reduction through "industrialization", i.e. the development of lead "industries" through the support of agro-enterprises and cooperatives), has delivered results, and it will remain a central element of the new rural revitalization strategy, it has also shown several shortcomings: (i) the 'one-village-one-crop-one-enterprise' model which is implicit in the *chaniye fupin* model has several risks, including insufficient diversification on both the supply and demand side, and financial unsustainability due to the excessive reliance on government subsidies; (ii) using dragonhead enterprises (i.e. large enterprises pulling a value chain) as the main entry point for linking poor smallholders to market has not always been successful (Ref. Section on Lessons learnt), with the result that several smallholders were transformed in land rent earners with little or no connection to agricultural activities - eventually forcing them to move out of agriculture; and (iii) cooperative development as an alternative entry point to achieve poverty reduction through industrialization also presented several shortcomings (Ref. Section on Lessons learned). The current situation offers an opportunity to re-think and adjust the current *chaniye fupin* model, and/or introduce and test new models and approaches, focusing on enhanced inclusiveness of vulnerable households, women and youth.

### 8. Rationale for IFAD involvement:

1. **How the proposed intervention fits in the context of the evolving IFAD-China partnership - IFAD's added value:** While in the past IFAD was primarily considered as a source of concessional financing, in recent years IFAD has been increasingly viewed and appreciated as a development partner, whose "added value" lies in its capacity (through its loans) to introduce, test and pilot innovative approaches that, if successful, could inform policymaking and be replicated and/or mainstreamed in government programs - or shared to other developing countries through south-south cooperation. This represents the foundations of the current COSOP (2016-2020), which provides the framework for the design of this project. Although the next COSOP (2021-2025), which will provide the framework for the implementation of the project, has not yet been developed, it is expected that the expectations about the role and added value of IFAD in China in the near future would broadly remain the same. The current situation offers a unique opportunity for IFAD to support the government in re-thinking and improving the *chaniye fupin* model, addressing some of its shortcomings, and adjusting it to a post-2020 scenario: making it

more fair, inclusive, and less demanding on public finance.

2. **IFAD's "niche" in China - the rationale for working in poor areas on improving chanye fupin models:** Since 1981, when the first IFAD loan to China was approved, IFAD has supported the government in pursuing its poverty reduction agenda, working in the most marginal and vulnerable areas of the country. In recent years (Ref. COSOP 2016-2020), IFAD has thematically focused on improving access of smallholders to markets by promoting inclusive value-chain and cooperative development, and on increasing the resilience of rural populations to climate change. IFAD has thus the credibility and the experience to support the government in improving its poverty reduction through agribusiness development models. The project would upgrade the *chanyie fupin* model by strengthening the role and capacity of farmer cooperatives to act as a vehicle/entry point for pursuing inclusiveness through agribusiness development. The underlying hypotheses which underpin the proposed approach are: (i) smallholder agriculture can remain competitive by differentiating from the increasingly industrialized crop production and developing "niche" markets where consumers are willing to pay a premium price - and that such opportunities exist in the project area and can be tapped by smallholder farmers (organized in cooperatives) through partnerships with other value chain actors; and (ii) farmer cooperatives where poor households/individuals have 60-70% of the shares can be effective for poverty reduction.
3. **How the project will expand women's economic empowerment and strengthen women's role in decision-making making the project "gender transformative":** In line with Mainstreaming Gender-transformative Approaches in the IFAD Action Plan 2019-2025, the project intends to be gender transformative. As illustrated above, there is an increasing trend of feminization of the agricultural workforce. However, there isn't a subsequent increase in women's participation in cooperatives and decision making roles. The activities of the project will expand women's economic empowerment through access to finance and technology, strengthen women's role in community institutions, and address social norms by bringing more women in decision making positions in community institutions.
4. **How the project would inform policymaking and favour replication [4]:** The project is conceived as a "demonstration" project, which will introduce several innovative approaches to test their applicability in the project area's context, learn lessons, and induce replication of those models and approaches that demonstrate themselves successful and/or inform policy-making. The potential of this project to become a vehicle for policy engagement and scaling-up relies on the genuine interest from the central level agencies, particularly from the Ministry of Agriculture and Rural Affairs (MARA), in observing how some of its policies and strategies can be best operationalized or adjusted. The provincial Department of Agriculture and Rural Affairs (DARA), the lead implementing agency, will play a critical role as entry point to inform MARA. Key elements for pursuing policy engagement and scaling-up include: (i) regular monitoring of project progress and documentation of results, which will provide evidence for learning; (ii) stocktaking and analysis of lessons and best practices, including through possible research/analytical works, impact assessments, etc.; (iii) regular workshops, seminars and other learning events to share knowledge, experiences, innovations, and best practices and inform policy-makers; (iv) joint field-visits with relevant stakeholders and policy-makers to showcase lessons and best practices; (v) regular interaction with other projects to share lessons and best practices. Within this context, it is strategic the partnership that the project will pursue with the Agriculture Information Institute of the Chinese Academy of Agricultural Science (AII-CAAS) to receive support in monitoring and evaluation, extracting relevant knowledge from the project, and utilizing it to inform policy making.
5. **Complementarity with other lending and non-lending instruments:** According to the COSOP 2016-2020, the implementation of the IFAD country program in China will be pursued through three complementary instruments/delivery mechanisms: investment loans, non-lending activities (which would include analytical works, technical assistance, impact assessments, policy engagement, south-south cooperation), and partnerships. The three instruments/delivery mechanisms are jointly expected to contribute to the COSOP' strategic objectives: increase smallholder capacity and opportunities to access markets, and strengthen environmental sustainability and climate resilience. This project should be seen as synergetic and complementary to the other ongoing and planned activities: it will further pilot and test different approaches of poverty reduction through agribusiness development, which represented the thematic focus of the last five IFAD-funded projects (in six different provinces) in China and of the next investment in pipeline in Hunan, offering additional insights on the factors and conditions that make different 'poverty reduction through agribusiness development' models more or less successful. In addition, the project well complements the analytical works on value chain development and poverty reduction carried out by the China Agricultural University (CAU) and the China Academy of Agricultural Sciences (CAAS) under the country grant "Enhancing Knowledge Management & Cooperation and Policy Dialogue" (Value chain models for poverty reduction, and E-commerce for value-chain development in poverty areas), and the planned analytical work on digital finance for smallholders carried out in partnership with the China Academy of Financial Inclusion (CAFI). If successful, the approaches piloted under the project can be documented and shared with other developing countries through the Global Poverty Reduction & Inclusive Growth Portal (GPIG), a digital platform hosted by the International Poverty Reduction Center in China (IPRCC) and the China Internet Information Center (CIIC) aimed at favouring south-south knowledge cooperation on poverty reduction and inclusive growth - as in the case of the "pro-poor private-public partnership" model piloted under the IFAD-funded SSADeP.



## B. Lessons learned

9. The design of the project benefited from lessons captured in the Evaluation Synthesis Report on Cooperatives of the Country Program Evaluation (2014), and the experience of several IFAD- and World Bank-funded projects, including SSADEP, JiMAAPP, QLMPRP, IPRAD, and SPRAD.

Lesson	How the lesson has been incorporated in the project
<ul style="list-style-type: none"> <li> <b>Poverty reduction through direct support to dragonhead enterprises evidenced shortcomings:</b> Most of government's past efforts to reduce poverty through 'industrialization' (i.e. <i>chanye fupin</i>) focused on directly supporting (through incentives, subsidies, preferential access to finance, etc.) local dragonhead enterprises, under the assumption that the economic benefits generated by the enhanced industries would trickle down to the surrounding population, including the poor. However such approach demonstrated some limitations, as: (i) highly dependent on government subsidies, which are likely to decrease after 2020, when poverty will be eradicated, and thus not sustainable in the long run; (ii) not necessarily inclusive, as limited attention in the model was paid to targeting and the benefit sharing mechanisms (in most cases, land leasing and dividends were the preferred benefit sharing mechanisms); and (iii) expensive: because limited attention was paid on targeting and benefit sharing mechanisms, most of the resources were captured by the enterprise and only limitedly reached the target population, making the investment/benefit ratio extremely high. </li> </ul>	<ul style="list-style-type: none"> <li> The project aims at improving the government's currently adopted poverty reduction through industrialization model (<i>chanye fupin</i>) by introducing and piloting different delivery mechanisms, that - if successful - can be replicated. Particularly: <ul style="list-style-type: none"> <li>(i) The project will not provide direct support to dragonhead enterprises (or enterprises in general): the project will primarily focus on cooperatives as the main entry point for investments;</li> <li>(ii) Joint cooperatives-agribusiness enterprises [5] partnerships, where the enterprise is a partner in an out-grower partnership arrangement, will be considered (Ref. Activity A.1.3). However, enterprises will not be eligible for receiving grant financing for their own assets from the project;</li> <li>(iii) The project will promote benefit sharing mechanisms that allow active participation of the target group in the economic success of the cooperative (i.e. income from production, wage labour, or dividends as active member in a cooperative. Using land as a share will be given preference over leasing the land for an annual or one-time payment).</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li> <b>Farmers cooperatives are an important force to facilitate farmers' access to market:</b> The Evaluation Synthesis Report on Cooperatives of the Country Program Evaluation (2014) highlighted that farmers' cooperatives are an inevitable outcome of China's recent rural economic development, and an important force to link farmers to markets, as they contribute to: (i) provide funding support for the poor farmers; (ii) reduce production and transactions costs; (iii) generate economies of scale effect(s); and (iv) improve the comprehensive quality of farmers. </li> </ul>	<ul style="list-style-type: none"> <li> In order to maximize the benefits for the project target group, some of the criteria for farmer cooperatives to be supported by the project include: (i) a critical balance between business strength (generally from non-poor members) and appropriate inclusiveness of vulnerable and poor households; (ii) transparency in business decisions and financial accounts to reduce elite capture and social disruptions; (iii) the application of fair benefit-sharing arrangements, which allow participation of the cooperative members in the business success of the cooperative, and stimulate individual engagement in the cooperative's economic activity; and (iv) shareholding structures and mechanisms which provide sufficient attractiveness for the necessary financial capital or land asset contribution. </li> </ul>

<ul style="list-style-type: none"> <li>● <b>The shortcomings of the cooperative development in China:</b> Over the past ten years, the number of farmer cooperatives in China has rapidly increased. However, the overall cooperative development in China presents some major shortcomings: <ul style="list-style-type: none"> <li>(i) In many cases cooperatives are established (and controlled) by enterprises and/or large farmers, rather than by the spontaneous coordination of small farmers dealing with the same problems. As a result, small farmers have little participation and control in the cooperatives;</li> <li>(ii) In other cases, cooperatives are created 'top-down', headed by village leaders, with every household considered as a member (i.e. the so-called 'village cooperatives'). However, such village cooperatives lack the features of self-elected governing and decision-making business entities, and lack financial independence and transparency.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>● Strengthening the role and capacity of farmer cooperatives in critical to achieve the objectives of poverty reduction through industrialization, and for sustaining the results. The success of farmer cooperatives in generating the economic benefits for their members in general, and for their poor members in particular, depend on their ability to meet operational standards (in terms of membership, financial management capacity, transparency, governance and decision making processes, etc.) and poverty alleviation commitments (in terms of inclusiveness of poor households, and fair shareholding and benefit sharing mechanisms).</li> <li>● The project will not support either the cooperatives controlled by an enterprise and/or large investor, or the village cooperatives, as they are not likely effective to create ownership, empowerment and self-development of the project target group.</li> </ul>
<ul style="list-style-type: none"> <li>● <b>The shortcomings of the 'large or lead households' and/or 'enterprises shareholding' cooperative model:</b> An analysis carried out under three World Bank's projects supporting some 500 farmer cooperatives in China, which classified cooperatives into six basic organisational models along asset ownership, involvement of large or lead households and enterprises and shareholding characteristics, showed that pure smallholder or poverty household cooperatives have extremely limited chances for financial success. Enterprise shareholding in cooperatives or large investors owning majority shares raise the financial success significantly, but hardly allow enough transparency and fairness in the profit sharing.</li> </ul>	<ul style="list-style-type: none"> <li>● The project design uses a balance between inclusiveness and benefit-sharing mechanisms on one hand, and the likelihood of economic success, which requires involvement of investors and better-off households on the other hand. These models have been successfully field tested in Guizhou and Guangxi under the World Bank projects.</li> </ul>
<ul style="list-style-type: none"> <li>● <b>The improvement of cooperative operations is an important objective in government programs.</b> The government has been supporting farmer cooperatives mainly by providing investments in productive assets and infrastructures, and in subsidizing farm inputs and trainings. <b>However, limited success has been achieved</b>, mainly because the traditional support programs are 'input oriented' and pay for expenses, rather than focusing on outputs and outcomes.</li> </ul>	<ul style="list-style-type: none"> <li>● The project would pilot a different incentive system to provide incentives to the cooperatives to meet the standards and conditions needed to achieve the expected economic performance and poverty reduction impact, whereas public support will not be provided in the form of productive assets and inputs, but as payment upon achievement of a certain result (i.e. the achievement of certain operational standards in terms of governance, membership, decision-making arrangements, financial management standards, benefit-sharing mechanisms, etc.). This approach will be piloted in Activity A.1.1 adopting a result-based lending approach.</li> </ul>

<ul style="list-style-type: none"> <li>• <b>Limited attention to post-production, value-addition and marketing:</b> Government's conventional agricultural development strategies have mainly focused on production/productivity enhancement, with emphasis on infrastructure development rather than on post-production, value-addition and marketing, which did not necessarily take advantage of the emerging market opportunities, and in some cases resulted in cases of local overproduction which led in drops in the price of commodities and farmers' income.</li> </ul> <p>As observed in the Evaluation Synthesis Report on Cooperatives of the Country Program Evaluation (2014), some of the shortcomings observed in the past programs that include a value-chain development module is that the module is not complete as the government mainly provides support for expansion of production, and is lacking a market operation mechanism. Selling of the products is often only considered a next step deferred after the project.</p>	<ul style="list-style-type: none"> <li>• The project will promote the adoption of a 'market-driven' approach (i.e. it will support cooperatives to identify and respond to markets' demands). While not excluding support to increasing/expanding production base [6], preference would be given to proposals that promote 'value-addition' (i.e. processing, product differentiation and certification, traceability, branding, marketing, etc.), as value-addition is expected to generate higher profits, and shortening of the value-chain (i.e. linking cooperatives to end-consumers, using e-commerce and direct sales arrangements with supermarkets, etc.).</li> <li>• The project will take several measures to promote a 'market-driven' approach: (i) the project moves away from a government designed investment package for farmer cooperatives to a demand-driven support of business opportunities identified in business plan proposals. To be financed, each business plan needs to demonstrate market demand and a market operation mechanism with satisfactory financial viability criteria; (ii) cooperatives need to attract a private co-investor matching the project investment at least on a 1:1 basis. The private investor will introduce management and business expertise and understanding: through such risk sharing it will contribute to market and business orientation; and (iii) investments in production will follow a 'contract farming approach' and will be based on joint business plan prepared by a market partner (enterprise) and a farmer cooperative.</li> </ul>
<ul style="list-style-type: none"> <li>• <b>The increasing weight of non-agricultural activities in the rural household's income:</b> Greater emphasis in previous projects has been placed on making agriculture activities more profitable for poor smallholders, with the objective of increasing their income. However, evidence shows that, following the fundamental transformation that rural China is experiencing, income from agricultural activities represents today - on average - a relatively small percentage of the overall income of a rural household.</li> </ul>	<ul style="list-style-type: none"> <li>• The project would combine activities aimed at promoting value-addition, shortening the value-chain, and making the benefit-sharing mechanisms more fair and inclusive (ref. Sub-component A.1) with activities aimed at stimulating entrepreneurship, including off-farm/non-agricultural activities (Ref. Sub-component A.2), with the overall objective of offering additional and more diversified income-generating opportunities to the households in the project area.</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Pricing in RBLs - Emerging lessons from the World Bank's Guangxi Poverty Reduction Program for Results (PforR):</b> In principle, pricing for RBLs can be either 'cost/expenditure-based' (i.e. disbursements are triggered by the documented execution of eligible expenditures), or 'value/incentive-based' (i.e. the required incentive to trigger the operator to deliver the outcome/result). The former method however presents several problems, as several actions that are critical to the achievement of the outcome/result are not directly related to expenditures. The World Bank Poverty Reduction PforR, approved in June 2018, adopts a value/incentive-based pricing.</li> </ul>	<ul style="list-style-type: none"> <li>• The design team proposed the adoption of the value/incentive-based pricing for the pilot RBL activity in the project, and the agreement of a fixed or average price per cooperative, rather than a different price for each individual cooperative.</li> <li>• However, understanding the proposed approach was not consistent with the Draft Guidance Note on Project and Programmatic Results-Based Lending (November 2018), the project eventually decided to adopt an expenditure-based approach for setting the fixed average price in the pilot RBL activity (Activity A.1.1).</li> </ul>

<ul style="list-style-type: none"> <li>• <b>The perverse incentive of decentralized repayment responsibilities:</b> Experiences from previous projects (e.g. SSADEP and JIMAAPP) showed that in those cases where the loan repayment responsibility is transferred to the local county authorities, and from them to the beneficiaries (i.e. agro-enterprises, cooperatives, or poor households) a perverse incentive is created whereas local authorities have an incentive to select among the entities to support those who could offer the highest likelihood of repayment, which are not necessarily those that are more functional to the achievement of the project objectives.</li> </ul>	<ul style="list-style-type: none"> <li>• As in most recent IFAD-funded projects (e.g. SPRAD and IPRAD), it was proposed that project funds be not on-lent to the project counties, but repaid by the Yunnan province. Counties would use project funds as grants for targeted entities. This would allow better targeting of project beneficiaries.</li> <li>• Unfortunately, during Appraisal, the province informed it had already reached its debt ceiling, and thus decided to on-lend the IFAD loan to the project counties. In order to mitigate the risk of the perverse incentives that such loan repayment modality could generate, it is agreed that the loan on-lent to the counties cannot be further on-lent to the beneficiaries, i.e. the project resources will be transferred to the beneficiaries as a grant.</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Limited policy-influence of results/lessons from IFAD-funded projects:</b> Recent assessments and evaluations indicated that IFAD-funded projects had a positive impact on the ground, but that the results/lessons generated by the projects had limited influence on policy-making.</li> </ul>	<ul style="list-style-type: none"> <li>• The project will partner with the Agriculture Information Institute, Center of International Agricultural Research of the Chinese Academy of Agricultural Science (CAAS) to receive support in monitoring and evaluation, extracting relevant knowledge from the project, and utilizing it to inform policy making.</li> </ul>

## 2. Project Description

### C. Project objectives, geographic area of intervention and target groups

10. **Project goal and development objective:** The project goal is to sustainably (i.e. in economic, social, and environmental terms - including climate risk resilience) maintain the poor and vulnerable households in the project area out of poverty. The development objective is to enhance the income generating opportunities for the poor and vulnerable households in the project area, and the inclusiveness of the benefit-sharing mechanisms from agro-industries.

This will be achieved by (i) strengthening and supporting cooperatives committed to poverty alleviation in terms of inclusiveness of poor households among their members and fair shareholding and benefit sharing mechanisms to become more competitive and generate more revenues (Ref. Sub-component A.1); (ii) stimulating additional and more diversified income opportunities in the project areas, by providing services and stimulating local entrepreneurship, and attracting new investors in agricultural or (rural/resource-based) non-agricultural activities (Ref. Sub-component A.2); (iii) improving access to finance (Ref. Sub-component A.3); and (iv) addressing some of the major gaps in the current infrastructure system in the project area which may limit or constrain the implementation of the proposed project activities (Ref. Component B). Climate change considerations will be mainstreamed throughout the project by strengthening the capacity of the government and beneficiaries to assess climate risks and identify adaptation options - and plan and decide accordingly, and improving the climate-resilience of the infrastructure system. Special focus will be at strengthening women's involvement in decision-making and leadership roles in cooperatives and entrepreneurship.

11. **Key indicators:** The impact of the project would be measured through the following key indicators: (i) increase in households' income; (ii) new jobs created; (iii) increase in cooperatives' sales; (iv) increase in number of cooperatives engaged in formal partnerships/contracts with public or private entities; (v) participating women report an adequate empowerment score in pro-WEAI index; (vi) increase in people adopting environmentally sustainable and climate resilient practices; (vii) reported reduced water shortages; and (viii) number of policies completed - among other indicators (Ref. Annex I - Logframe). Indicators will be disaggregated by gender, age, and ethnic group, when relevant.
12. **Disbursement-linked indicator:** In addition to the key indicators above, output indicator 1.1 (i.e. Number of pro-poor professional farmer cooperatives meeting agreed operational standards) will be used as disbursement-linked

indicator for Activity A.1.1, i.e. the indicator that will be used to trigger the disbursement of funds for activity A.1.1, in line with the result-based lending approach that will be pilot under this project.

13. **Expected outcomes:** Expected outcomes include: (i) participation of poor and vulnerable households in rural economic growth enhanced; (ii) business opportunities for rural households enhanced; (iii) economic opportunities for women and youth enhanced; (iv) resilience to the negative effects of climate change enhanced.
14. **Project duration:** The project will be implemented over a period of 5 years [7].
15. **Project area:** The project will be implemented in seven currently nationally-designated poor counties within the four municipalities/prefectures of Zhaotong, Dali, Lijiang and Nujiang in the North-East and Western part of Yunnan province (i.e. Zhenxiong and Suijiang counties in Zhaotong municipality; Yunlong and Yongping counties in Dali prefecture; Huaping and Yongsheng counties in Lijiang municipality; and Lanping county in Nujiang prefecture). Criteria for the selection of the counties included: poverty incidence (nationally- or provincially-designated poor county), presence of industries with a market potential, and commitment of the local government to the objectives and proposed approach of the project.
16. **Ethnic minorities in project area:** Yunnan has 25 of the 55 ethnic minority groups of the country. Five of the seven project counties are located in the so-called "cultural diversity area" of Yunnan. Dali and Nujiang are classified "minority autonomous prefectures". In Lijiang prefecture, 60% of the population belong to ethnic minority groups. Overall, about 29% of the population in the project area belong to ethnic minority groups. Main ethnic minority groups in the project area are: Hui, Bai, Yi, Miao, Lisu, Naxi, Lahu, Pumi, Dai and Nu people.
17. **Targeting strategy:** The project will adopt the following targeting strategy:
  1. **Geographical targeting:** the project will target current or former nationally-designated poor counties, or counties with high poverty incidence, and - within these counties - priority will be given to relative backward villages and communities, i.e. villages and communities with a relatively high concentration (higher than county average) of registered- or formerly registered-poor. Based on the above criteria, 172 villages in 29 townships have been pre-identified for project implementation, which represent about one-fifth of the villages in the project counties. The project would cover about 19% of the poor villages in the project counties. Poverty incidence in the project area is about 23%, about one-third higher than county average (17%) and four-time higher than provincial average (5%). Net income per capita in the project area is about 13% lower than provincial average and 8% lower than county average.
  2. **Poverty targeting:** within the project area, focus will be given on relative poor (i.e. households who have been registered at least once in the National Poor Registration System since 2014). It is in fact expected that no more households will be in the NPRS after 2020.

***The advantages of relying on 'households who have been registered at least once in the National Poor Registration System since 2014' as targeting category:***

Adherence to this category for targeting offers several advantages: first, it allows precise targeting; second, it ensures full alignment with government poverty reduction strategies and efforts, as government is expected to keep track of the formerly registered poor after 2020 to avoid they fall back into poverty; and third, it enables the project to broadly target 'vulnerable' households (rather than strictly 'poor' households), as several of the formerly registered poor may have actually moved out of poverty in the period 2014-2020, but they would still remain vulnerable to shocks.

While the targeting strategy "focuses" on formerly registered poor, it does not however exclude households that have never been poor in the period 2014-2020, but may become poor after 2020. The measures that the project puts in place to minimize the risk of excluding people who become poor for the first time after 2020 include the financing rules for approval of business plan proposal, where inclusion of poor households is one of the criteria for accessing project co-financing.

The risk of exclusion is thus considered minimal. However, it is also possible that some poor households give preference to different livelihoods strategies (for instance, continue to rely on migrant labour), and decide not take advantage of the opportunities provided by the project interventions.

3. **Gender, youth and ethnic minorities targeting:** among the project beneficiaries, specific focus will be given to vulnerable groups (i) women; (ii) youth (i.e. people between 18-45 years of age [8]); and (iii) ethnic minorities. Particularly, the project will actively favour women and youth participation to/benefit from project activities as follows:

1. **Women targeting strategy:** (1) Women participation in supported cooperatives will be promoted as follows:

- (i) Women-led cooperatives will be encouraged: the project will support at least two women-led cooperatives per county; (ii) Gender eligibility criteria will be applied to select the cooperatives to be supported by the project: percentage of women in the cooperative should be higher than the percentage of women in the local village; women should be included in the cooperative's board; at least 60% of the participants to trainings and capacity building activities should be women; (2) Women entrepreneurship will be favoured by awarding at least 25% of the start-up investment support to women.
2. *Youth targeting strategy*: (1) Youth participation in supported cooperatives will be promoted by supporting at least one youth-led cooperative per county; (2) Youth entrepreneurship will be favoured by awarding at least 50% of the start-up investment support to youth, of which 50% will be for young women.
3. *Ethnic minorities targeting strategy*: Ethnic minorities in the project area are in general well integrated in the existing socio-economic context, have livelihood strategies similar to those of the other rural populations, are not excluded from existing economic opportunities, are not discriminated, and have not distinct needs from the rest of the population. They are vulnerable not because belonging to an ethnic minority group, but because they live in poor and not well developed areas. Government policies targeting rural poor and vulnerable households do not differentiate based on ethnicity, but target based on poverty indicators. The project engagement approach with pro-poor cooperatives and agro-businesses will be based on informed consultations to ensure that particular livelihood strategies of the different ethnic groups are taken into account, where existing.
18. **Beneficiaries**: In all, the project is expected to directly benefit an estimated 91,770 individuals, out of which about 25% are formerly registered poor, 50% women, 30% youth, and 60% belong to ethnic minorities (i.e. direct beneficiaries). The project is expected to indirectly benefit about 414,540 people, inside the project area with 88,200 households.
19. **The added value of the infrastructure component in terms of outreach of targeted population**: Unequal availability, access, and quality of infrastructures is often quoted as one of the main factors of regional inequalities, particularly between better-off and poorer areas. In this context, the improvement of the infrastructure system in the project area is expected to overall develop the project area and improve the conditions and reduce the gap with more developed areas of the province. As the benefits generated by public infrastructures can be considered public goods, and as such equally accessible to the whole population of the project area, it is difficult to claim that the project target group will benefit more from the improved infrastructure system than the rest of the population. However, considering that poverty incidence in the project area is higher than the county and provincial average, it can be argued that overall the infrastructures supported by the project would incrementally benefit more IFAD target group. That being said, selection of the infrastructures to be supported by the project (particularly production roads, irrigation systems and land improvement) would in principle follow and be driven by the selection of the cooperatives to be supported. Improvement of safe drinking water supply systems will primarily benefit villages and households that do not have yet access to safe drinking water, i.e. the poorest.
20. **How support to cooperatives would ensure outreach to the target population**: The project will provide technical and financial support as an incentive to selected cooperatives to stimulate them to establish inclusive and fair relationship with the project target group. Practically, the project will co-finance competitively-selected business plans as a means to efficiently allocate public resources to cooperatives or enterprise-cooperative joint ventures to promote the inclusion of the project target group in sustainable and profitable value chains through mutually beneficial contractual arrangements. The selection of the business plans will be on a competitive basis and will be based on selecting criteria, including: (i) project target group outreach; (ii) definition of fair and sustainable contractual arrangements with the project target group; and (iii) viability and sustainability of the proposal, among other criteria. The project would give preference to benefit sharing models which allow active participation of the target group beneficiaries in the economic success of cooperatives and enterprises (i.e. income from production, wage labour, or dividends as active members in a cooperative). Using land as a share would be given preference over leasing the land for an annual or one-time payment, but land leasing is acceptable as it reflects individual choice (i.e. risk perceptions) of part of the target group. The project engagement approach with pro-poor cooperatives and agro-businesses will be based on informed consultations to ensure that particular livelihood strategies of the different ethnic groups are taken into account, where existing. This will include discussions with subgroups (women, youth and ethnic minorities) to insure the aspirations, inclusion barriers and needs of these groups are considered in the cooperative and agro-business development strategies, activities and investment plans.

## D. Components/outcomes and activities

21. **Component A: Supporting Inclusive Rural Development**: This component aims at favouring the economic development of the project area, by (i) promoting improvements in one of the Government's currently adopted poverty reduction model and approach: *chanye fupin*, i.e. poverty reduction through "industrialization" (the development of lead "industries" through the support of agro-enterprises and cooperatives); and (ii) stimulating additional and more diversified income opportunities in the project areas, by providing services and stimulating local entrepreneurship, and attracting new investors in agricultural or (rural/resource-based) non-agricultural activities. This



component is organized along three sub-components:

1. **Sub-component A.1: Improving *chanye fupin* models:** This sub-component will support the piloting/demonstration of innovative/improved *chanye fupin* models, with specific focus on promoting/strengthening the role of cooperatives as vehicle/entry point for pursuing inclusiveness through agribusiness development. Key activities under this sub-component include:

- o *A.1.1: Promoting pro-poor farmer cooperatives:* The project will provide support to interested or newly established cooperatives to reach operational standards (in terms of membership - ensuring a minimum percentage of poor households, women and youth among their members, financial management capacity, transparency, governance and decision making processes, benefit-sharing mechanisms, etc.) which qualify them as 'pro-poor standard cooperatives', i.e. cooperatives committed to poverty alleviation in terms of inclusiveness of poor households among their members, and fair shareholding and benefit sharing mechanisms.

Specific focus under this key activity will be placed on supporting women cooperative members and managers. In the selection of pro-poor cooperatives to be supported by the project, quotas will be set to ensure that at least 40% of membership are women; at least 60% of participants in technical trainings are women; management training will be provided to women cooperative board members; at least two women-led cooperatives will be supported in each county, which will be closely supported by county Women Federation. The project will also engage with male members and board members of cooperatives to enlist support for facilitation of women's membership and leadership in pro-poor cooperatives.

#### **Result-based lending**

This activity will be implemented piloting a result-based lending approach: disbursement for this activity will be triggered by the number of cooperatives that meet defined operational standards that make them 'pro-poor' (disbursement-linked indicator), as confirmed by an independent third-party verification agency. The verification protocol is described in Section K - Organizational Framework, and Annex 8 - Project Implementation Manual.

The amount to be disbursed against the achievement of the agreed target would be determined on the basis of the actual costing/expenditures of the activities needed to reach this target, evidenced by the documentation of the actual expenditures. As an additional incentive to cooperatives to adopt the defined operational standards, cooperatives that will meet the agreed operational standards would have a preferential access to the resources allocated to finance business plan proposals under this component (Ref. Activity A.1.2).

Should the pilot deliver positive results, replication at a larger scale (i.e. increase the allocation to this activity and increase the target, but also assessing the possibility to adopt the RBL approach in other activities which are suitable for adopting verifiable DLIs) will be considered at mid-term.

*A.1.2: Supporting certified pro-poor farmer professional cooperatives:* Successfully certified pro-poor farmer professional cooperatives will be eligible to apply for a special matching grant from the project, whose conditions would be more favourable than those under the other models under this component. This funding will be provided based on an approved business plan.

- o *A.1.3: Promoting pro-poor cooperative-investor joint-ventures:* The project will establish an incentive system to attract interested investors (e.g. migrant labour returnees, talented young entrepreneurs, etc.) and support pro-poor farmer cooperatives. Specifically, the project will co-fund joint pro-poor cooperative-investor proposals. Investors can only be individuals (not enterprises). Project co-investment will be converted into shares of cooperative members, prioritizing poor and vulnerable households.
- o *A.1.4: Promoting company-cooperative (or household) models:* The project will co-fund joint- buyer (i.e. company) and producer (i.e. cooperative, or, in those cases where the formation of a cooperative is not appropriate, individual household's) investment proposals. Specifically, the project will partially finance the cooperative (or individual household) share of the proposal. Project funds will be used to finance technical assistance or jointly owned/operated assets by the cooperative (e.g. agricultural machineries, processing facilities, water storage and distribution facilities, etc.) and land improvements (e.g. terracing, drainage and water pipes systems, etc.).
- o *A.1.5: Promoting other innovative models:* The project will support other *chanye fupin* models to be proposed by participating counties. Such models would need to feature agreed project's guiding principles, in particular: (i) clear focus on the project target group; (ii) participation of the target group in the design, implementation, and benefit-sharing mechanism of the model; and (iii) a reasonable prospect for

sustainability and replicability of the model.

- *A.1.6: Adopting a county traceability system:* The project will support project counties in the adoption and application of a traceability system synchronized with the 'national agro-products traceability system', the traceability system promoted by the Ministry of Agriculture and Rural Affairs, to - among other ends - favour adding value of locally produced products. Specifically, the project will support access and registration to the system, provision of necessary software, and user training.
  - *A.1.7: Improving climate information and adaptation advice:* The project will finance a set of activities aimed at improving farmers' access to weather and climate forecast information and advice on options to make their farming practices more resilient to climate change, i.e. (i) technical assistance to improve the analysis of the changes in crop climatic zones and of the climate risks associated with different crops; (ii) upgrade of a few meteorological stations to monitor key parameters relevant to agriculture; (iii) technical assistance to relevant county-level agencies to improve climate-related forecasts, advice, and early warnings; and (iv) trainings to farmers in climate change risks and vulnerability management. Activities include: carrying-out climate risks and vulnerability analysis; installing additional weather and agro-met monitoring units; establishing early warning systems for priority products in selected areas; training of producers in the use of climate data, identification of risks and application of appropriate coping strategies; and - when demanded - technical support to selected entities to establish climate-smart agricultural platforms.
2. **Sub-component A.2: Stimulating entrepreneurship/attracting investors:** This sub-component will provide incentives and support to entrepreneurs and investors (particularly young and women) to start their own business in the project area, thus retaining young business-minded people in the project area - or attracting them from other areas. Key activities under this sub-component include:
- *A.2.1: Establishing Business Incubation and Service Centers:* The project will support the setting up and operationalization of Business Incubation and Service Centers at county level [9], with the main objective of providing services to talented youth (i.e. college graduates, new professional farmers, agricultural professional managers, and new rural leaders) and women. The centers will provide services, training and advice in business development (planning, financial management, loan applications, marketing skills, e-commerce, legal counsel, etc.) and management of climate risks, and will favour market linkages by reducing information asymmetries and building trust among the actors along a value chain. The centers will also help enterprises to access appropriate financial products by facilitating linkages with partnering financial institutions. Finally, the centers will offer facilities (office space, meeting rooms, internet access, equipment, etc.) for interested start-up entrepreneurs to work in a professional environment. Women entrepreneurs will especially be encouraged to benefit from services of the incubation centres.
- The operating plan of the centres would introduce a decreasing cost sharing arrangement. The centres are expected to become financially sustainable by the end of the project through generation of their own revenues for the provided services.
- *A.2.2: Investment support to start-ups:* The project will provide start-up investment support as matching grant to acceptable investment proposals, including non-agricultural related business proposals (e.g. tourism, e-commerce shops, agricultural machinery services, etc.), presented by youth and women entrepreneurs who participate to activities under A.2.1. At least 25% of all start-up packages will be guaranteed for women entrepreneurs.
3. **Sub-component A.3: Improving access to finance:** This sub-component will stimulate financial service innovations to improve access to finance in the project area in support of Sub-component A.1 and A.2. Key activities under this sub-component include:
- ◦ *A.3.1: Strengthening financial capacity:* The project will provide specific capacity building opportunities (e.g. trainings, study tours, etc.) to cooperatives, small- and medium-enterprises (SMEs), financial institutions, financial service agents, staff of the PMO, etc. on financial matters.
  - *A.3.2: Improving financial services:* The project will enhance the availability and capacity to provide financial services in the project area by (i) establishing one agribusiness credit system for the cooperatives, SMEs, and farmers; and (ii) establishing an information platform and developing digital micro-lending models in the counties willing to participate.
  - *A.3.3: Establishing a financial advisory service center:* The project will support the establishment of a financial advisory service center which will act as a bridge between the supply side (i.e. financial institutions) and the demand side (i.e. cooperatives, SMEs, farmers) to provide financial services. These centers can be combined with the business incubation and service centers supported under Activity A.2.1.

22. **Component B: Climate-proofed public infrastructure planning and development:** This component aims at

improving and expanding the infrastructure systems in the project area through a combination of physical improvements, institutional strengthening and technical assistance to improve road access, water security, and prevent soil erosion, and reduce the risks and the impacts associated to changing weather and climate conditions and promote a sustainable and climate resilient agricultural production. This component is organized along two sub-components:

1. **Sub-component B.1: Improving infrastructures' climate resilience:** This sub-component will support the improvement of climate-risk assessment, planning and decision-making, and the development and improvement of the underdeveloped and/or deteriorated water irrigation, water harvesting and water delivery systems in the project area. Key activities under this sub-component include:

- *Activity B.1.1: Improving climate-risk assessment, planning and decision-making:* The project will (i) support the analysis of current and future climate trends and risks and the identification and preparation of disaster risk reduction, adaptation and mitigation measures in infrastructure planning and design in the three most vulnerable counties (Yongsheng, Zhenxiong, and Lanping); and (ii) support the development of adaptation guidelines for the design of infrastructure projects linked to key agricultural industries involving smallholders (water, roads, and soil conservation).
- *Activity B.1.2: Piloting climate-proofed smart irrigation investments:* The project will (i) support the development and improvement of the irrigation water supply system (e.g. canals), water harvesting and water source facilities (e.g. water ponds and water pools), and pumping stations and delivery systems (e.g. water pipelines) to provide irrigation water to agribusiness entities and farmers and drinking water to some villages. This would contribute to improving agricultural productivity, agricultural diversification, and climate-resilience in the project area; and (ii) support selected cooperatives, in areas with periodic water scarcity, in the development of a digital water monitoring and management system that would allow for continuous adaptation of irrigation systems and optimization of water use.

Ownership of the irrigation and the water source facilities improved and developed under the project will belong to the beneficiary villages, water users associations, or farmers' cooperatives, depending on the decision of respective county project management offices. The ownership groups will receive training and be involved in the planning of the infrastructure. An operation, maintenance and water management plan with roles and responsibilities, budget and financing sources must be agreed before the investments are made to ensure sustainability.

2. **Sub-component B.2: Improving rural infrastructure system:** This sub-component will address some of the major gaps in the current infrastructure system in the project area, which may limit or constrain the implementation of the proposed project activities, and - in the case of water source facilities - help reducing the vulnerability to the impact of climate change: incomplete rural road network, underdeveloped and/or deteriorated irrigation and drainage systems, lack of drinking water and/or electricity supply facilities, segmented and sloping agricultural land, etc. All infrastructures supported under this sub-component will be climate-proofed. Key activities under this sub-component include:

- *Activity B.2.1: Improving and developing rural roads:* The project will support the development and improvement of village and production roads, which will serve both agribusiness entities and village farmers.
- *Activity B.2.2: Improving and developing safe drinking water supply system:* The project will support the development and improvement of water supply pipelines to those villages that lack access to safe drinking water, or whose existing systems/facilities are deteriorated. Safe water supply, given its direct impact on infectious disease, especially diarrhoea, is important for preventing malnutrition.
- *Activity B.2.3: Land improvement and preparation:* The project will support land levelling in order to enable safe and productive farming, and soil and water conservation.
- *Activity B.2.4: Supporting infrastructures' operation & maintenance (O&M):* The project will support (i) the establishment and strengthening of O&M organizations; and (ii) implementation of any required environmental and social safeguards (Ref. ESMP PIM, chapter 10).
- *Activity B.2.5: Promoting women's participation in community management:* Women will be involved in Village Infrastructure O&M Committees and Water User Associations. Meanwhile, for ensuring women's capacity for participating in decision-making, women will share half of the O&M training opportunities.

23. **Component C: Project Management, Knowledge Management, M&E, and Policy:** This component will support the planning, coordinating, monitoring, reporting and overall management functions of the project management offices (PMOs) at provincial and county level. An important partnership will be established with the Agricultural Information Institute, Center of International Agricultural Research of the Chinese Academy of Agricultural Science

(All-CAAS) for the provision of support in monitoring and evaluation functions, knowledge management, and policy engagement.

24. **Promoting gender transformative impact:** The project will promote gender transformative impact by (a) *Building support systems for women's participation*: Involving the Women Federation in the project activities at all levels to facilitate the implementation of gender strategy through the project process; (b) *Building a network for women in the project*: Annual exchange activity will be organized for women involved in the project in each county, and provincial women's exchanges will be held every two years. Besides networking individuals, government agencies and other gender issues concerned organizations will be engaged in the project. These exchanges will also provide women and these organizations with the opportunity to exchange their experience on promoting women's participation in the project process; (c) *Building awareness for the project management system*: In the beginning of the project, gender awareness training will be integrated in the project management training for PMO staff at all levels. Gender perspectives will be integrated in the training for the staff of implementing agencies, and for WUA and O&M Committee members during the project implementation. Provincial and county gender focus will be involved in these trainings; (d) *Nutrition training* will be arranged for members of women-led cooperative through CPMO coordination with township health centre; (e) *Policy engagement*: if the proposed model is successfully implemented, it will generate evidence of impact on women's productivity and empowerment, which could be proposed to local governance bodies for replication and scaling up.
25. **Components coordination and sequencing:** Awareness building and mobilisation of cooperatives and other key stakeholders will be implemented first, to ensure a bottom up approach in the selection of cooperatives and to drive the selection of infrastructure to be financed by the project. To allow for synergies with the component A investments, the first infrastructure investments are deferred to year 2 of the project, assuming that the cooperative and investor business proposals will take some time to be developed. The field survey shows that company-cooperative (or household) models could be more readily identified. Some of them would need to be supported by public infrastructure investments. Before any infrastructure investments are made Water Users Associations and other Operation & Maintenance associations should be formed and they should be involved in decisions on the design and the preparation of the O&M plan for each infrastructure.

## E. Theory of Change

26. **Industrialization as key strategy for poverty reduction and rural revitalization:** Promoting thriving "industries" (i.e. agribusiness development) and linking them with farmers for income generation has been the primary approach in government poverty reduction programs (i.e. *chanyie fupin*, poverty reduction through industrialization). Agricultural "industrialization" remains a central pillar in the new rural revitalization strategy - a long-term strategy that aims at making rural areas a liveable place for all. However, persistent challenges remain in tackling poverty issues, sustaining poverty reduction results, and promote economic development in the so called "deep poverty" areas, such as those targeted by the project.
27. **The current base scenario:** In the current base scenario, the project area and the relative poor and vulnerable households still face a mixture of constraints: (i) limitation in income-generating opportunities; (ii) outflow of rural labour force to urban areas and of financial resources to sustain the education of the young generation - leaving the old, children and part of the women population behind together with limited household resources for investments in agriculture or other economic activities; (iii) limited scale of household land holding, value addition and secure market outlets preventing them from being competitive, and progressive land consolidation (i.e. leasing of land to enterprises); and (iv) inability of smallholders to effectively operate collectively and enter value chain. Furthermore, (v) increasing rainfall variability and frequency of unusual weather events and other risks (price fluctuation & epidemics) are seen as growing uncertainties to agricultural production in the project area. Even though migration for employment has a high social cost in terms of separating the families, it still brings a much needed and higher income than they can currently earn from their small farms and disarticulated production.
28. **The shortcomings of the current approach:** While "industrialization" remains a key strategy for poverty reduction and for revitalizing the rural areas, the current approach which focuses on reaching the smallholder households through "dragonhead enterprises" has several shortcomings, does not always bring the desired results and/or guarantee sustainability. There are evident gaps in inclusiveness (linking to more poor farmers and households), fairness and equality (in benefit sharing), efficiency (of government support), and sustainability (lasting of relationship). At the same time, while strengthening the role and capacity of farmer cooperatives can offer a more viable approach to achieve the objectives of poverty reduction through industrialization and for sustaining the results, cooperative development in China also presented some major shortcomings: in many cases cooperatives are established (and controlled) by enterprises and/or large farmers, rather than by the spontaneous coordination of small farmers, resulting in little participation and control of the small farmers over the cooperative. Finally, the government also recognized that, while aiming largely to realize the immediate milestone of poverty eradication, many of the efforts and practices were not adequately thought through or will not be equally effective after 2020.

Furthermore, there is an increasing trend of feminization of the agricultural workforce, however, there isn't a subsequent increase in women's participation in decision making roles, preventing women from optimising their

productivity. They are affected by lack of access to technology, finance and leadership roles and this has a disproportionate impact on their economic empowerment in relation to their participation in the agricultural sector. Lack of access to productive assets and knowledge also translates into low productivity.

29. **Turning the challenges into opportunities:** The current situation offers an opportunity to introduce and test alternative approaches that could have potential value in informing the government on its pursuit for rural revitalization and sustainable poverty reduction.
30. **The proposed approach:** The project would introduce improvements in the current *chanyie fupin* model, placing greater emphasis on the principles of diversification, inclusiveness, equality and sustainability. Through the proposed project interventions, rural villages and cooperatives, and proactive smallholder farmers (including youth, women and ethnic minorities) will be supported in developing initiatives around sustainable agriculture as well as rural-based non-farm opportunities. This will incorporate organizational innovations (e.g. shorter supply chains or digital payment mechanisms), along with improved agricultural practices that reduce the need for chemical inputs and take care of the environment and adapt to climatic risks.

The project activities would also invest in improving productive and managerial capacities of women and increase their participation in decision making roles in community institutions. This would be done through ensuring higher quotas for women in cooperative and board membership, providing leadership and management trainings for women board members, supporting women's only cooperatives, improving access of women to knowledge and technology and investing in women's start-ups. It is assumed that enhancing women's economic empowerment would strengthen women's status in society and enable them to be more present in decision making spaces, that would also lead to improved access to productive assets. Studies from around Asia have also demonstrated that improving women's access to agricultural technologies and input services, investment in rural infrastructure, access to finance, lead to economic empowerment of women that in turn impacts on reduction in their work load, as women are able to employ enhanced production practises and also have surplus income to employ hired labour.

31. **How the approach will be operationalized:** This will be achieved through: (i) capacitating genuine cooperatives (rather than dragonhead enterprises) as the main entry point to link poor farmers to markets, and piloting alternative *chanyie fupin* models (Ref. Sub-component A.1); (ii) stimulating additional and more diversified income opportunities in the project areas by providing services and stimulating local entrepreneurship (especially among women and young farmers/migrant returnees), and attracting new investors in agricultural or (rural/resource-based) non-agricultural activities (Ref. Sub-component A.2); (iii) stimulating financial service innovations to improve access to finance in support of Sub-component A.1 and A.2 (Ref. Sub-component A.3); (iv) addressing some of the major gaps in the current infrastructure system in the project area (e.g. road access, water scarcity, etc.) which may limit or constrain the implementation of the proposed project activities, while at the same time reducing the risks associated to climate change (Ref. Component B).
32. **Expected outcomes:** With these strategy and interventions, (i) additional income generating opportunities for targeted farmers will have been generated; (ii) more equitable and sustainable business partnership with agro-entities will be developed for farmers so that added value of farmers' products or services will be attained; (iii) more young people will find business opportunities at home and investment in rural sectors will be promoted - which will also help mitigating the labor and finance outflow; (vi) more women would be active members of cooperatives and improve their access to inputs, farm productivity and income; (v) potential climate risks will be mitigated; and (v) those farmers who got rid of poverty will have less likelihood of reverting to poverty; (vi) more women would be decision making roles in local/community institutions. These will help achieving the project objectives and goals, and contribute to revitalizing the rural areas along with other measures taken by government.

## F. Alignment, ownership and partnerships

33. **Alignment with national priorities and strategies:** The project is well aligned with the national priorities and strategies as it will (i) contribute to the government's objective of sustaining the poverty reduction achievements in the years following 2020, in line with the principles of the rural revitalization strategy, where "sustaining poverty eradication efforts" represents a key priority in the strategy; (ii) promote agricultural industrialization, create employment opportunities, and develop the infrastructure system, in line with the rural revitalization strategic approach; (iii) contribute to make the project area economically more attractive, thus retaining migrant workers, and possibly attracting people back to the rural areas; and (iv) promote environmental sustainability, in line with the government's concepts of 'ecological civilization' and 'ecologically-balanced development'. The project is in addition aligned with and is expected to contribute to the Yunnan Young League's 'Action Plan of Youth Contribution to Rural Revitalization (2019-2022)'.
34. **Alignment with Sustainable Development Goals (SDGs):** The objective and activities of the proposed project are aligned with and will contribute to the Agenda 2030, and, more specifically to SDG1 (eradicating poverty), SDG2 (ending hunger and malnutrition, achieving food security and promoting sustainable agriculture), SDG5 (achieving greater gender equality and empower women), SDG10 (reducing inequality within China), SDG13 (reducing the impacts of climate change), and SDG15 (managing sustainably natural resources and halting and reducing land

degradation).

35. **Alignment with COSOP 2016-2020:** The project is the third investment operation to be designed under the current 2016-2020 COSOP, and it well reflects the recent trend of focusing IFAD support towards enhancing income opportunities and increasing resilience by promoting and strengthening cooperatives, giving more emphasis to improving access to markets and value-chains, and resilience to climate change. The project supports the COSOP 2016-2020 strategic objectives 1 (Increase smallholders' capacity and opportunities to access markets) and 2 (Strengthen environmental sustainability and climate resilience), and particularly thematic area of focus 1.A (Support inclusive and safe value chain development), 1.B (Support inclusive cooperatives), 1.C (Support inclusive financial services), and 2.B (Mainstreaming environmental and climate resilience considerations). The project is also (a) fully aligned with and supports the three COSOP 2016-2020 strategic thrusts (i.e. innovation, knowledge management to inform policy, and scaling-up); and (b) aligned to and contributes to the "programmatic" approach envisioned under the COSOP.
1. **Alignment with and support to the three COSOP 2016-2020 strategic thrusts (i.e. innovation, knowledge management to inform policy, and scaling-up):** The project is conceived as a "demonstration" project, which will introduce several innovations (e.g. innovative *chanyie fupin* models, inclusive finance models, disbursement against results, climate-proofed design of infrastructure, etc.) to test their applicability in the project context, learn lessons, and promote replication of the models and approaches that demonstrate themselves successful. Assessment and replication of successful models and approaches will be favoured by the strong collaboration that the project will develop with the Division of Cooperative Economy of the Department of Agriculture and Rural Affairs (DARA). In addition, a strategic partnership with the Chinese Academy of Agricultural Sciences (CAAS) will be established to extract and document knowledge from the project and utilising it to inform policy making at central level.
2. **Alignment with and support to the "programmatic" approach envisioned under the COSOP:** The project is aligned to and contributes to the "programmatic" approach envisioned under the COSOP as it has to be considered part of a series of IFAD-funded projects within a broader programmatic framework that pilot different 'poverty reduction through agribusiness development' approaches in different provinces, with the broad "programmatic" objective of contributing to learn about the conditions that make the different models more or less successful, and compare the strengths/weaknesses of the different models. (Y2RDP is the sixth project in IFAD portfolio that introduces and pilots improved *chanyie fupin* models. The H2RDP, which will be presented to the September EB, also fits within the same programmatic framework) [10].
36. **Alignment with UNDAF 2016-2020 and draft UNSDCF 2021-2025:** The project is in line with and contributes to the priority areas of the UNDAF 2016-2020, and particularly with priority area 1 (Reduction of Poverty and Equitable Development)/ outcome 1 (more people, particularly the vulnerable and disadvantaged, enjoy improved living conditions and increased opportunities for economic, social and cultural development), and priority area 2 (Improved and Sustainable Environment)/ outcome 2 (more people enjoy a cleaner, healthier and safer environment as a result of improved environmental protection and sustainable green growth). The project is also in line and is expected to contribute to the strategic priorities of the draft UNSDCF 2021-2025, currently under preparation, and particularly to strategic priority 1/ outcome 2/ output 2.1 (China demonstrates a strengthened enabling environment to stimulate public and private investment and support to overcome income inequality, particularly in rural areas), and strategic priority 2/ outcome 3/ output 3.1 (Farmers, fishers, and livestock owners - both male and female - have enhanced skills, ability, and access to adopt and implement sustainable and resilient practices in their work), and output 3.2 (The Government has strengthened capacity, resources, and incentives to develop, implement and enforce sustainable agriculture, production and consumption, and biodiversity conservation policies at national and local levels).
37. **Alignment with IFAD' Strategic Framework 2016-2025.** The objective and activities of the project are in line with the IFAD Strategic Framework 2016-2025 goal and strategic objectives, particularly strategic objective 2 (increase poor rural people's benefits from market participation) and strategic objective 3 (strengthen the environmental sustainability and climate resilience of poor rural people's economic activities).
38. **Alignment with Transition Framework:** The strategic approach of the IFAD country program in China (as elaborated in the COSOP 2016-2020) is in line and supports the principles of the Transition Framework (2018) in terms of adoption of a mix and diversified lending and non-lending instruments (e.g. investments, knowledge/policy dialogue, SSTC, etc.), increase co-financing (particularly domestic co-financing), and alignment with partners approach (e.g. contribution and alignment to/with UNDAF/UNSDCF). Specifically, the proposed project implements several of the principles and elements of the Transition Framework. In particular, it will (i) pilot one of the new proposed products under IFAD11 (i.e. the result-based lending, RBL), with the objective of informing IFAD on the applicability of this instrument widely across its portfolio; (ii) contribute to informing policy-making: a strategic partnership with the Chinese Academy of Agricultural Sciences (CAAS) will be established precisely to extract and document knowledge from the project and utilising it to inform policy making; and (iii) significantly contribute to increase co-financing, particularly domestic co-financing: the project is expected to mobilise resources in a 1:2.1 ratio, 50% above the IFAD11 target of 1:1.4 (and almost three-times above the 1:0.8 target for domestic co-financing), and above the COSOP target of 1:1.5.



39. **Alignment with IFAD11 mainstreaming agenda:** The project directly supports three of the four IFAD-11 thematic priorities, as it promotes gender empowerment, foster opportunities for the youth, and addresses or reduces the impacts of climate change.
40. **Alignment with Private Sector Engagement Strategy:** This project is aligned with and directly contributes to the objectives of the IFAD's Private Sector Engagement Strategy, i.e. mobilize private funding and investments, and expand markets and increase income and job opportunities for IFAD's target groups, as it will (i) use loan resources to attract domestic private sector investments and develop inclusive value-chain to foster pro-poor cooperative-investor joint ventures and/or company-cooperatives joint proposals (Ref. Activities A.1.2 and A.1.3), or support entrepreneurs and investors, particularly young and women, to start their business - thus contributing to expand the market opportunities and increase the income and job opportunities for the project target group; and (ii) stimulate financial service innovations to improve access to finance in the project area (Ref. Sub-component A.3).

## G. Costs, benefits and financing

### a. Project costs

41. **Project costs:** The total project cost is estimated at US\$ 234.5 million, including contingencies. The total base cost is US\$ 224.8 million; physical and price contingencies account for an estimated US\$ 9.7 million (i.e. 4.3% of the total base cost or 4.1% of the total project cost). Project costs are allocated among the three components as follows: (A) Supporting Inclusive Rural Development (49% of the total project cost); (B) Climate-proofed public infrastructure planning and development (47% of the total cost); and (C) Project Management, Knowledge Management, M&E, and Policy (4% of the total cost). Costs per component and sub-component, and financier are summarised in Table 2 in Annex 3.

### b. Project financing/co-financing strategy and plan

42. **Country eligibility and PBAS allocation 2019-2021:** China is eligible for IFAD financing, and it officially confirmed its intention to borrow from IFAD during IFAD11 in 2018. China was included among the countries that would benefit from IFAD11 resources. On the basis of the PBAS formula, US\$ 134.99 million were allocated to China for the period 2019-2021, and the proposed project included in the IFAD program of loans and grants (PoLG) 2019-2021. The country allocation was re-confirmed in December 2019.
43. **Project financing and co-financing:** IFAD will contribute to the project with a loan for a total amount of US\$ 74.8 million (32% of the total project cost). The Government will contribute US\$ 115.3 million (49% of the total cost), and participating enterprises and cooperatives are expected to contribute approximately US\$ 41.7 million (18% of the total cost). The beneficiaries' contribution is expected to be approximately US\$ 2.8 million (1% of the total cost). Costs by expenditure account are presented in Table 1 in Annex 3.
44. **Co-financing ratio:** The IFAD loan has a co-financing ratio of approximately 1:2.1. This is 50% above the IFAD11 target of 1:1.4 (and almost three-times above the 1:0.8 target for domestic co-financing).
45. **Climate financing:** Project sub-components A.1, A.2, and B.1 are counted as climate finance. As per the multilateral development banks' methodologies for tracking climate change adaptation and mitigation finance, the total amount of IFAD climate finance for this project is calculated as US\$ 35,163,000 million, which represents 47% of the total IFAD project amount.
46. **Co-financing strategy:** The project co-financing strategy is in line with the IFAD co-financing strategy in China outlined in the COSOP 2016-2020, where focus is placed on leveraging domestic co-financing (from Government and other domestic parties, i.e. the private sector, financial institutions, cooperatives and beneficiaries). Particularly, Government's co-financing will be equivalent to 1.54 times IFAD's contribution (i.e. US\$ 115.25 million), well-above the co-financing ratio of 1:1 applied in projects designed in IFAD9 and IFAD10. In addition to Government's contribution, about 19% of the project budget (i.e. about US\$ 44.44 million) is leveraged from non-government partners (i.e. cooperatives and agro-enterprises, financial institutions, and beneficiaries).
47. **Opportunities for international co-financing:** Opportunities for co-financing with other international partners were sought, but did not materialize. It is important to note that co-financing opportunities with other international financiers in China are limited. First, borrowing provinces must not have exceeded their debt ceiling: it is thus difficult for a province to borrow too many international resources at the same time, and it is thus rare to observe a concentration of international resources in one single province. Second, as a general principle, the National Development and Reform Commission (NDRC), the government institution in charge of defining the pipeline of internationally-financed projects in China, tends to favour equal opportunities and even distribution of international resources among the provinces, thus discouraging concentration of international resources in one single province. Even within the same province, for the same principle, the Provincial Development and Reform Commission (PDRC) also discourages a concentration of donor resources in the same counties. Within this context, international co-financing is difficult, if not

explicitly discouraged. The Yunnan province confirmed there were not other planned activities to be funded by international agencies in the project area.

### c. Disbursement

48. In accordance with the section 4.04(d) of the General Conditions, immediately after entry into force of the Financing Agreement, there shall be a Designated Account (DA) for the IFAD Loan denominated in the currency of the loan (USD/EURO to be the same currency of the loan) to be opened, through which IFAD funding shall be channelled. The DA is to be set up at and managed by DOF. DOF will be directly responsible for the management, maintenance and reconciliation of the DA activities. Supporting documents required for IFAD disbursements will be prepared and submitted by CPMOs through PPMO for review and verification before sending to DOF for further disbursement processing.
49. The PPMO and county CPMOs are responsible for reviewing the Disbursement Request as well as the supporting documentation required for IFAD disbursements. Disbursement Requests will be prepared and submitted by CPMOs to PPMOs for review and verification before sending the Disbursement Request to DOF for further disbursement processing. Once approved, project resources will be channeled directly from provincial level to county level .
50. In accordance with Section 3.1 of the LDH, the Designated Account will be administered following Imprest Account arrangements. Advances from this Financing must be segregated from other funds for the Project .

### d. Summary of benefits and economic analysis

51. **Expected benefits:** The project is expected to generate substantial net incremental benefits for farmers, rural entrepreneurs and rural households in the project area. Benefits would directly accrue from (i) diversification of productive activities and sources of income; (ii) increased agricultural production and productivity; (iii) increased value-added of agricultural outputs; (iv) improved quality of processed products, thus attracting higher prices at local market; (v) reduced transportation costs and enhanced processing efficiency through innovative technology and improved infrastructure; (vi) increased employment either for hired or family labour, for both on-farm and off-farm activities; (vii) increased water availability for both human and productive use; (viii) enhanced climate adaptation capacity; and (ix) tax revenues as a result of increased volume of taxable production. Increase in income would be largely dependent on farmers/household/rural entrepreneurial groups adopting improved technologies which the programme will promote through technical assistance, development plans and infrastructure investments, thus improving market access, supporting marketing linkages and generally creating a favourable economic environment that encourages farmers/rural entrepreneurs to produce more competitive products.
52. **Results of the financial analysis:** The financial viability of the project has been assessed on the basis of a number of indicative economic activities that could be supported by the project. Results of the financial analysis, with- and without-project scenarios, of the different productive models show positive cash-flows even after the project closure, and reasonable financial returns in the range of 9-45% (Ref. Annex 4 - Economic and Financial Analysis).
53. **Results of the economic analysis:** Project benefits have been estimated over a period of 20 years using a discount rate of 5%. The results of the economic analysis suggest that the project is economically viable, with an economic internal rate of return (EIRR) of 15.3% for the base case scenario, with a net present value (NPV) of US\$ 199 million (Ref. Annex 4 - Economic and Financial Analysis).
54. **Results of the sensitivity analysis:** The results of the sensitivity analysis suggest that the project is relatively robust to changes in input prices and investment costs, while more sensitive to changes in benefits and output prices. More specifically, switching values and critical thresholds have been identified for the main variables: the project would no longer be viable in case of (i) investment costs increase by more than 73%; (ii) operating costs increases by more than 23%; (iii) benefits decline by more than 19%; (iv) input cost increase by more than 30%; (v) output prices fall by more than 23%; and (vi) project beneficiaries involved in productive activities are less than 2,260 HHs (Ref. Annex 4 - Economic and Financial Analysis).
55. **Assessment of the environmental externalities related to carbon emission/sequestration:** The economic analysis includes a tentative assessment of the environmental externalities related to carbon emission/sequestration. Results of the analysis indicate that the programme would be responsible for a net emission of approximately 754,443 tons of CO<sub>2</sub> equivalent. The analysis considered the average 32.3 tons year<sup>1</sup> ha<sup>-1</sup> emission in accordance with the phasing-in of production activities and infrastructure. Each ton of carbon has been valued at a very conservative price of 4 US\$ per ton, so as to determine the economic contribution of carbon reduction to the overall project worth. The net economic effect is estimated at an average annual outlay of approximately US\$ 321,000.

## e. Exit Strategy and Sustainability

56. **Sustainability:** There are several elements in the project that are likely to ensure post-project sustainability of the supported activities and generated benefits:
1. **Economic viability**, as suggested by the results of the economic analysis;
  2. **Alignment with national policies, strategies and priorities:** The project is fully aligned with and embedded in the key policies, strategies and priorities of the country. Mainstreaming smallholders in modern agriculture; revitalizing rural areas, making them economically more attractive and creating new employment opportunities; sustaining poverty achievements and preventing that those that were brought out of poverty fall back into poverty; upgrading and standardizing farmer cooperatives; and promoting environmental sustainability are all important objectives of the government policies and strategies. It is thus expected that the Government will continue to ascertain political commitment towards the project objectives, and ensure adequate human and financial resources to ensure that the project achievements are sustained after project completion. It is important to note that the development and up-grading of farmer professional cooperatives into self-standing and self-sustained viable rural economic entities has been and continues to be a central element of the government's poverty reduction and rural development strategy: farmer cooperatives are not seen as a vehicle to implement government programs, but intended to be self-standing, inclusive and growing business entities;
  3. **Institutional sustainability and sustainable partnerships:** The project activities will be implemented by permanent government institutions and/or existing service providers in the project area, which will continue to exist and provide their services after project completion. The project will promote different forms of partnerships (cooperative-investor, enterprise-cooperative, economic entities-service providers, etc.) whereas project (public) financing will be used as a catalyst to forge business relations and start/expand viable business operations;
  4. **Beneficiary ownership and empowerment:** Ownership and commitment of beneficiaries (cooperatives, enterprises, investors, etc.) will be guaranteed through the business plan development and selection process, where agribusiness entities and investors are expected to present their own business ideas, and expected to take a financial risk by mobilizing their own resources, which the project will simply match through co-financing arrangements. Likewise, infrastructure (water and roads) ownership and organization of operation, maintenance and management will be supported prior to any infrastructure investment. Beneficiaries will be adequately empowered, including in collective decision-making, management, etc. through various capacity building activities provided through the project;
  5. **Financial viability:** Financial viability will be one of the criteria for the selection of the business plans to be financed by the project. Business plans would need to include a financial analysis that demonstrates that the investment is financially viable and offers acceptable financial under manageable risk scenarios, convincing marketing arrangements, cost-benefit and cash flow projections and projected break-even forecasts. It is to be noted that the results of the financial analysis of the different productive models that could be supported by the project show positive cash-flows even after the project closure, and reasonable financial returns;
  6. **Moving away from subsidizing production towards responding to market demand:** While it is true that the project operates in marginal and remote areas, with relatively low productivity and high transaction costs, it is nevertheless true that the project avoids building on the conventional 'subsidization' strategy which focused on subsidising production of predefined commodities, and is promoting a shift towards a more 'market-driven' approach, which focused on market demand, instead [11]. Sustainability of activities supported by the project will thus not depend on subsidies provided through the project, but will be ensured by the capacity of the supported entities to adequately respond to market demands;
  7. **Mainstreaming climate considerations into infrastructure development, and ensure O&M arrangements:** The anticipated effects of climate change will be taken into consideration in the planning and design process of the infrastructures to be supported by the project, and the anticipated impacts of climate change integrated into the technical specification of the infrastructure to mitigate climate risks. The establishment of Water Users Associations and Operation and Maintenance Associations, and the preparation of O&M plans are pre-conditions to any infrastructure investment supported by the project.
57. **Exit strategy:** The exit strategy of the project is built on two building blocks. More details in Annex 10 - Exit Strategy.
1. **Sustainability and value of project interventions** (Ref. to Section on Sustainability above); and
  2. **Potential for scaling-up and informing policy-making** (Ref. to Section L.b).

## 3 Risks

## H. Project risks and mitigation measures

58. **Project risks:** Annex 9 presents the Integrated Risk Framework (IRF), with financial management risks reviewed in the financial management section below. In general, most of the identified risks (i.e. political and governance, macroeconomic, sector strategies, procurement, stakeholders) have low probability and low impact, except for risks inherent to institutional capacity, which are rated medium, and environmental and social risks, which are rated minor to moderate and are discussed in more details in Section I. Appropriate mitigation measures are identified and reported in Annex 9.
59. **How risks related to the potential complexity of results-based lending (RBL) piloting have been assessed and managed:** On the basis of early experience and lessons from the World Bank's Guangxi Poverty Reduction Program for Results, the main risk in implementing an RBL approach relates to insufficient understanding of the approach by the relevant implementers on the ground, and misunderstandings about the need for sufficient upfront budget allocation - which generally causes delays. As a mitigation measure, the proposed project will raise awareness and create enough understanding about the principles of the RBL approach such as prior achievement and independent verification of results before disbursement and the need to advance government funds (e.g. from the consolidated budgets for poverty alleviation) for the achievement of the disbursement-linked indicator. In addition, given the pilot nature of the RBL activity, a relatively small share of the budget is allocated to this activity, in order to reduce the risk of possible low disbursement in case the targets set result too difficult to be achieved, or the incentives provided not sufficient to generate an interest in the cooperatives.
60. **How risks related to the perverse incentive of decentralized repayment responsibilities have been mitigated:** Experiences from previous projects (e.g. SSADEP and JIMAAPP) showed that in those cases where the loan repayment responsibility is transferred to the local county authorities, and from them to the beneficiaries (i.e. agro-enterprises, cooperatives, or poor households) a perverse incentive is created whereas local authorities have an incentive to select among the entities to support those who could offer the highest likelihood of repayment, which are not necessarily those that are more functional to the achievement of the project objectives. Because the Yunnan province has already reached its debt ceiling, it decided to on-lend the IFAD loan to the project counties. In order to mitigate the risk of the perverse incentives that such loan repayment modality could generate, it is agreed that the loan on-lent to the counties cannot be further on-lent to the beneficiaries, i.e. the project resources will be transferred to the beneficiaries in the form of grant.
61. **Implementation readiness:** Implementation readiness is not considered a major risk (risks of delayed start-up are considered low). Yunnan has extensive experience in implementing foreign-funded projects, including IFAD-funded projects (the last one, YARIP, was completed in 2018). The PMO has experience in implementing an ADB-funded project. Geographical dispersion of project counties is common in internationally-financed project, and does not represent a factor that affects implementation readiness. In order to further mitigate the the risks of start-up delays, provision for retroactive financing is made to the project to finance start-up activities and facilitate prompt execution of the project.
62. The overall inherent risk of the country is deemed to be Medium. China is ranked 87th out of 180 countries in the 2018 TI Corruption Perception Index, with a medium score of 39. With the most recent developments in the country, some improvements on accountability and transparency performance of governments can be anticipated. The government since beginning of 2013 has embarked on refreshed campaign to fight corruption, promote public fiscal austerity and transparency and reform fiscal budgeting arrangements. The most recent fourth plenary session of the Central Committee of the Communist Party of China in October 2014 further upheld the rule of law, giving prospect of further improvement in TI rating and scorings.
63. Taking into consideration recent experience of IFAD-financed project in Yunnan, Financial Management Assessment was undertaken for this project at the design, guided by the 'financial management questionnaire (FMAQ)'. In view of the mitigation measures and previous experience of, the overall project fiduciary risk is assessed to be Medium at the design stage.
64. MOF will be the responsible agency for repayment of the loan in subsequent arrangement with Yunnan province. The loan proceeds will be onlent from the Ministry of Finance (MOF) to DOF of Yunnan province where the loan proceeds will be further onlent to County BOFs, at the same terms and conditions without additional charges. At county level, the funds will be transferred from BOFs to PMOs and the later will forward the funds to relevant project implementing agencies (IAs) for the project implementation in accordance with expenditures incurred under approved annual work plan and budgets (AWPBs).
65. The Yunnan Provincial Department of Finance (DOF) will have the primary responsibility for the administration of project resources. The Department/Bureaux of Finance (DOF/BOFs) at the provincial and county levels respectively will be responsible for the followings: (i) opening and management of the Project Accounts; (ii) administering the project resources including the IFAD loan and counterpart funds; (iii) review and approval of the financing needs of project implementation; (iv) overseeing the use of project resources; (v) ensuring effective flow of funds for project

implementation; (vi) providing appropriate training to the financial officers of PMOs in terms of financial management; and (vii) preparing Withdrawal Applications (WAs) and reimbursement of eligible project expenditures on a timely basis.

66. Department of Agriculture and Rural Affairs(DARA) as the Lead Project Agency (LPA), will have the overall accountability for the project, including fiduciary aspects.
67. The project will (i) establish a control framework integrating periodic internal audits, independent external audits, and social safeguards to be adopted based on IFAD policies; (ii) adopt a good governance and mutual accountability framework to strengthen accountability and transparency in line with international best practices.(iii) outline the project specific financial management procedures and disbursement requirements in the PIM. (iv) establish a Management Information System (MIS) to support the core project management functions

## **I. Environment and Social category**

68. **Environment and Social category:** The project is classified as Category B. The Project has minor to moderate risks of adverse environmental impacts. Water infrastructures are smaller water harvesting ponds (15-100 m<sup>3</sup> serving 5-40 ha each), rehabilitation and upgrading of reservoirs (max. 130 000 m<sup>3</sup>) and some pumping stations. The water sources are rainwater and mountain streams and the Jin Sha Jiang river which has a dry season streamflow of 400m<sup>3</sup>/second against which the water volume intake will be insignificant. Road works are all below the threshold for requiring an environmental assessment and the counties have experience in soil erosion control and proper drainage in mountain road construction. The infrastructure will entail some conversion of farmland, where all farmers impacted will lose less than 10% of the land they have user rights to through voluntary agreements. The increased production, can potentially increase pollution from pesticides and increase pressure on land resources against which farmers will be trained in IPM and soil fertility management. All these possible impacts are reversible in nature, and can be readily remedied by appropriate preventive actions and/or mitigation measures as outlined in the ESMP (PIM chapter 9). The farmer-cooperative-enterprise models for rural transformation has risks of elite capture and limited economic inclusion and benefits generated for poor and vulnerable households, women and youth. It is at the core of the design to support a pro-poor and inclusive development and implementation of these models and monitor the results (ref. component A).

## **J. Climate Risk classification**

69. **Climate Risk classification:** The potential climate risk of this project is classified as "moderate". The three key climate trends that may have a potential impact in the project area are: (i) Changes in rainfalls quantity and intensity: Decrease in rainfalls may affect the viability of rain-fed agriculture in the absence of irrigation or water harvesting technologies; Increase in rainfalls, may increase the likelihood of floods. Shorter but more intense rainy seasons may increase flood risks; (ii) Changes in rainfall patterns: Changes in the seasonality of the rainy seasons, particularly delays in the onset of the rainy season, may increase the risks of droughts and have detrimental consequences for the agricultural production; (iii) Increases in temperatures: Higher temperatures in the dry season may increase the magnitude of dry spells and droughts. The project will finance a series of hard and soft investments (i.e. climate-proofed infrastructures, institutional strengthening, and technical assistance) aimed at reducing the risks and the negative impacts associated to the changing of weather and climate conditions, and promote climate-resilient production (e.g. Improving climate-risk assessment, planning and decision-making, and Piloting climate-smart irrigation investments - Ref. Component B). To further reduce the potential negative impacts of climate change on the project investments, the project would adopt adaptation measures, e.g. (i) the project will refrain from investments in headworks (i.e. intake weirs), which are prone to flood damage; (ii) all physical infrastructures, and particularly on-farm irrigation works and rural roads, will be climate-proofed. As most of the infrastructures financed by the project will be relatively small infrastructures, climate-proofing will be largely achieved by the implementation of good management, operation, and maintenance practices. Potential climate risks related to the project investments are mostly linked to changing rainfall patterns and rising temperature, which in turn may lead to (i) landslides on steep hillsides, (ii) flash floods and water logging in lowlands, and (iii) droughts and extreme hot spells.

## 4. Implementation

### K. Organizational Framework

#### a. Project management and coordination

70. **Lead implementing agency:** The Provincial Department of Agriculture and Rural Affairs (DARA) has been appointed as lead implementing agency. Specifically, the Farmland Enhancement Division within DARA would take lead responsibility for project design, management, supervision and evaluation, and will act as the Provincial Project Management Office (PPMO). Additional support will be mobilized from the Division of Cooperative Economy of DARA, and other divisions whenever needed. DARA will be in addition the main institutional entry point for linkages with MARA.
71. **County Project Management Offices:** Major implementation responsibilities of the project lie with the counties. County Project Management Offices (CPMOs) will be established at the County Bureau of Agriculture and Rural Affairs. Relevant technical bureaus in the counties (such as water conservancy, meteorological, bureaus, etc.) will be mobilized to support the project implementation in the related activities of the project as per need.
72. **Role of the Department/Bureaus of Finance:** The Department/Bureau of Finance at Provincial/County level will be responsible for administering project resources, including the IFAD loan and counterpart funds.
73. **Implementing Support Units:** Implementing Support Units will be established in the project townships to facilitate project implementation, targeting and related monitoring activities.
74. **Project Joint Meeting:** At provincial level, a coordinating committee comprising at least the Provincial Department of Finance (DOF), the Provincial Department of Agriculture and Rural Affairs (DARA), the Provincial Development and Reform Commission (PDRC), and the Provincial Office of Poverty Alleviation may be established to provide overall guidance and coordination of the project implementation. Involvement of the Women Federation, Youth League, the Meteorological Service, and Work Bureau is also recommended. Similar coordination committees led by the county mayors should be established at county level.
75. **Independent third-party Verification Agency:** An independent third-party verification agency will be contracted by the project to verify that the disbursement-linked indicator target set for the activity that would pilot the result-based lending approach (A.1.1 - Promoting pro-poor farmer cooperatives) (i.e. number of cooperatives that meet defined operational standards) is achieved.
76. **Verification protocol:** The Agricultural Bureaus or the Economic and Management Bureaus of DARA at the county levels will record the cooperative information in a database on a regular basis and be responsible for the accuracy of the information. Cooperatives meeting all the agreed eligibility requirements will be reported to the PPMO on a semi-annual basis. The independent third-party Verification Agency (VA) will conduct a verification of all cooperatives deemed to meet the agreed operational standards in a given DLI disbursement period (e.g. quarterly). The cooperatives will report to the VA who after verification will report to the PPMO according to the agreed check list. Confirmation that the disbursement-linked indicators (DLI) target has been achieved would be through a letter of confirmation to IFAD.
77. **Role of the County Meteorological Bureaus:** The County Meteorological Bureaus will take the lead in implementing the Improving climate information and adaptation advice activity (Ref. Activity A.1.7).
78. **Role of the Agricultural Information Institute of the Chinese Academy of Agricultural Science:** IFAD and the Agricultural Information Institute, Center of International Agricultural Research of the Chinese Academy of Agricultural Science (AII-CAAS) are entering into an agreement by which CAAS would provide support to IFAD in monitoring and evaluating the IFAD portfolio in China, extracting relevant knowledge from IFAD portfolio, and utilizing it to inform policy making. Within this context, the project would enter into an agreement with AII-CAAS for carrying out major functions related to M&E, knowledge management and policy dialogue, i.e. carrying out baseline, midline, and endline surveys, analysis of data, impact evaluations, policy notes, etc.
79. **Role of the Yunnan Youth League:** The Yunnan Youth League is the most extensive youth organization in the province and at the county level. The project envisions its involvement as a member of the Project Joint Meeting. In addition, the project will explore collaboration with the Youth League for the setting-up and operation of the business incubation and service centers [12].
80. **Role of Women Federation:** The Yunnan Women Federation is the main women's organization in the province. The project envisions its involvement as a member of the Project Joint Meeting. In addition, the project will explore collaboration with the Women Federation for the setting-up and operation of the business incubation and service centers.

81. **Role of MARA:** In order to facilitate the possible scaling up of successful innovations promoted through the project beyond Yunnan province, and inform national policies, DARA is invited to strengthen the linkages with the Ministry of Agriculture and Rural Affairs (MARA). A budget for policy activities under Component C has been included to favour and provide sufficient resources to implement activities aimed - among alia - to this purpose.
82. **Leveraging existing development partners' platforms:** Existing platforms with other developing partners, for instance the UN technical working group on agriculture, the IPRCC-ADB-FAO-IFAD-UNDP-WB-WFP collaboration on poverty reduction and south-south cooperation, will be leveraged and mobilized to maximize the opportunities for policy dialogue and engagement.

## **b. Financial Management, Procurement and Governance**

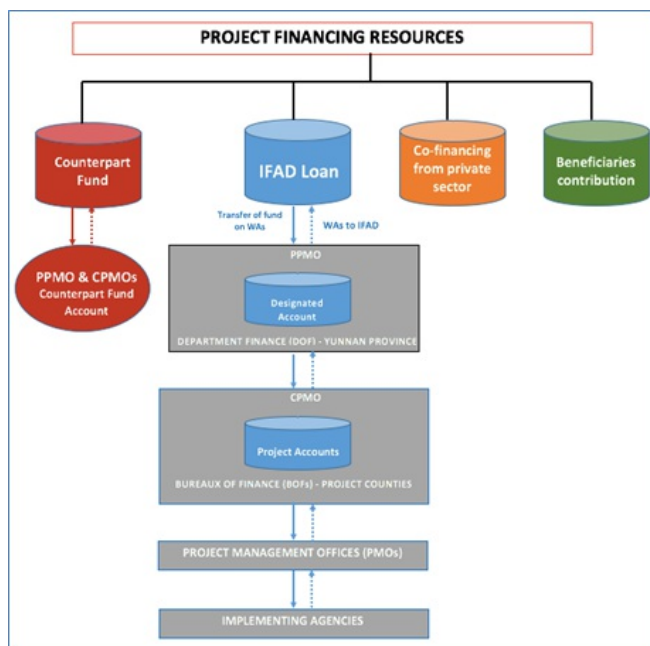
83. **Organisation and staffing.** A dedicated provincial PMO (PPMO) shall be set up within the Department of Cropland Construction and Management, DARA. It will be responsible for project coordination, management support, monitoring and reporting, ensuring adherence to agreed standards, guidelines, and procedures, providing overall guidance on operational aspects to the various implementing units, and facilitating intra-knowledge transfer among project provinces and with external domestic and international agencies.
84. PMOs are staffed with officers who need to have experience in project management, financial management, procurement, and monitoring and evaluation. They will also be assisted by officers from the technical line bureaus of Water Resources, Agriculture, Forestry, and Finance at the corresponding level. PPMOs and CPMOs will be in charge of day to day management of project activities, overseeing project designs, implementing and supervising project activities, arranging for counterpart-funding and local labor contribution, preparing annual work plans, financial plans, procurement plans, monitoring and reporting on project progress, outputs, and outcomes.
85. PMO and the CPMOs will assign financial staff and to support the Financial Division of the LPA for the financial management of the project. The financial division at each level is composed of three or more professional staff (Finance Manager, released on a full-time basis, to be assisted by an Accountant and Accounts Assistants).
86. The PPMO organization structure is composed of the director who has overall responsibility and a Finance Manager who has financial responsibility overseeing an accountant and a cashier. The technical officers in the PMOs will have review and pre-approval functions, similarly in the counties PMOs.
87. Financial Manager (accountant in professional title) is responsible for the project financial management. The manager will be assigned who has accumulated rich experiences in managing projects of international cooperation in the years implementation of the World Bank and ADB projects.
88. Budgeting staff are responsible for the allocation of project plan funds. procurement personnel , accountants are responsible for calculating and reviewing the fund inflow and disbursement
89. Financial accountants are personnel of state organs, all of whom have been selected and recruited through examinations.
90. **Budgeting.** China has undertaken extensive reforms to its budgeting system over the past 10 years. These have encompassed the entire budgeting cycle: formulation, approval, implementation and audit. The early challenge was fundamentally to create the institutional infrastructure for a modern budget process where none had previously existed. Under its budgeting system, provincial, and local government. All activities of the government are predetermined and are set out in plans and programs. The annual estimates of expenditure detail the financial commitment of the government for the next year's program of activities.
91. The PPMO, after consultations with project stakeholders, shall prepare its annual budget, linking all the planned activities to the cost categories outlined in Schedule II of the Financing Agreement; this exercise will take place in advance of the preparation of the national budget, to ensure that the required Government funds will be allocated and available on time. All financing contributions should be clearly stated in the budget to be submitted to internal for approval and to IFAD for non –objection.
92. The LPA should make adequate annual budgetary provisions for IFAD funds and Counterpart funds in the National Budget, based on the AWPB of the Project.
93. Counterpart funding will consist of allocations made by the project province and counties/districts. Government will ensure that counterpart funds are contained in the domestic fiscal allocations for the counties, and that they are released for the project on time. The counterpart funding maintain in the Treasury Accounts of the counties will be used to pre-finance the project expenditures as well.
94. Budget allocations will be made to enable the function of the provincial and county PMOs, to cover investment and recurrent expenses, office and training equipment, capacity building, M&E, knowledge management, and agribusiness facilitation services. Modest project support will also be reserved for function at township where existing

government staff and facilities will be used. Recurrent costs for all PMOs will be ensured by government counterpart funding, which will cover staff salaries, travel costs, administrative costs, and operation and maintenance of vehicles etc.

95. **Disbursement arrangements and flow of funds** In accordance with the section 4.04(d) of the General Conditions, immediately after entry into force of the Financing Agreement, there shall be a Designated Account (DA) for the IFAD Loan denominated in the currency of the loan (USD/EURO to be the same currency of the loan) to be opened, through which IFAD funding shall be channelled. The DA is to be set up at and managed by DOF. DOF will be directly responsible for the management, maintenance and reconciliation of the DA activities. Supporting documents required for IFAD disbursements will be prepared and submitted by CPMOs through PPMO for review and verification before sending to DOF for further disbursement processing.
96. The PPMO and county CPMOs are responsible for reviewing the Disbursement Request as well as the supporting documentation required for IFAD disbursements. Disbursement Requests will be prepared and submitted by CPMOs to PPMOs for review and verification before sending the Disbursement Request to DOF for further disbursement processing. Once approved, project resources will be channeled directly from provincial level to county level .
97. In accordance with Section 3.1 of the LDH, the Designated Account will be administered following Imprest Account arrangements. Advances from this Financing must be segregated from other funds for the Project .
98. **Additional general conditions precedent to withdrawal: The following are designated as additional general conditions precedent to withdrawal**
99. (a) The Provincial Project Management Office (PPMO") and at least one County PMO, the respective key Project staff shall have been selected;
- 100.(b) The Borrower, through the Lead Project Agency, shall have submitted, and the Fund shall have received, an official document confirming the availability of adequate counterpart funds for the first Project Year;
- 101.(c) The Designated Account shall have been duly opened : Documentation evidencing the opening of the Designated Account, with details of the names and titles of the persons authorized to operate the DA, must reach IFAD before withdrawal from the loan account can begin.
- 102.(d) the designated representative a letter designating the names of officials authorized to sign withdrawal applications which includes their authenticated specimen signature(s). The project is eligible and authorised to use the IFAD Client Portal (ICP), the applicable form is included in LTB.
- 103.(d) A draft PIM shall have been prepared and is acceptable to the Fund and
- 104.(e) A computerized accounting system acceptable to the Fund shall have been identified and selected by the Provincial PMO.
105. Upon fulfilment of conditions precedent to withdrawal and the Borrower's request, the Fund will make one (or more) withdrawal(s) of up to the ceiling USD/EURO 6 million for the loan.,and deposit such amount(s) into the Designated Account; DOF shall submit withdrawal applications to replenish the Designated Account from time to time, based on expenditures, provided that the amount claimed is not less than 20% of the initial deposit. All withdrawals must be in line with projected expenditures as detailed in the approved AWPBs.
106. The following are the SOE thresholds that apply for withdrawal application under procedure (i) "Advance Withdrawal" and under procedure (iii) "Reimbursement": USD 300,000 for all expenditures categories.
107. PMOs and IAs shall maintain Implementation ledger Accounts in local currency in the Treasury System or commercial banks to receive the proceeds of the IFAD financing and/or the counterpart funding respectively. The County PMOs and BOFs will ensure that funds received at each level are transferred without delay. Separate bookkeeping is maintained by each of the IAs where Project activities will be implemented.
108. Y2RDP will pilot a result-based Lending/disbursement in selected sub-component (sub- component 1. 1 ). Replication at larger scale could be considered at mid-term on the basis of the positive results and lessons generated during implementation. The disbursement under RBL will be conditional to the achievement of agreed and independently verifiable targets or milestones. Detailed disbursement linked indicators need to be identified and verified by an assigned independent agency following agreed verification protocols.
109. Y2RDP will pilot a result-based Lending/disbursement (RBL) in selected sub-components. Replication at larger scale could be considered at mid-term on the basis of the positive results and lessons generated during implementation. The disbursement under RBL will be conditional to the achievement of agreed and independently verifiable targets or milestones. Detailed disbursement linked indicators need to be identified and verified by an assigned independent agency following agreed verification protocols.



110. FM procedures for the annual audit, verification on missions are still as part of the annual process. Project needs to ensure that verification on the funds used for the intended purpose, for efficiency, social equity, basically value added principles.



111. **Retroactive financing** As an exception to the General Conditions for Agricultural Development Financing, IFAD will seeking IFAD Executive Board approval that for retroactive financing from the loan up to US\$7.5 million for eligible expenditures incurred as from the date which the design document approval by Quality assurance group to the date of the entry in force of the financing agreement. Eligible expenditures for retroactive financing are considered those incurred to finance the start-up and preparation project activities such as : (i) purchase of essential items (including equipment and procurement of MIS system) for the PMOs; (ii) recruitment of project staff; (iii) costs related to tendering, selection, and recruitment of service providers; (iv) costs related to the finalization of the program implementation manual, customization of accounting software to fit IFAD requirement and license fees, start-up trainings and workshops; (v) establishment of the M&E system, including carrying-out of the baseline survey and development of MIS; (vi) exposure visits for knowledge and experiences sharing; (vii) surveys and feasibility studies; (viii) training and technical assistance for cooperatives, including recruitment of service providers, cooperative support field officers, technical advisors for business plans development, brokers/facilitators for linkages with supermarkets; and value-chain officers and monitoring & evaluation officers; and (ix) business plans.

112. **Financing of taxes:** In line with IFAD GCs, IFAD's funds may be used to finance taxes that are not "excessive, discriminatory or otherwise unreasonable". In view of improvement of the efficiency of funds flow and better support to the project implementation, IFAD's financing will be used to finance taxes for an estimated amount of approximately US\$2.1 million. Government financial contribution to the project is in the amount of US\$ 115 million which is more than 54 times of the amount of taxes (US\$ 2.1 million) financed by IFAD.

113. **Internal controls and internal audit :** As part of internal control procedures, the PPMO need to provide a formal delegation of authority and clear segregation of duties among the project staff. In addition, the project's financial performance will be periodically reviewed. The overall control measures and systems and procedures that are in place

114. **Management Information System (including Accounting software).** The Project will establish a Management Information System (MIS) to support the core project management functions at the central and district levels, such as business plan development, financial management and project monitoring and evaluation. The MIS should be able to record all expenditures transactions by categories, components, project activities and sources at all level of this project

115. The PPMO and CPMOs will adopt an accounting software, customised to record and generate financial reports and preserve financial data per the requirements of IFAD. The customisation should comply to the chart of accounts, disbursement rules and share of financiers and should be able to generate Financial Statements and automate the preparation of WAs.

116. The Provincial PMO shall make sure proper internal controls defined and described in the project FM guideline, as part of the PIM. Detailed control activities include a good transaction trail, personnel policies and competent project staff, segregation of duties, physical protection of assets, and timely progress and performance reporting

117. Financial Supervision and Inspection Bureau does random check / audit of the financial issues. The focus is shifting randomly to all the relevant units. In addition, the commissioners of MOF organize non-scheduled inspection.
118. Corrective measures to the problems found in the internal audit are carried out in line with the relevant provisions of the national financial funds management.
119. **External Financial Audit.** The auditing is conducted by the DAO which is constituted as an independent body under the National Audit Office (NAO) and responsible for the audit for all IFIs projects in China. The Provincial Audit Office will be delegated to be responsible for auditing the project. PAO has rich experiences with WB, ADB and IFAD project auditing. The audited financial statements and a detailed audit report along with a Management Letter not later than six months after the end of each financial year.
120. IFAD will publicly disclose project financial statements and audit reports of projects financed by IFAD. In line with the standards of the International Aid Transparency Initiative, the government is encouraged to publish relevant financial information on their own websites, for increased accountability. The audit TORs shall explicitly mention the right of the borrower/recipient and of IFAD to publish the audit report, with no limitation-of-use clause.
121. **Lending Terms and Financing Conditions.** The Loan is granted on ordinary terms and shall be subject to interest on the principal amount outstanding of the Loan rate equal to the IFAD Reference Interest Rate including the variable or fixed spread, payable semi-annually in the Loan Service Payment Currency. The loan has a maturity period with a ( MAXIMUM 35) YEARS, including a grace period with (MAXIMUM 10 YEARS) subject to subject to a maximum average repayment maturity of 20 years. The maturity period is initiated when the Fund determines that all general conditions precedent to withdrawal have been met by the Borrower.
122. China remains at low risk of external debt distress. China recorded a government debt equivalent to 47.60 percent of the country's Gross Domestic Product in 2017. According to the date released on March 2019 by the State Administration of Foreign Exchange (SAFE) of China, as of the end of 2018 China's foreign debt balance was USD\$1.9652 trillion, for an increase of \$207.3 billion, or 12% compared to the end of 2017 with the foreign debt balance-to-GDP ratio standing at 14.4%. It is also stated that China will continue to pay close attention to changes in foreign debt conditions, and strengthen foreign debt risk prevention and maintain the security of the national economy and finance while persevering with management of foreign exchange to service the real economy.
123. **Financial Management Manual:** (i) The PPMO in consultation with DOF will update the financial management (FM) Guideline for the project to regulate the project financial management. The PPMO shall make sure that proper internal controls are defined and described in the FM guideline, as part of the PIM. The PIM will be made a condition to disbursement. The project shall draft and submit to IFAD financial statements for the loan on a biannually basis which shall indicate the financial and physical achievements during project implementation. Annual unaudited financial statements should be prepared and delivered to IFAD no later than four (4) months after the end of each Fiscal Year. (ii) Dedicated finance staff should be appointed in the implementing agencies at provincial and county level. This will be a disbursement condition to disburse funds to participating cooperatives and enterprises. Participating enterprises/cooperatives should also have sufficient financial capacity. Capacity building will be provided through the project.
124. Lessons learned from previous projects. To speed up the project start-up: (i) adequate and capable finance staff should be appointed at each level of PMOs with more relevant educational background and working experience to quickly adapt to the sound FM requirements, arrangements and accounting practices; (ii) PIM should be properly prepared, translated and distributed to all level of PMOs; (iii) training on capacity building for staff at implementing agencies should be conducted at early phase to enhance their understandings and capability and possibly improve staff turnover rate (iv) retroactive financing to be used for the project. .
- Strong management and effective coordination systems will be essential to ensure efficient financial reporting and fund-flows, which will be key to improve slow disbursement and successful project implementation;
  - Web-based accounting software should be identified and procured in the design stage
  - The MIS system to be serve as project management tool should be adopted more widely with the development of key areas of the system including Financial management to be linked with procurement management, etc.;
  -
125. **Procurement.** Procurement of goods, works and services financed by the project will be carried out in accordance with the Procurement Law of the People's Republic of China (2002) and its amendments to the extent that they are consistent with the provisions of IFAD's Project Procurement Guidelines and Handbook (2010) and its amendments. The procurement methods to be applied, prior review arrangements, and the thresholds for different procurement methods will depend on the expenditure and the estimated value of the contract, and will be detailed in the letter to the borrower.

## L. Planning, M&E, Learning, KM and Communication

### a. Planning, M&E, Learning, Knowledge Management and Communication

126. **Planning:** Planning will follow current practices for the IFAD-funded projects in China: planning will be done on annual basis through the development of annual work plan and budgets (AWPBs). AWPBs will be developed through participatory approach. AWPBs would include, among other things, a detailed description of the planned activities and required budget, a procurement plan, and a plan for the implementation of the activities. AWPBs would need to receive IFAD's "no objection".

127. **Monitoring and evaluation (M&E):** Monitoring and evaluation is an essential function that would support project management. M&E will be supported by a management information system (MIS) which will be specifically developed for the project, and that will integrate information regarding project management, financial management and physical progress, allowing real-time reporting.

As part of its commitment to being gender transformative, a pro-WEAI survey will be undertaken at baseline and completion. The pro-WEAI survey will assess the increase in the participating women's agency and empowerment. Aspects of pro-WEAI will also be included in the Core Indicator Outcome Indicator Survey, particularly with regard to asset management and productivity.

128. **Learning and knowledge management (KM):** The project knowledge management strategy would be built on the following key elements: (i) an effective M&E framework will be established to monitor implementation progress, and would provide the evidence for learning; (ii) a baseline, mid-line, and endline survey will be conducted at the beginning, mid-term, and completion of the project; (iii) workshops at different levels will be held regularly to share knowledge, experiences, innovations, and best practices; (iv) study tours, exposure and exchange visits, both in the country and outside the country will be encouraged as a vehicle for sharing knowledge; (v) an agreement with the Agricultural Information Institute, Center of International Agricultural Research of the Chinese Academy of Agricultural Science (AII-CAAS) will be signed for the provision of support in M&E, and knowledge management.

### b. Innovation and scaling up

129. **Innovations:** One of the main objectives of the project is to introduce, test, pilot, and demonstrate innovative models, approaches, mechanisms, that - if successful - could be replicated and scaled-up, inform policy-making - or shared with other developing countries through south-south cooperation.

It is important to clarify that, in the context of this project, the term 'innovative' is used to describe a model, approach or mechanism that is different from the 'mainstreamed' approach. This definition reflects the Government's understanding and expectations. Some of the elements described below can be considered truly 'innovative' in the country, provincial or project area's context. Others may not be completely new in the country context, but their adoption may have been limited and their implementation may have encountered challenges that the Government is interested to understand and overcome.

Anticipated innovations include:

1. **Innovative *chanyie fupin* models:** The project will introduce and pilot an upgraded *chanyie fupin* model, where the role and capacity of farmer cooperatives to act as vehicle/entry point for pursuing inclusiveness through agribusiness development will be piloted. The project would promote cooperative standardization (i.e. the adoption of 'best operational standards' by cooperatives); the adoption of value-chain approaches by agro-business entities; business plans as strategic development tool for agro-business entities; and benefit-sharing mechanisms that allow active participation of the target group in the economic success of the cooperative and stimulate individual engagement in the cooperative's economic activity (Ref. Sub-component A.1);
2. **Traceability systems:** The project will support the adoption of a traceability system at county level, a trusted system to ensure that food safety requirements are met and eventual breaches identified, thus generating consumer trust in food standards and certification (Ref. Sub-component A.1);
3. **Business incubation centers:** The project will support the setting-up and operationalization of business incubation centers, platforms to support entrepreneurship programs and business start-up (Ref. Sub-component A.2);
4. **Inclusive finance models:** The project will stimulate financial service innovations to improve access to finance in the project area (Ref. Sub-component A.3);
5. **Climate proofed design of infrastructure:** The project will support the improvement of the capacity to assess

climate-risks, and plan and make investment decisions accordingly, and the integration of climate considerations into the design and technical specification of the infrastructures, to reduce their vulnerability to the anticipated impacts of climate change (Ref. Component B);

6. **Disbursement against results:** The project will introduce on a pilot basis an innovative mechanism for disbursement, i.e. disbursing project funds allocated for a sub-set of activities (Ref. Activity A.1.1) against the achievement of agreed and independently verifiable targets or milestones that are considered important towards contributing to the achievement of the project objectives. The achievements of the agreed targets or milestones, or disbursement linked indicators (DLIs), will be verified by an assigned independent agency following agreed verification protocols. The disbursement against results will be piloted on a small scale by the project, and replication at a larger scale could be considered at mid-term on the basis of the positive results and lessons generated during implementation.

130. **Policy engagement and scaling-up:** Policy engagement is a key strategic thrust of IFAD-China partnership, as highlighted in the COSOP 2016-2025. Policy engagement is a long-term process, which is pursued through a combination of different instruments: lending (e.g. investment project) and non-lending (e.g. dialogue, partnerships, analytical works, etc.).

Within this framework, the project will contribute to the policy and scaling-up agendas as follows: the project is conceived as a 'demonstration' project, which will introduce several innovative approaches to test their applicability in the project area's context, learn lessons, and induce replication of those models and approaches that demonstrate themselves successful and/or inform policy-making. The policy engagement and scaling-up framework relies on the following elements:

1. **Champions:** The project will closely engage national and provincial stakeholders as champions to learn and replicate ideas and experiences derived from the project. Central level agencies such as the Ministry of Finance, (MOF) the National Reform and Development Commission (NDRC), and the Leading Group Office of Poverty Alleviation and Development (LGOP) place great expectations on the capacity of IFAD-funded projects to introduce innovations and good practices that can be replicated or inform policy-making, and will closely observe the progress and results of the project. The Ministry of Agriculture and Rural Affairs (MARA) has a special interest on a number of features in the project, that may inform its policies and programs, including the cooperative standardization, rural entrepreneurship program, synchronization with the 'national agro-products traceability system, climate service for agricultural production, etc.
2. **Drivers:** There is a mix of (i) market forces associated to the growing demand for safe and high quality food; and (ii) genuine policy interest from the government, particularly from the Ministry of Agriculture and Rural Affairs (MARA), in observing how some of its policies and strategies can be best operationalized or adjusted, including ensuring long-term sustainability of poverty achievements, mainstreaming smallholder farmers into modern agriculture, revitalizing and creating new employment opportunities in rural areas, upgrading and standardizing cooperatives, among other policies and strategies;
3. **Pathway:** The pathway for policy engagement and scaling-up would include the following steps: (i) regular monitoring of project progress and results through the project M&E system, supported by a management information system (MIS) that would allow real-time reporting, which will provide evidence for learning; (ii) learning and stocktaking of lessons and best practices, including through possible research/analytical works, impact assessments, etc. - this function will be supported by the Agricultural Information Institute of the China Academy of Agricultural Science (AII-CAAS), with which the project would enter into an agreement; (iii) workshops, seminars and other learning events at different levels will be held regularly to share knowledge, experiences, innovations, and best practices and inform policy-makers, including the IFAD Annual Portfolio Review, consultations in the framework of the design and/or evaluation of the COSOP, regular policy seminars organized by IFAD to share experience from its projects with various stakeholders, etc. AII-CAAS is expected to play a critical role to disseminate relevant lessons from the project and inform policy-making; (iv) joint field-visits with relevant stakeholders and policy-makers to showcase lessons and best practices; (v) regular interaction with other projects to share lessons and best practices;
4. **Possible scaling-up directions:** Possible scaling-up could happen through (i) *expanding services* to more clients in a given geographical space; (ii) *horizontal replication*, from one geographical area to another; (iii) *functional expansion*, by adding additional areas of engagement; and (iv) *vertical expansion*, moving from a local or provincial engagement to a nation-wide engagement;
5. **Provisions:** Adequate budget is provided for project M&E and knowledge management, and to undertake the necessary advocacy and policy activities;
6. **IFAD's role:** IFAD will support and facilitate the process, by providing the necessary expertise, contributing to the monitoring of the results and to the knowledge management, and leveraging its own partnerships and platforms that will catalyze the scaling-up process. However, the policy engagement and scaling-up strategy of the project

will primarily rely on and will be delivered through the government systems - not by IFAD.

131. **Clarifying the boundaries for policy engagement:** This primary objective of this project is not to support the central government in pursuing or implementing policy reforms in the country, but to support the provincial government of Yunnan in financing income-generating activities in the project area. Within this framework, the Design Team considers this project relevant enough to key development policy questions and innovative enough to generate lessons that could stay on the table of policy dialogue. Within this framework, the project has set-up a framework for policy engagement (ref. above). However, policy outcomes would be a possible and desired by-product of the project, and not its primary objective. Moreover, the extent by which the project could influence policymaking cannot be determined a priori, as it would depend on a number of factors that are not predictable and beyond the control of the project. In conclusion, the project policy engagement strategy is not to claim an 'a priori' policy impact, but to use the results, lessons, etc. of this project as an entry point for dialogue within the broader context of IFAD's engagement and dialogue in China.

## M. Implementation plans

### a. Implementation readiness and start-up plans.

132. **Key steps towards project approval and project start-up:** The following are the key milestones between the end of project design and project start-up:

- **IFAD - Design Review Meeting:** 4 February 2020
- **IFAD - Quality Assurance Group Review:** 10-15 February 2020
- **IFAD - Submission of IFAD Project Design Report to SEC:** 19 February 2020
- **Government - Submission Feasibility Study to PDRC and Foreign Capital Use Report to NDRC for approval:** February 2020 (expected)
- **IFAD - Informal EB Seminar:** 25 March 2020
- **Government - NDRC approval and MOF authorization to negotiate:** March 2020 (expected)
- **Loans negotiations:** First half April 2020 (tentative)
- **IFAD Executive Board approval:** 20-22 April 2020
- **Signing financing agreement:** May 2020 (expected)
- **Establishment of PMOs and appointment of project staff:** June-September 2020 (tentative)
- **Implementation support mission:** September/October 2020 (tentative)
- **Opening designated account:** November 2020 (tentative)
- **Start-up:** December 2020 (tentative)

133. **Retroactive financing:** To mitigate the the risks of start-up delays and facilitate prompt execution of the project, provision for retroactive financing is made to the project. Conditional to the approval of the IFAD Executive Board, IFAD will reimburse eligible project expenditures incurred by the borrower before the loan effectiveness to finance the start-up preparation activities [13] up to a maximum of 10% of the total IFAD financing (i.e. US\$ 7.5 million). Retroactive expenditures are pre-financed by the borrower.

134. **Stakeholder consultations and feedback:** An indicative list of the stakeholders that have been consulted during the design process, and views captured in the project design, include: Department of Agriculture and Rural Affairs, Yunnan Province (DARA); Farmland Enhancement Division, DARA; Farmland Construction Division, Department of Agriculture & Rural Development, DARA; Division of Cooperative Economy, DARA; Poverty Alleviation Division, DARA; Finance Division, DARA; Yunnan Department of Finance; Yunnan Water Conservancy Bureau; Yunnan Meteorological Bureau; Yunnan Transportation Bureau; Yunnan Women's Federation; Yunnan Youth League; Yunnan Poverty Alleviation Office; Yunnan Maternity and Child Care Center; Bureau of Agriculture and Rural Affairs, Yunlong, Yongping, Yongshen, Huaping, Lanping, Zhenxiong, Suijiang counties; Plant protection and Extension Services, Bureau of Agriculture and Rural Affairs, Yunlong county; Poverty Alleviation Office, Yunlong, Yongping, Lanping, Yongshen counties; Bureau of Ethnic Groups and Religions, Yunlong, Yongping counties; Bureau of Employment, Yunlong county; Women's Federation, Yunlong, Yongping, Lanping, Yongshen counties; Youth League, Yunlong, Yongping, Zhenxiong, Yongshen counties; Environment Protection Agency, Yunlong county; County Metrological station, Yunlong county; Dayanchang Livestock Cooperative, Yunlong county; Wenxing Village Committee (village heads, households & women), Yunlong county; Jiaju Village (village heads, households & women), Yunlong county; Water Conservancy Bureau, Yunlong, Yongping, Huaping, Lanping, Zhenxiong, Suijiang, Yongshen counties; Transportation Bureau, Yunlong, Yongping, Huaping, Lanping, Zhenxiong, Suijiang, Yongshen counties; Bureau of Human Resources and Social Security, Yongping county; Bonanshan Tea Company, Yongping county; Boheng Tea Factory, Yongping county; Dapingtan Village (Village heads, households & women), Yongping county; Dapingtan Tea Factory, Yongping county; Shijiacun Kiwi Cooperative, Yongping county; Maternity and Child Care Center, Zhenxiong, Yongshen counties; Pianjiao Township, Yongshen county; Pianjiao Pomegranate Cooperative, Yongshen county; Cunong Fruit & Vegetable Cooperative, Yongshen county; Anhong Cropping and Livestock Cooperative, Yongshen county; various Village Committees and Farmer Cooperatives in Yongping, Lanping, Zhenxiong, Huaping, Lanping, Zhenxiong, Suijiang counties.

In addition, a consultative meeting with representatives of IFAD Executive Board in China and other relevant development partners will be organized in early March 2020 to present the main elements of the design and seek their feedback.

135. **Project Design and Delivery Team:** Matteo Marchisio (Country Director, APR); Rikke Grand Olivera (Senior Global Technical Specialist and Project Technical Leader, PMI); Sun Yinong (Country Program Officer, APR); Josef Ernstberger (Rural Development Specialist); Cai Kui (Social Development Specialist); Li Guangyong (Rural Infrastructure Specialist, China Agricultural University); Mo Xiugeng (Rural Finance Specialists, China Academy of Financial Inclusion); Enrico Mazzoli (Economist); Ghulam Marri (Economist); Irene Li (Senior Regional Financial Officer, IFAD); Candra Samekto (Program Officer, APR); Mattia Prayer Galletti (Lead Technical Specialist, ECG); Puri Tola Satue (Legal Officer, LEG); Lauren Phillips (Lead Policy and Results Specialist, OPR); Fabrizio Bresciani (Regional Economist, APR); Martina Huonder (Program Liaison, APR); Yinyin Shi (Country Program Assistant, APR).

## **b. Supervision, Mid-term Review and Completion plans.**

136. **Supervision, Mid-term Review and Completion plans:** The project will be under the direct supervision of IFAD. In order to facilitate the project's implementation and ensure the achievement of project objectives, IFAD and the Government will perform project supervisions/reviews that include (at least one) annual supervision, mid-term review, and completion review. Additional, specific implementation support missions to deal with specific implementation issues can be organized as per need.

1. **Annual supervision:** Annual supervision will be conducted by supervision missions sent by IFAD, and to the extent possible jointly with the Government. The missions will review the progress of program implementation, both physically and financially; implementation performance; fiduciary aspects, results, impact and sustainability. Recommendations to issues raised, if any, will be made by the mission to improve the program implementation. For the first supervision of the program, the focuses will be on reviewing adherence to the programme strategies and institutional performance, including implementation arrangements, targeting, appropriateness of procurement, functioning of the M&E system, and effectiveness of financial management.
2. **Mid-term review:** IFAD and the Government will jointly carry out a "mid-term review" (MTR). Among other things, the MTR mission will review the project approaches and strategies including the effectiveness of targeting and gender mainstreaming strategies, implementation modalities, poverty and gender focuses, impact of individual intervention, and sustainability. The mission will recommend a scaling-up or reorientation as may be required to achieve project objectives and remove eventual constraints. Recommendations from the MTR may result in modifications to the Loan Documents.
3. **Completion review:** Completion review, also jointly conducted by IFAD and the Government, will evaluate, among other things, the results and impact of the program, review sustainability and exit arrangement, and draw experiences and lessons for later IFAD and government supported projects.

## **Footnotes**

[1] According to the World Bank (2015), GINI coefficient in China was 38.6.

[2] Presently, China does not have any explicitly written, unified, national policy on youth, or any official executive mechanism for carrying out and monitoring national or regional youth affairs. Youth policy is regarded as a component of the overall policy of the China's Communist Party.

[3] In this regard, the Government has recently launched a pilot "Mass Rural Youth Volunteer Program", which aims at facilitating the migration of ten million young volunteers from large cities to rural areas.

[4] The extent by which the project will be scaled-up or influence policymaking cannot be determined a priori as it would depend on a number of factors that are not predictable and beyond the control of the project - not least, the extent by which the piloted models would demonstrate themselves successful.

[5] Dragonhead and SMEs.

[6] Production expansion would be conditional to formal out-grower arrangements, ensuring they respond to a real demand.

[7] The Project Design Team was of the opinion that, given the innovative nature of some of the models to be introduced by the project, and the time usually needed to build adequate capacity of the cooperatives, a 6 year implementation

period would have been more appropriate. However, the PPMO strongly requested the implementation period not to exceed 5 years. The rationale is linked to the preference of the government to start paying the loan back after project activities are completed (ordinary terms loans do grant a five-year grace period). The government is also be concerned on the additional administrative costs (i.e. costs of the PMOs, which are borne by the government and not funded by the project) associated with a longer implementation period. The rationale for a longer implementation period suggested by the reviewers to ensure sufficient time for policy engagement is noted. However, policy engagement and possible scaling-up would be guaranteed by the continuous engagement of IFAD in China, by the integration of the lessons generated and successful models tested by the project in future IFAD investments, and by the policy dialogue conducted by the IFAD Country Office through various instruments and channels - and not necessarily by activities of the project.

[8] The Youth League defines "youth" as individuals between 18 and 45 year old.

[9] The Business Incubation and Service Centers will be primarily located at the premises of the recently established county e-commerce centers, established under the Ministry of Commerce, which generally have sufficient office, meeting and conference space, and communication facilities. Collaboration with the youth and women leagues will be sought.

[10] The project will not rely on a central agency as lead implementing agency. The appointment of a central agency as lead implementing agency requires a number of conditions - not least the willingness and the capacity of a central agency to accept and repay, with its own resources, an international loan - which are difficult to attain. So far, such approach has been piloted in one project only: the IPRAD-SN. While the benefits of such approach have yet to be demonstrated, the experience has already demonstrated the extremely high costs of such approach, including much more lengthy and cumbersome government internal approval process, delays in start-up (e.g. opening of designated accounts, etc.), high supervision costs. It was thus considered more prudent to adopt the more conventional and tested 'loan to a provincial government' approach for the projects developed under IFAD11 - while not excluding to reconsider the possibility of a loan implemented by a central agency in the future, based on the experience of IPRAD-SN.

[11] The project strategy builds on two important macro-trends in China: (i) a rapidly growing demand and consumer preferences for clean and safe food, for which the remote project areas have a comparative advantage. The project will focus on investments and organizational arrangements primarily on value addition (i.e. special products, branding, traceability, green and organic certification) and on linking consumers as directly as possible to the producers, which is now possible due to (ii) significant adoption of Information Technology (IT), which has penetrated most aspects of people's life in China. Online information and shopping including ordering food and even fresh food product has become common feature for many urban citizens. It permits development of more efficient forward and backward linkages and facilitates faster responses to consumer preferences, as well as increasing consumer control over production standards.

[12] The nature of the partnership with the Youth League will be further detailed during the start-up and implementation phases.

[13] Eligible expenditures for retroactive financing are those incurred to finance: (i) purchase of essential items (including equipment and procurement of necessary software) for the PMOs; (ii) recruitment of project staff and/or consultants and procurement of technical assistance; (iii) costs related to tendering, selection, and recruitment of service providers; (iv) costs related to the finalization of the Project Implementation Manual, customization of accounting software to fit IFAD requirement and license fees, start-up trainings and workshops; (v) establishment of the M&E system, including carrying-out of the baseline survey and development of MIS; (vi) exposure visits and study tours for knowledge and experiences sharing; (vii) surveys and feasibility studies; (viii) recruitment of service providers.

## **China**

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### **Yunnan Rural Revitalization Demonstration Project Project Design Report**

#### **Annex 1: Logframe**

Mission Dates: 16 to 25 September 2019  
Document Date: 27/02/2020  
Project No. 2000002358  
Report No. 5310-CN

Asia and the Pacific Division  
Programme Management Department





# Yunnan Rural Revitalization Demonstration Project

## Logical Framework

Results Hierarchy	Indicators				Means of Verification			Assumptions	
	Name	Baseline	Mid-Term	End Target	Source	Frequency	Responsibility		
Outreach	1 Persons receiving services promoted or supported by the project				Project M&E, Household Surveys	Baseline, Annual and Completion surveys	PPMO, M&E	Continuity of government socio-economic policies and poverty reduction strategies and political commitment. (A) Farmers slow/relevant tendency towards cooperative led organizations. (R) Cooperatives thrive as per government new laws and regulations. (A)	
	Females			22943					45885
	Males			22943					45885
	Young			6882					27531
	Indigenous people			27531					55062
	Total number of persons receiving services			45885					91770
	Young			15					30
	1.a Corresponding number of households reached				Project M&E, Household Surveys	Baseline, Annual and Completion surveys	PPMO, M&E		
	Women-headed households								26460
	Non-women-headed households								61740
	Households			44100					88200
	1.b Estimated corresponding total number of households members				Project M&E, Household Surveys	Baseline, Annual and Completion surveys	PPMO, M&E		
	Household members			207270					414540

Results Hierarchy	Indicators				Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Source	Frequency	Responsibility	
<b>Project Goal</b> Poor and vulnerable rural households are sustainably out of poverty in the project area	%age of households with income growth higher than the county average growth				Project M&E, Household Surveys, Govt Statistics	Baseline and Completion surveys	PPMO; M&E	Continuity of economic, social and marketing stability in the target project area. (A) Poverty is a dynamic process associated with different socio-economic shocks, so maintaining zero rural poverty will be subject to such shocks (R)
	female-headed households			80				
	ethnic households			80				
	total households			80				
<b>Development Objective</b> Enhancing the income generating opportunities in the project area for poor and vulnerable households, and the inclusiveness of the benefit-sharing mechanisms from industries	At the end of the project, targeted households achieve at least a 30% increase in annual income from project-supported activities				Project M&E, Government Statistics	Baseline, Mid-term and completion surveys	PPMO, M&E	Providing investment opportunities/ benefit sharing mechanism through enhanced and standard cooperatives to the poor farmers lead to high income. (A) Farmers reluctance to go with cooperative led value chain and industry model. (R)
	total households			79380				
	female headed hhs			90				
	ethnic hhs			90				
	2.2.1 New jobs created				Project M&E, Government Statistics	Baseline, Mid-term and completion surveys	PPMO, M&E	
	Job owner - men			700				
	New jobs			2000				
	Job owner - women			1300				
	Job owner - young			200				
	Participating women report an adequate empowerment score in pro-WEAI index				pro-WEAI survey	baseline, and completion	PPMO	
	women	0		50				

Results Hierarchy	Indicators				Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Source	Frequency	Responsibility	
<b>Outcome</b> 1. Strengthen the participation of poor and vulnerable population in rural economic growth	2.2.3 Rural producers' organizations engaged in formal partnerships/agreements or contracts with public or private entities				Project M&E Reports	Baseline, yearly after Mid-term and completion surveys	PPMO, M&E	Cooperative management are committed to smallholder membership. (A) Cooperatives are increasingly member-driven and responsive to smallholder needs. (A) Weak Farmers might be influenced by rich farmers (R)
	Number of POs		42	140				
	2.2.4 Supported rural producers' organizations members reporting new or improved services provided by their organization				Project M&E Reports	Baseline, yearly after Mid-term and completion surveys	PPMO, M&E	
	Number of POs		4000	11760				
<b>Output</b> 1.1 Up-grade/develop Pro-poor farmer cooperatives	Pro-poor Farmer Professional Cooperatives meeting the operational standards				Project M&E Reports	Baseline, yearly and Completion surveys	PPMO, M&E	Design estimates are realistic (A) Farmers are committed to abide by new cooperatives law (A) Farmers are new to genuine cooperatives with its profit meckhanism sharing and might show lukewarm attitude or get influnced by rich farmer members. (R)
	cooperatives		14	35				
<b>Output</b> 1.2 Private co-investment in Business plans of Agro-entities	Number of co-investment plans supported under the project				Project M&E Reports	Baseline, yearly and Completion surveys	PPMO, M&E	Private agro-investors are interested to join/share farmers cooperatives income sharing mechanism and willing to pay related subscription and for the services. (A) Influential members might hold bigger share. (R)
	plans		50	178				
<b>Output</b> 1.3 Establishing county Traceability System TS	Agro-Entities adopting digitalized traceability system				Project M&E Reports	Baseline, yearly and Completion surveys	PPMO, M&E	Continued policy support to farmer cooperatives and private enterprises. (A)
	agro-entities		35	70				

Results Hierarchy	Indicators				Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Source	Frequency	Responsibility	
<b>Outcome</b> 2. Improved climate information and adaptation advice used by farmers	3.2.2 Households reporting adoption of environmentally sustainable and climate-resilient technologies and practices				Project M&E Reports, Service provider report	Baseline, yearly after Mid-term and completion surveys	PPMO, M&E	Farmers will participate in climate information services workshop/centers (A) Climate sensitivity is new phenomon and might not be welcomed overwhelmingly. ( R)
	Households			15				
	Total number of household members			62181				
	Households			13230				
<b>Output</b> 2.1 Improving climate information and adaptation advice	3.1.2 Persons provided with climate information services				Project M&E Reports , Service provider reports	Baseline, yearly and Completion surveys	PPMO	
	Persons provided with climate information services			14700				
<b>Outcome</b> 3. Improve business opportunities for rural households	2.2.5 Rural producers' organizations reporting an increase in sales				Project M&E Reports, Government Statistics	Baseline, yearly after Mid-term and completion surveys	PPMO	Continuity of economic, social and marketing stability in the target project area ( A). Enterprise/cooperative management are committed to smallholder membership. (A) Enterprise/Cooperatives are increasingly member-driven and responsive to smallholder needs. (A)
	Percentage of rural POs		10	70				

Results Hierarchy	Indicators				Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Source	Frequency	Responsibility	
<b>Output</b> 3.1 Business development/support provided by service centers	2.1.2 Persons trained in income-generating activities or business management				Project M&E, Household Surveys, Cooperative registers	Baseline, yearly and Completion surveys	PPMO, M&E	Small holder farmers are interested to join upscale value chain and willing to pay related subscription and for the services. (A) Failure of farmer cooperatives and private enterprises to cooperative standards and farmers needs and excluding poor farmers from joining value chain development (R)
	Females			19845				
	Males			19845				
	Young			11907				
	Not Young			27783				
	Persons trained in IGAs or BM (total)			39690				
<b>Output</b> 3.2 Investment Support for start-ups	Start-up businesses of young people /women entrepreneurs supported				Project M&E, Household Surveys, Cooperative registers	Baseline, yearly and Completion surveys	PPMO, M&E	Small holder farmers are interested to join upscale value chain and willing to pay related subscription and for the services. (A) Failure of farmer cooperatives and private enterprises to cooperative standards and farmers needs and excluding poor farmers from joining value chain development (R)
	total start-ups		80	140				
	start ups of young people			98				
	start ups of women			70				
<b>Output</b> 3.3 Improved access to finance	1.1.7 Persons in rural areas trained in financial literacy and/or use of financial products and services				Project M&E, Household Surveys, Cooperative registers	Baseline, yearly and Completion surveys	PPMO, M&E	FIs willing to participate in government rural revitalization strategy programme (A) Communities are willing to access credit. (A) Poor Farmers' (lack of) capacity to access and to pay back. ( R )
	Females			9065				
	Males			9065				
	Young			5400				
	Not Young			12730				
	Persons in rural areas trained in FL and/or use of FProd and Services (total)			18130				

Results Hierarchy	Indicators				Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Source	Frequency	Responsibility	
<b>Outcome</b> 4. Climate resilient infrastructure	2.2.6 Households reporting improved physical access to markets, processing and storage facilities				Impact Assessment Reports, Project Reports	Baseline, yearly after Mid-term and Completion surveys	PPMO, M&E	Adequate participation in climate related information training ( A )
	Households reporting improved physical access to markets			15				
	Households reporting improved physical access to processing facilities			20				
	Households reporting improved physical access to storage facilities			20				
<b>Output</b> 4.1 Improved infrastructure and systems for climate resilient water and soil management	3.1.4 Land brought under climate-resilient practices				Impact Assessment Reports, M&E Reports	Baseline, yearly and Completion surveys	PPMO, M&E	Local leaders and farmers are sensitive of the issue and assessment studies will find adequate sites for rainwater harvest ( A )
	Hectares of land			8820				
<b>Output</b> 4.2 Improved Rural Infrastructure	1.1.2 Farmland under water-related infrastructure constructed/rehabilitated				Impact Assessment Reports, M&E Reports	Baseline, yearly and Completion surveys	PPMO and M&E	Communities assume responsibility for use, maintenance and management of facilities invested in by the project ( A )
	Hectares of land			3600				
<b>Output</b> stand alone output: Policy	Policy 1 Policy-relevant knowledge products completed				M&E reports	yearly and Completion surveys	PPMO and M&E	Commitment of Provincial stakeholders to the policy value of the project
	Number			3				

## **China**

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### **Yunnan Rural Revitalization Demonstration Project Project Design Report**

#### **Annex 2: Theory of change**

Mission Dates: 16 to 25 September 2019  
Document Date: 27/02/2020  
Project No. 2000002358  
Report No. 5310-CN

Asia and the Pacific Division  
Programme Management Department





- Limited IGA opportunities
- Labor and finance outflow
- Small scale landholding
- Limited skills of target HH
- Prevailing risks (climatic, markets reverting to poverty)

#### Activities:

- Stimulating entrepreneurship and investors through incubation and start up support
- Improving access to finance
- Develop climate proofed infrastructure

#### Theory of Change:

Capacitate cooperatives (instead of dragon head enterprises) to develop inclusive, equitable, fair & sustainable business partnership with agro-entities, for diversified rural based IGA for target groups

**Outcome 2:**  
Increased Market  
Participation of rural  
HH

#### Project goal:

Poor and vulnerable rural households sustainably out of poverty in the project area

#### Hurdles for target groups

others vulnerable Ethnic minorities youth women

Cooperatives

Industrial development for Poverty Eradication -----> Rural Revitalization

#### Project destination

- Lack of inclusiveness of govt. CYFP approach
- Benefiting mechanism not adequately fair
- Relationship not sustainable
- Lack of farmers collective operation
- .....

#### Activities:

- Upgrade cooperatives
- Support co-investment in cooperatives
- Develop business partnership with agro-entities
- Establish traceability system
- Explore other innovative models

**Outcome 1:**  
Strengthening agricultural  
industrialization through  
enhanced cooperative  
linkages.

#### Project objective:

Enhancing the income generating opportunities in the project area for poor and vulnerable households, and the inclusiveness of the benefit-sharing mechanisms from industries

## **China**

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### **Yunnan Rural Revitalization Demonstration Project Project Design Report**

#### **Annex 3: Project cost and financing: Detailed costs tables**

Mission Dates: 16 to 25 September 2019  
Document Date: 27/02/2020  
Project No. 2000002358  
Report No. 5310-CN

Asia and the Pacific Division  
Programme Management Department



### Annex-3: Y2RDP PROJECT COSTS AND FINANCING

1. **Assumptions:** Key assumptions used in estimating the project costs include (i) price contingencies assumed at 5% and applied on all items, except for Grant and Subsidies category; (ii) exchange rate at CNY 7.07 per USD; (iii) taxes as prevailing at the time of design and broadly based at 10%; (iv) a FIVE year implementation phase and the project starting in April 2020; (v) all unit costs are input in Chinese Yuan, i.e. CNY and the price contingencies at 2% based on an average annual inflation rate in China; (vi) taxes excluded from IFAD financing rules and (vii) cost tables are presented in China fiscal year which corresponds to Calendar Year.
2. **Unit costs:** Unit costs for all detailed Tables were provided by the respective counties, in particular for the Component-2: Climate proofed public infrastructure activities. Operations and maintenance costs for these interventions have been assumed at 1% of annual investment costs. Unit costs for Component 1: Support to inclusive rural development were developed in consultation with the respective Counties during the field visits and refined with the Provincial PMO. In doing so, some adjustments have been made but otherwise, total average expenditure for this component is more or less identical. Unit costs for the Component 3, Project Management, M&E, KM and Policy were provided by the Provincial PMO.
3. **Costab accounts:** Costab accounts are organised into following three accounts: (i) procurement accounts, (ii) disbursement accounts and (iii) expenditure accounts. Following accounts have been created in accordance with the project expenditure categories and the project financing arrangements:

Procurement accounts (PA) a/	Disbursement accounts (DA)	Expenditure accounts (EA)
<i>Civil work_PA</i>	<i>Civil work_DA</i>	<i>Civil work_EA</i>
<i>Smart Civil work_PA</i>	<i>Smart Civil work_DA</i>	<i>Smart Civil work_EA</i>
<i>Equipment and materials_PA</i>	<i>Equipment and materials_DA</i>	<i>Equipment and materials_EA</i>
<i>Training, capacity building and TA_PA</i>	<i>Training, capacity building and TA_DA</i>	<i>Training, capacity building and TA_EA</i>
<i>Goods, services and inputs_PA</i>	<i>Goods, services and inputs_DA</i>	<i>Goods, services and inputs_EA</i>
<i>Grants and subsidy_PA</i>	<i>Grants and subsidy_DA</i>	<i>Grants and subsidy_EA</i>
<i>Salary and allowances_PA</i>	<i>Salary and allowances_DA</i>	<i>Salary and allowances_EA</i>
<i>Operating costs_PA</i>	<i>Operating costs_DA</i>	<i>Operating costs_EA</i>
<i>Operations and maintenance_PA</i>	<i>Operations and maintenance_DA</i>	<i>Operations and maintenance_EA</i>
a/ in Summary and Detailed tables, these accounts will end up with PA, DA & EA respectively		

4. **Y2RDP Project accounts:** The project has three expenditure components including the project management and 5 sub-components. Cost Tables have according organised, prepared and

provided in following pages: (i) first Summary Tables for components, (ii) detailed Tables by Components and sub-components and (iii) Detailed Tables by Counties.

5. **Summary Tables:** These Tables are presented summarising all components by financiers (that is GOC, IFAD, PRIVATE SECTOR and BENEFICIARIES) under the project in thousand USD currency units. (*Tab file: Y2RDP\_components.tab*)

6. **Detailed Cost Tables:** Each Detailed Table contains the following data and information relating to the project interventions and activities. These are description of an activity, unit, physical quantities by year, unit cost in CNY and USD, base costs in thousand USD currency unit, total costs including contingencies in thousand USD, percentage of disbursement account and financing rule (ie % of financing by Government, IFAD, private sector and the beneficiaries).

Components	Sub-components	Cost Table reference #
Support to Inclusive Rural Development	Improving <i>chanye fupin</i> models	1.1
	Stimulating entrepreneurship	1.2
	Improving access to finance	1.3
Climate-proofed public infrastructure planning and development	Improving infrastructure climate resilience	2.1
	Improving rural infrastructure system	2.2
Project Management, M&E, KM and Policy	Project management, M&E, KM and Policy	3.1

**7. Retroactive financing** As an exception to the General Conditions for Agricultural Development Financing, IFAD will be seeking IFAD Executive Board approval that for retroactive financing from the loan up to a maximum of 10% of the total IFAD financing ( i.e US\$7.5 million) for eligible expenditures incurred as from the date of wrap up of the design completion mission to the date of the entry in force of the financing agreement. Eligible expenditures for retroactive financing are considered those incurred to finance the start-up and preparation project activities such as : (i) purchase of essential items (including equipment and procurement of MIS system) for the PMOs; (ii) recruitment of project staff; (iii) costs related to tendering, selection, and recruitment of service providers; (iv) costs related to the finalization of the program implementation manual, customization of accounting software to fit IFAD requirement and license fees, start-up trainings and workshops; (v) establishment of the M&E system, including carrying-out of the baseline survey and development of MIS; (vi) exposure visits for knowledge and experiences sharing; (vii) surveys and feasibility studies; (viii) training and technical assistance for cooperatives, including recruitment of service providers, cooperative support field officers, technical advisors for business plans development, brokers/facilitators for linkages with supermarkets; and value-chain officers and monitoring & evaluation officers; and (ix) business plans.

**8. Financing of taxes:** In order to improve the efficiency of funds flow and better support project implementation, IFAD's funds may be used to finance taxes that are not "excessive, discriminatory or otherwise unreasonable". In case the Government intends to use IFAD financing to finance taxes that is impossible or impractical to exempt, the Government would need to formalize such request in writing.

## Annex 3 – Y2RDP: Project cost and financing

### Summary tables

#### Y2RDP Disbursement Accounts by Financiers

China  
Y2RDP PDR  
Disbursement Accounts by Financiers  
(US\$ '000)

	Govt of China		IFAD		Private sector		Beneficiaries		Total		For.	Local (Excl.	Duties &
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Exch.	Taxes)	Taxes
1. Civil work	86 311.1	100.0	-	-	-	-	-	-	86 311.1	36.8	-	77 679.9	8 631.1
2. Smart civil work	2 048.3	10.0	18 434.6	90.0	-	-	-	-	20 482.9	8.7	-	18 434.6	2 048.3
3. Equipment and materials	145.3	50.8	140.7	49.2	-	-	-	-	286.0	0.1	-	257.4	28.6
4. Training, workshop, capacity building and TA	1 390.9	14.6	8 107.9	85.4	-	-	-	-	9 498.8	4.1	-	8 548.9	949.9
5. Goods, services and inputs	599.0	16.6	3 004.2	83.4	-	-	-	-	3 603.3	1.5	-	3 242.9	360.3
6. Grants and subsidy	18 955.7	18.1	44 132.3	42.1	41 685.7	39.8	-	-	104 773.7	44.7	-	104 773.7	-
7. Salary and allowances	2 405.5	80.6	580.5	19.4	-	-	-	-	2 986.0	1.3	-	2 986.0	-
8. Operating costs	3 423.6	90.1	377.9	9.9	-	-	-	-	3 801.5	1.6	-	3 801.5	-
9. Operations and maintenance	-	-	-	-	-	-	2 769.0	100.0	2 769.0	1.2	-	2 769.0	-
<b>Total PROJECT COSTS</b>	<b>115 279.4</b>	<b>49.2</b>	<b>74 778.1</b>	<b>31.9</b>	<b>41 685.7</b>	<b>17.8</b>	<b>2 769.0</b>	<b>1.2</b>	<b>234 512.2</b>	<b>100.0</b>	<b>-</b>	<b>222 494.0</b>	<b>12 018.2</b>



## Y2RDP Components by Financiers

China  
Y2RDP PDR  
Components by Financiers  
(US\$ '000)

	Govt of China		IFAD		Private sector		Beneficiaries		Total		For.	Local (Excl.	Duties &
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Exch.	Taxes)	Taxes
<b>A. Components</b>													
<b>1. Comp-1: Supporting inclusive rural development</b>													
a. Improving Chanye fupin model	19 299.1	18.6	45 102.9	43.4	39 565.7	38.1	-	-	103 967.7	44.3	-	103 624.3	343.4
b. Stimulating entrepreneurship	898.0	9.5	6 422.9	68.0	2 120.0	22.5	-	-	9 440.9	4.0	-	9 069.3	371.6
c. Improving access to finance	51.0	10.0	458.9	90.0	-	-	-	-	509.9	0.2	-	458.9	51.0
<b>Subtotal</b>	20 248.1	17.8	51 984.7	45.6	41 685.7	36.6	-	-	113 918.5	48.6	-	113 152.5	766.0
<b>2. Comp 2: Climate-proofed public infrastructure</b>													
a. Improving infrastructure climate resilience	2 195.7	9.7	19 761.5	87.3	-	-	687.0	3.0	22 644.2	9.7	-	20 448.5	2 195.7
b. Improving rural infrastructure	86 311.1	97.6	-	-	-	-	2 082.0	2.4	88 393.1	37.7	-	79 762.0	8 631.1
<b>Subtotal</b>	88 506.8	79.7	19 761.5	17.8	-	-	2 769.0	2.5	111 037.3	47.3	-	100 210.5	10 826.8
<b>3. Comp 3 Project management, M&amp;E, KM and policy</b>													
a. Project management, M&E, KM and Policy	6 524.5	68.3	3 031.9	31.7	-	-	-	-	9 556.4	4.1	-	9 131.0	425.4
<b>Total PROJECT COSTS</b>	115 279.4	49.2	74 778.1	31.9	41 685.7	17.8	2 769.0	1.2	234 512.2	100.0	-	222 494.0	12 018.2

## Expenditure accounts by financiers

China  
Y2RDP PDR  
Expenditure Accounts by Financiers  
(US\$ '000)

	Govt of China		IFAD		Private sector		Beneficiaries		Total		For.	Local (Excl.	Duties &
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Exch.	Taxes)	Taxes
<b>I. Investment Costs</b>													
A. Civil works	86 311.1	100.0	-	-	-	-	-	-	86 311.1	36.8	-	77 679.9	8 631.1
B. Smart civil work	2 048.3	10.0	18 434.6	90.0	-	-	-	-	20 482.9	8.7	-	18 434.6	2 048.3
C. Equipment and materials	145.3	50.8	140.7	49.2	-	-	-	-	286.0	0.1	-	257.4	28.6
D. Training, workshop, capacity building & TA	1 390.9	14.6	8 107.9	85.4	-	-	-	-	9 498.8	4.1	-	8 548.9	949.9
E. Goods, services and inputs	599.0	16.6	3 004.2	83.4	-	-	-	-	3 603.3	1.5	-	3 242.9	360.3
F. Grants and subsidy	18 955.7	18.1	44 132.3	42.1	41 685.7	39.8	-	-	104 773.7	44.7	-	104 773.7	-
<b>Total Investment Costs</b>	109 450.3	48.7	73 819.8	32.8	41 685.7	18.5	-	-	224 955.7	95.9	-	212 937.5	12 018.2
<b>II. Recurrent Costs</b>													
A. Salary and allowances	2 405.5	80.6	580.5	19.4	-	-	-	-	2 986.0	1.3	-	2 986.0	-
B. Operating costs	3 423.6	90.1	377.9	9.9	-	-	-	-	3 801.5	1.6	-	3 801.5	-
C. Opearations and maintenance	-	-	-	-	-	-	2 769.0	100.0	2 769.0	1.2	-	2 769.0	-
<b>Total Recurrent Costs</b>	5 829.1	61.0	958.3	10.0	-	-	2 769.0	29.0	9 556.5	4.1	-	9 556.5	-
<b>Total PROJECT COSTS</b>	115 279.4	49.2	74 778.1	31.9	41 685.7	17.8	2 769.0	1.2	234 512.2	100.0	-	222 494.0	12 018.2

## Y2RDP Project cost summary

China

Y2RDP PDR

Components Project Cost Summary

	(CNY '000)			(US\$ '000)			%	% Total
	Local	Foreign	Total	Local	Foreign	Total	Foreign Exchange	Base Costs
<b>A. Components</b>								
<b>1. Comp-1: Supporting inclusive rural development</b>								
a. Improving Chanye fupin model	695 776.0	-	695 776.0	99 254.8	-	99 254.8	-	44
b. Stimulating entrepreneurship	62 750.8	-	62 750.8	8 951.6	-	8 951.6	-	4
c. Improving access to finance	3 400.0	-	3 400.0	485.0	-	485.0	-	-
<b>Subtotal</b>	761 926.8	-	761 926.8	108 691.4	-	108 691.4	-	48
<b>2. Comp 2: Climate-proofed public infrastructure</b>								
a. Improving infrastructure climate resilience	153 929.9	-	153 929.9	21 958.6	-	21 958.6	-	10
b. Improving rural infrastructure	596 075.7	-	596 075.7	85 032.2	-	85 032.2	-	38
<b>Subtotal</b>	750 005.6	-	750 005.6	106 990.8	-	106 990.8	-	48
<b>3. Comp 3 Project management, M&amp;E, KM and policy</b>								
a. Project management, M&E, KM and Policy	63 909.5	-	63 909.5	9 116.9	-	9 116.9	-	4
<b>Total BASELINE COSTS</b>	1 575 841.9	-	1 575 841.9	224 799.1	-	224 799.1	-	100
Physical Contingencies	-	-	-	-	-	-	-	-
Price Contingencies	68 088.4	-	68 088.4	9 713.0	-	9 713.0	-	4
<b>Total PROJECT COSTS</b>	1 643 930.3	-	1 643 930.3	234 512.2	-	234 512.2	-	104

## Y2RDP Expenditure accounts project cost summary

China

Y2RDP PDR

Expenditure Accounts Project Cost Summary

	(CNY '000)			(US\$ '000)			%	% Total
	Local	Foreign	Total	Local	Foreign	Total	Foreign Exchange	Base Costs
<b>I. Investment Costs</b>								
A. Civil works	582 433.2	-	582 433.2	83 086.0	-	83 086.0	-	37
B. Smart civil work	139 367.5	-	139 367.5	19 881.2	-	19 881.2	-	9
C. Equipment and materials	1 985.0	-	1 985.0	283.2	-	283.2	-	-
D. Training, workshop, capacity building & TA	63 733.5	-	63 733.5	9 091.8	-	9 091.8	-	4
E. Goods, services and inputs	24 116.0	-	24 116.0	3 440.2	-	3 440.2	-	2
F. Grants and subsidy	700 800.0	-	700 800.0	99 971.5	-	99 971.5	-	44
<b>Total Investment Costs</b>	<b>1 512 435.2</b>	<b>-</b>	<b>1 512 435.2</b>	<b>215 754.0</b>	<b>-</b>	<b>215 754.0</b>	<b>-</b>	<b>96</b>
<b>II. Recurrent Costs</b>								
A. Salary and allowances	19 911.8	-	19 911.8	2 840.5	-	2 840.5	-	1
B. Operating costs	25 350.0	-	25 350.0	3 616.3	-	3 616.3	-	2
C. Opeartions and maintenance	18 144.9	-	18 144.9	2 588.4	-	2 588.4	-	1
<b>Total Recurrent Costs</b>	<b>63 406.7</b>	<b>-</b>	<b>63 406.7</b>	<b>9 045.2</b>	<b>-</b>	<b>9 045.2</b>	<b>-</b>	<b>4</b>
<b>Total BASELINE COSTS</b>	<b>1 575 841.9</b>	<b>-</b>	<b>1 575 841.9</b>	<b>224 799.1</b>	<b>-</b>	<b>224 799.1</b>	<b>-</b>	<b>100</b>
Physical Contingencies	-	-	-	-	-	-	-	-
Price Contingencies	68 088.4	-	68 088.4	9 713.0	-	9 713.0	-	4
<b>Total PROJECT COSTS</b>	<b>1 643 930.3</b>	<b>-</b>	<b>1 643 930.3</b>	<b>234 512.2</b>	<b>-</b>	<b>234 512.2</b>	<b>-</b>	<b>104</b>

## Project cost summary: IFAD financing %

China

Y2RDP PDR

### Project Cost Summary

(US\$ '000)

	<b>Cost Including Contingencies</b>	<b>% of Total</b>	<b>IFAD Financing</b>	<b>% Financing</b>
<b>A. Components</b>				
<b>1. Comp-1: Supporting inclusive rural development</b>				
a. Improving Chanye fupin model	103 967.7	44.3	45 102.9	43.4
b. Stimulating entrepreneurship	9 440.9	4.0	6 422.9	68.0
c. Improving access to finance	509.9	0.2	458.9	90.0
<b>Subtotal</b>	<b>113 918.5</b>	<b>48.6</b>	<b>51 984.7</b>	<b>45.6</b>
<b>2. Comp 2: Climate-proofed public infrastructure</b>				
a. Improving infrastructure climate resilience	22 644.2	9.7	19 761.5	87.3
b. Improving rural infrastructure	88 393.1	37.7	-	-
<b>Subtotal</b>	<b>111 037.3</b>	<b>47.3</b>	<b>19 761.5</b>	<b>17.8</b>
<b>3. Comp 3 Project management, M&amp;E, KM and policy</b>				
a. Project management, M&E, KM and Policy	9 556.4	4.1	3 031.9	31.7
<b>Total PROJECT COSTS</b>	<b>234 512.2</b>	<b>100.0</b>	<b>74 778.1</b>	<b>31.9</b>

## Expenditure accounts by components

China  
Y2RDP PDR

Expenditure Accounts by Components - Base Costs  
(US\$ '000)

	Components						Total
	Comp-1: Supporting inclusive rural development			Comp 2: Climate-proofed public infrastructure		Comp 3 Project management, M&E, KM and policy	
	Improving Changye fupin model	Stimulating entrepreneurship	Improving access to finance	Improving infrastructure climate resilience	Improving rural infrastructure	Project management, M&E, KM and Policy	
<b>I. Investment Costs</b>							
A. Civil works	-	-	-	-	83 086.0	-	83 086.0
B. Smart civil work	-	-	-	19 881.2	-	-	19 881.2
C. Equipment and materials	-	-	-	-	-	283.2	283.2
D. Training, workshop, capacity building & TA	1 592.0	3 295.3	485.0	1 435.1	-	2 284.4	9 091.8
E. Goods, services and inputs	1 685.6	249.6	-	-	-	1 505.0	3 440.2
F. Grants and subsidy	95 977.2	3 994.3	-	-	-	-	99 971.5
<b>Total Investment Costs</b>	99 254.8	7 539.2	485.0	21 316.3	83 086.0	4 072.5	215 754.0
<b>II. Recurrent Costs</b>							
A. Salary and allowances	-	613.5	-	-	-	2 227.0	2 840.5
B. Operating costs	-	798.9	-	-	-	2 817.4	3 616.3
C. Operations and maintenance	-	-	-	642.3	1 946.1	-	2 588.4
<b>Total Recurrent Costs</b>	-	1 412.4	-	642.3	1 946.1	5 044.4	9 045.2
<b>Total BASELINE COSTS</b>	99 254.8	8 951.6	485.0	21 958.6	85 032.2	9 116.9	224 799.1
Physical Contingencies	-	-	-	-	-	-	-
<b>Price Contingencies</b>							
<b>Inflation</b>							
Local	4 712.9	489.3	24.8	685.6	3 360.9	439.5	9 713.0
Foreign	-	-	-	-	-	-	-
<b>Subtotal Inflation</b>	4 712.9	489.3	24.8	685.6	3 360.9	439.5	9 713.0
Devaluation	-	-	-	-	-	-	-
<b>Subtotal Price Contingencies</b>	4 712.9	489.3	24.8	685.6	3 360.9	439.5	9 713.0
<b>Total PROJECT COSTS</b>	103 967.7	9 440.9	509.9	22 644.2	88 393.1	9 556.4	234 512.2
Taxes	343.4	371.6	51.0	2 195.7	8 631.1	425.4	12 018.2

## Project components by year –baseline costs

China

Y2RDP PDR

### Project Components by Year -- Base Costs

(US\$ '000)

	Base Cost					Total
	2020	2021	2022	2023	2024	
<b>A. Components</b>						
<b>1. Comp-1: Supporting inclusive rural development</b>						
a. Improving Chanye fupin model	11 786.4	25 955.2	32 537.4	25 378.6	3 597.2	99 254.8
b. Stimulating entrepreneurship	1 191.2	1 940.1	1 940.1	1 940.1	1 940.1	8 951.6
c. Improving access to finance	97.0	97.0	97.0	97.0	97.0	485.0
<b>Subtotal</b>	13 074.6	27 992.3	34 574.5	27 415.7	5 634.3	108 691.4
<b>2. Comp 2: Climate-proofed public infrastructure</b>						
a. Improving infrastructure climate resilience	6 505.8	9 220.7	5 241.2	776.1	214.9	21 958.6
b. Improving rural infrastructure	21 190.0	25 788.1	21 847.5	11 714.2	4 492.4	85 032.2
<b>Subtotal</b>	27 695.8	35 008.9	27 088.6	12 490.3	4 707.3	106 990.8
<b>3. Comp 3 Project management, M&amp;E, KM and policy</b>						
a. Project management, M&E, KM and Policy	2 157.7	1 780.4	1 910.7	1 758.3	1 509.8	9 116.9
<b>Total BASELINE COSTS</b>	42 928.1	64 781.6	63 573.8	41 664.3	11 851.4	224 799.1
Physical Contingencies	-	-	-	-	-	-
<b>Price Contingencies</b>						
<b>Inflation</b>						
Local	429.3	1 956.4	3 229.8	2 992.3	1 105.2	9 713.0
Foreign	-	-	-	-	-	-
<b>Subtotal Inflation</b>	429.3	1 956.4	3 229.8	2 992.3	1 105.2	9 713.0
Devaluation	-	-	-	-	-	-
Subtotal Price Contingencies	429.3	1 956.4	3 229.8	2 992.3	1 105.2	9 713.0
<b>Total PROJECT COSTS</b>	43 357.3	66 738.0	66 803.6	44 656.6	12 956.6	234 512.2
Taxes	3 016.6	3 855.2	3 109.3	1 477.2	559.9	12 018.2

## Y2RDP Project components by year –total including contingencies

China

Y2RDP PDR

**Project Components by Year -- Totals Including Contin**

(US\$ '000)

	Totals Including Contingencies					Total
	2020	2021	2022	2023	2024	
<b>A. Components</b>						
<b>1. Comp-1: Supporting inclusive rural development</b>						
a. Improving Chanye fupin model	11 904.2	26 739.1	34 190.4	27 201.3	3 932.7	103 967.7
b. Stimulating entrepreneurship	1 203.1	1 998.7	2 038.7	2 079.4	2 121.0	9 440.9
c. Improving access to finance	98.0	99.9	101.9	104.0	106.1	509.9
<b>Subtotal</b>	13 205.3	28 837.7	36 331.0	29 384.7	6 159.8	113 918.5
<b>2. Comp 2: Climate-proofed public infrastructure</b>						
a. Improving infrastructure climate resilience	6 570.8	9 499.2	5 507.4	831.8	234.9	22 644.2
b. Improving rural infrastructure	21 401.9	26 566.9	22 957.4	12 555.5	4 911.3	88 393.1
<b>Subtotal</b>	27 972.7	36 066.1	28 464.8	13 387.3	5 146.2	111 037.3
<b>3. Comp 3 Project management, M&amp;E, KM and policy</b>						
a. Project management, M&E, KM and Policy	2 179.3	1 834.2	2 007.7	1 884.6	1 650.6	9 556.4
<b>Total PROJECT COSTS</b>	43 357.3	66 738.0	66 803.6	44 656.6	12 956.6	234 512.2



## Project components by year –investment and recurrent costs

China

Y2RDP PDR

### Project Components by Year -- Investment/Recurrent Costs

(US\$ '000)

	Totals Including Contingencies					Total
	2020	2021	2022	2023	2024	
<b>A. Components</b>						
<b>1. Comp-1: Supporting inclusive rural development</b>						
<b>a. Improving Changye fupin model</b>						
Investment Costs	11 904.2	26 739.1	34 190.4	27 201.3	3 932.7	103 967.7
Recurrent Costs	-	-	-	-	-	-
<b>Subtotal</b>	11 904.2	26 739.1	34 190.4	27 201.3	3 932.7	103 967.7
<b>b. Stimulating entrepreneurship</b>						
Investment Costs	917.8	1 707.7	1 741.8	1 776.7	1 812.2	7 956.2
Recurrent Costs	285.3	291.0	296.8	302.8	308.8	1 484.7
<b>Subtotal</b>	1 203.1	1 998.7	2 038.7	2 079.4	2 121.0	9 440.9
<b>c. Improving access to finance</b>						
Investment Costs	98.0	99.9	101.9	104.0	106.1	509.9
Recurrent Costs	-	-	-	-	-	-
<b>Subtotal</b>	98.0	99.9	101.9	104.0	106.1	509.9
<b>Subtotal</b>	13 205.3	28 837.7	36 331.0	29 384.7	6 159.8	113 918.5
<b>2. Comp 2: Climate-proofed public infrastructure</b>						
<b>a. Improving infrastructure climate resilience</b>						
Investment Costs	6 570.8	9 432.2	5 342.9	609.5	1.9	21 957.2
Recurrent Costs	-	67.0	164.6	222.4	233.0	687.0
<b>Subtotal</b>	6 570.8	9 499.2	5 507.4	831.8	234.9	22 644.2
<b>b. Improving rural infrastructure</b>						
Investment Costs	21 401.9	26 348.6	22 466.0	11 936.4	4 158.1	86 311.1
Recurrent Costs	-	218.3	491.4	619.1	753.2	2 082.0
<b>Subtotal</b>	21 401.9	26 566.9	22 957.4	12 555.5	4 911.3	88 393.1
<b>Subtotal</b>	27 972.7	36 066.1	28 464.8	13 387.3	5 146.2	111 037.3
<b>3. Comp 3 Project management, M&amp;E, KM and policy</b>						
<b>a. Project management, M&amp;E, KM and Policy</b>						
Investment Costs	1 160.3	794.8	947.6	803.3	547.6	4 253.7
Recurrent Costs	1 019.0	1 039.3	1 060.1	1 081.3	1 103.0	5 302.7
<b>Subtotal</b>	2 179.3	1 834.2	2 007.7	1 884.6	1 650.6	9 556.4
<b>Total PROJECT COSTS</b>	43 357.3	66 738.0	66 803.6	44 656.6	12 956.6	234 512.2
Total Investment Costs	42 053.1	65 122.3	64 790.6	42 431.1	10 558.6	224 955.7
Total Recurrent Costs	1 304.3	1 615.7	2 012.9	2 225.5	2 398.0	9 556.5

## Expenditure accounts by year

China

Y2RDP PDR

### Expenditure Accounts by Years -- Totals Including Contingenci

(US\$ '000)

	Totals Including Contingencies					
	2020	2021	2022	2023	2024	Total
<b>I. Investment Costs</b>						
A. Civil works	21 401.9	26 348.6	22 466.0	11 936.4	4 158.1	86 311.1
B. Smart civil work	6 353.0	8 181.3	5 341.1	607.6	-	20 482.9
C. Equipment and materials	286.0	-	-	-	-	286.0
D. Training, workshop, capacity building & TA	1 474.7	3 202.3	2 399.8	1 318.4	1 103.5	9 498.8
E. Goods, services and inputs	650.9	819.5	886.1	909.2	337.5	3 603.3
F. Grants and subsidy	11 886.6	26 570.6	33 697.7	27 659.4	4 959.4	104 773.7
<b>Total Investment Costs</b>	42 053.1	65 122.3	64 790.6	42 431.1	10 558.6	224 955.7
<b>II. Recurrent Costs</b>						
A. Salary and allowances	573.8	585.3	597.0	608.9	621.1	2 986.0
B. Operating costs	730.5	745.1	760.0	775.2	790.7	3 801.5
C. Opearations and maintenance	-	285.3	656.0	841.5	986.2	2 769.0
<b>Total Recurrent Costs</b>	1 304.3	1 615.7	2 012.9	2 225.5	2 398.0	9 556.5
<b>Total PROJECT COSTS</b>	43 357.3	66 738.0	66 803.6	44 656.6	12 956.6	234 512.2

## Financing Investment and Recurrent costs by year

China

Y2RDP PDR

Financing of Investment/Recurrent Costs and Financial Charges by Year

(US\$ '000)

	Financing					
	2020	2021	2022	2023	2024	Total
<b>I. Investment Costs</b>						
Govt of China	25 856.0	32 508.6	29 135.2	16 804.2	5 146.3	109 450.3
IFAD	11 874.7	21 753.3	21 939.5	14 633.5	3 618.8	73 819.8
Private sector	4 322.4	10 860.5	13 715.9	10 993.4	1 793.5	41 685.7
Beneficiaries	-	-	-	-	-	-
<b>Total Investment Costs</b>	<b>42 053.1</b>	<b>65 122.3</b>	<b>64 790.6</b>	<b>42 431.1</b>	<b>10 558.6</b>	<b>224 955.7</b>
<b>II. Recurrent Costs</b>						
Govt of China	1 120.1	1 142.5	1 165.4	1 188.7	1 212.4	5 829.1
IFAD	184.2	187.8	191.6	195.4	199.3	958.3
Private sector	-	-	-	-	-	-
Beneficiaries	-	285.3	656.0	841.5	986.2	2 769.0
<b>Total Recurrent Costs</b>	<b>1 304.3</b>	<b>1 615.7</b>	<b>2 012.9</b>	<b>2 225.5</b>	<b>2 398.0</b>	<b>9 556.5</b>
<b>III. Financial Charges</b>						
Govt of China	-	-	-	-	-	-
IFAD	-	-	-	-	-	-
Private sector	-	-	-	-	-	-
Beneficiaries	-	-	-	-	-	-
<b>Total Financial Charges</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Total Financing of Costs</b>	<b>43 357.3</b>	<b>66 738.0</b>	<b>66 803.6</b>	<b>44 656.6</b>	<b>12 956.6</b>	<b>234 512.2</b>

## Annex-3: DETAILED COST TABLES BY COMPONENTS

**Table 1.1: Improving *Chanye fupin* models**

China

Y2RDP PDR

Table 1.1. Improving chanye fupin models

### Detailed Costs

#### I. Investment Costs

##### A. Upgrading cooperative meeting operational standard

1. Payment to cooperative meeting operational standard																	coop	-	18	27	-	-	45	234,000	33,381	-	619.0	947.1	-	-	1 566.1	IFAD ( 100% )	
2. Verification expenses																																	
Verification agency																	LS	7	7	7	7	-	28	15,000	2,140	15.1	15.4	15.7	16.1	-	62.4	IFAD ( 100% )	
MIS for RBL																	LS	-	7	7	7	7	28	7,500	1,070	-	7.7	7.9	8.0	8.2	31.8	IFAD ( 100% )	
Subtotal																										15.1	23.1	23.6	24.1	8.2	94.2		
3. Investment on pro-poor cooperatives																																	
Project grant support																	coop	-	-	8	16	8	32	1,500,000	213,980	-	-	1 798.8	3 669.6	1 871.5	7 339.9	IFAD ( 100% )	
Private investments																	coop	-	-	8	16	8	32	1,000,000	142,653	-	-	1 199.2	2 446.4	1 247.7	4 893.2	PRIVATE ( 100% )	
Govt assistance																	coop	-	-	8	16	8	32	600,000	85,592	-	-	719.5	1 467.8	748.6	2 935.9	GOVT	
Subtotal																										-	-	3 717.5	7 583.8	3 867.7	15 169.0		
Subtotal																										15.1	642.1	4 688.2	7 607.9	3 875.9	16 829.3		
B. Matching grant for cooperative co-investors																																	
Project grant support																	coop	-	22	30	22	-	74	1,200,000	171,184	-	3 879.8	5 396.4	4 036.5	-	13 312.7	IFAD (100%)	
Private investment																	coop	-	22	30	22	-	74	1,200,000	171,184	-	3 879.8	5 396.4	4 036.5	-	13 312.7	PRIVATE ( 100% )	
Govt assistance																	coop	-	22	30	22	-	74			-	-	-	-	-	-	IFAD ( 100% )	
Subtotal																										-	7 759.6	10 792.9	8 073.1	-	26 625.5		

##### C. Company-cooperatives-households model

1. Company-cooperative-household models																
Project grant	each	15	22	22	13	-	72	1,500,000	213,980	3 241.8	4 849.7	4 946.7	2 981.5	-	16 019.8	IFAD ( 100% )
Private sector participation	each	15	22	22	13	-	72	1,500,000	213,980	3 241.8	4 849.7	4 946.7	2 981.5	-	16 019.8	PRIVATE ( 100% )
Support from Govt	each	15	22	22	13	-	72	1,000,000	142,653	2 161.2	3 233.2	3 297.8	1 987.7	-	10 679.9	GOVT
<b>Subtotal</b>										8 644.8	12 932.6	13 191.3	7 950.7	-	42 719.4	
2. Other innovative models																
Project support	each	15	22	22	13	-	72	500,000	71,327	1 080.6	1 616.6	1 648.9	993.8	-	5 339.9	IFAD ( 100% )
Private sector	each	15	22	22	13	-	72	500,000	71,327	1 080.6	1 616.6	1 648.9	993.8	-	5 339.9	PRIVATE ( 100% )
Govt assistance	each	15	22	22	13	-	72	500,000	71,327	1 080.6	1 616.6	1 648.9	993.8	-	5 339.9	GOVT
<b>Subtotal</b>										3 241.8	4 849.7	4 946.7	2 981.5	-	16 019.8	
<b>Subtotal</b>										11 886.6	17 782.3	18 138.0	10 932.3	-	58 739.2	
D. Product traceability system																
Promotion and user registration	LS	7	7	7	7	-	28	2,500	357	2.5	2.6	2.6	2.7	-	10.4	IFAD ( 90% )
Training of Govt staff and agro-entity	LS	-	7	7	7	7	28	7,000	999	-	7.2	7.3	7.5	7.6	29.7	IFAD ( 90% )
Equipment support /a	LS	-	7	7	7	7	28	25,000	3,566	-	25.7	26.2	26.8	27.3	106.0	IFAD ( 90% )
Operating costs, supervision	LS	-	7	14	21	28	70	5,000	713	-	5.1	10.5	16.1	21.8	53.5	IFAD ( 90% )
<b>Subtotal</b>										2.5	40.6	46.7	53.0	56.8	199.6	
E. Improving climate information[and adoption advice	LS	-	7	7	7	-	21	500,000	71,327	-	514.4	524.7	535.1	-	1 574.2	IFAD ( 90% )

#### Total Investment Costs

#### II. Recurrent Costs

<b>Total</b>										11 904.2	26 739.1	34 190.4	27 201.3	3 932.7	103 967.7	
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\a Such as bar-code printer, computer set, scanner, data hardware, fast-testing tools, etc

Table-1.2: Stimulating entrepreneurship/ attracting investors

China

Y2RDP PDR

Table 1.2. Stimulating entrepreneurship

Detailed Costs

**I. Investment Costs**

A. Business incubation / Service centres

**B. Technical assistance to the service centre**

TA support from the project

**C. Startup investments**

Project support

Private sector support

**Subtotal**

**Total Investment Costs**

**II. Recurrent Costs**

**A. Staff salary**

Manager

Administrator

**Subtotal**

**B. Other operating costs**

Rental costs

Other operating costs

**Subtotal**

**Total Recurrent Costs**

**Total**

Unit	Quantities					Total	Unit Cost (CNY)	Unit Cost (US\$)	Totals Including Contingencies (US\$ '000)						Fin. Rule
	2020	2021	2022	2023	2024				2020	2021	2022	2023	2024	Total	
centre	7	-	-	-	-	7	250,000	35,663	252.1	-	-	-	-	252.1	IFAD ( 90% )
LS/year	7	7	7	7	7	35	660,000	94,151	665.6	679.0	692.5	706.4	720.5	3 464.1	IFAD ( 100% )
each	-	7	7	7	7	28	500,000	71,327	-	514.4	524.7	535.1	545.8	2 120.0	IFAD ( 100% )
each	-	7	7	7	7	28	500,000	71,327	-	514.4	524.7	535.1	545.8	2 120.0	PRIVATE ( 100% )
									-	1 028.7	1 049.3	1 070.3	1 091.7	4 240.0	
									917.8	1 707.7	1 741.8	1 776.7	1 812.2	7 956.2	

Table-1.3: Improving access to finance

China

Y2RDP PDR

Table 1.3. Improving access to finance

**Detailed Costs**

**I. Investment Costs**

**A. Improving access to finance**

A. Improving access to finance																
Strengthening financial capacity	LS	8	8	8	8	8	40	45,000	6,419	51.9	52.9	54.0	55.0	56.1	269.9	IFAD ( 100% )
Improving financial advisory services	LS	8	8	8	8	8	40	40,000	5,706	46.1	47.0	48.0	48.9	49.9	239.9	IFAD ( 100% )
<b>Total</b>										<b>98.0</b>	<b>99.9</b>	<b>101.9</b>	<b>104.0</b>	<b>106.1</b>	<b>509.9</b>	

# Table-2.1: Improving infrastructure climate resilience

China  
Y2RDP PDR  
Table 2.1. Improving infrastructure climate resilience

Detailed Costs		Quantities						Unit Cost (CNY)	Unit Cost (US\$)	Totals Including Contingencies (US\$ '000)						Fin. Rule
		Unit	2020	2021	2022	2023	2024			Total	2020	2021	2022	2023	2024	
I. Investment Costs																
A. Counties:																
1. Zhengxiong:																
Planning and design	LS/year	1	1	1	1	-	4	12,500	1,783	1.8	1.8	1.9	1.9	-	7.4	IFAD ( 90% )
Pond	each	15	-	-	-	-	15	100,000	14,265	216.1	-	-	-	-	216.1	IFAD ( 90% )
Pipeline	km	45	-	-	-	-	45	30,000	4,280	194.5	-	-	-	-	194.5	IFAD ( 90% )
Support to WUA	each	7	-	-	-	-	7	10,000	1,427	10.1	-	-	-	-	10.1	IFAD ( 90% )
Training	persons	60	60	60	60	60	300	200	29	1.7	1.8	1.8	1.8	1.9	9.0	IFAD ( 90% )
Rural road, rehabilitation	km	6	6	8	-	-	20	900,000	128,388	778.0	793.6	1 079.3	-	-	2 650.9	IFAD ( 90% )
Subtotal										1 202.3	797.2	1 083.0	3.7	1.9	3 088.0	
2. Suijiang:																
Planning & design	LS	1	1	1	1	-	4	122,000	17,404	17.6	17.9	18.3	18.7	-	72.4	IFAD ( 90% )
Pond	each	15	15	-	-	-	30	80,000	11,412	172.9	176.4	-	-	-	349.2	IFAD ( 90% )
Pipeline	km	15	15	-	-	-	30	20,000	2,853	43.2	44.1	-	-	-	87.3	IFAD ( 90% )
Irrigation system	mu	-	8 000	-	-	-	8 000	1,250	178	-	1 469.6	-	-	-	1 469.6	IFAD ( 90% )
Drip irrigation system	mu	-	2 000	-	-	-	2 000	3,500	499	-	1 028.7	-	-	-	1 028.7	IFAD ( 90% )
Subtotal										233.7	2 736.7	18.3	18.7	-	3 007.4	
3. Yongping:																
Design and planning	lumpsum	1	1	1	1	-	4	125,000	17,832	18.0	18.4	18.7	19.1	-	74.2	IFAD ( 90% )
Pond	each	36	36	36	-	-	108	38,900	5,549	201.8	205.8	209.9	-	-	617.5	IFAD ( 90% )
Pipeline	km	61	61	61	61	-	244	54,500	7,775	479.0	488.6	498.3	508.3	-	1 974.2	IFAD ( 90% )
Irrigation canal	km	1	-	-	-	-	1	50,000	7,133	7.2	-	-	-	-	7.2	IFAD ( 90% )
Pumping stations	each	2	2	-	-	-	4	750,000	106,990	216.1	220.4	-	-	-	436.6	IFAD ( 90% )
Subtotal										922.1	933.2	727.0	527.4	-	3 109.7	
4. Yunlong:																
Design and planning	lumpsum	1	1	1	1	-	4	125,000	17,832	18.0	18.4	18.7	19.1	-	74.2	IFAD ( 90% )
Pipeline	km	113	130	-	-	-	243	49,500	7,061	805.9	945.7	-	-	-	1 751.6	IFAD ( 90% )
Irrigation canal	km	14	20	23	-	-	57	167,400	23,880	337.7	492.0	577.1	-	-	1 406.8	IFAD ( 90% )
Domestic water supply unit	each	1	1	-	-	-	2	2,500,000	356,633	360.2	367.4	-	-	-	727.6	IFAD ( 90% )
Subtotal										1 521.8	1 823.5	595.9	19.1	-	3 960.3	
5. Lanping:																
Design and planning	lumpsum	1	1	1	1	-	4	125,000	17,832	18.0	18.4	18.7	19.1	-	74.2	IFAD ( 90% )
Pond	lumpsum	2	3	3	-	-	8	100,000	14,265	28.8	44.1	45.0	-	-	117.9	IFAD ( 90% )
Storage reservoirs	each	8	10	10	-	-	28	100,000	14,265	115.3	147.0	149.9	-	-	412.1	IFAD ( 90% )
Subtotal										162.1	209.4	213.6	19.1	-	604.2	
6. Yongsheng:																
Design and planning	lumpsum	1	1	1	1	-	4	125,000	17,832	18.0	18.4	18.7	19.1	-	74.2	IFAD ( 90% )
Pipeline	km	30	36	38	-	-	104	400,000	57,061	1 729.0	2 116.2	2 278.5	-	-	6 123.7	IFAD ( 90% )
Irrigation system	each	-	-	-	-	-	-	-	-	-	-	-	-	-	-	IFAD ( 90% )
Subtotal										1 747.0	2 134.6	2 297.2	19.1	-	6 197.9	
7. Huaping:																
Design and planning	lumpsum	1	1	1	1	-	4	15,000	2,140	2.2	2.2	2.2	2.3	-	8.9	IFAD ( 90% )
Pumping stations	each	2	2	1	-	-	5	2,706,000	386,020	779.8	795.4	405.6	-	-	1 980.7	IFAD ( 90% )
Subtotal										781.9	797.6	407.9	2.3	-	1 989.7	
Total Investment Costs										6 570.8	9 432.2	5 342.9	609.5	1.9	21 957.2	
II. Recurrent Costs																
A. Annual maintenance /a																
lumpsum										-	67.0	164.6	222.4	233.0	687.0	BEN ( 100% )
Total Recurrent Costs										-	67.0	164.6	222.4	233.0	687.0	
Total										6 570.8	9 499.2	5 507.4	831.8	234.9	22 644.2	

/a 1% of total investment cost per year

Table-2.2: Improving rural infrastructure system

China

Y2RDP PDR

Table 2.2. Improving rural infrastructure

Detailed Costs

Detailed Costs		Quantities						Unit Cost (CNY)	Unit Cost (US\$)	Totals Including Contingencies (US\$ '000)					Total	Fin. Rule
		Unit	2020	2021	2022	2023	2024			Total	2020	2021	2022	2023		
I. Investment Costs																
A. Road design and management: Counties																
1. Zhengxiong	per year	1	1	1	1	1	5	1,200,000	171,184	172.9	176.4	179.9	183.5	187.1	899.8	GOVT
2. Suijiang	per year	1	1	1	1	1	5	1,000,000	142,653	144.1	147.0	149.9	152.9	156.0	749.8	GOVT
3. Yongping:	per year	1	1	1	1	1	5	5,127,000	731,384	738.7	753.5	768.5	783.9	799.6	3 844.2	GOVT
4. Yunlong	per year	1	1	1	1	1	5	1,270,000	181,170	183.0	186.6	190.4	194.2	198.1	952.2	GOVT
5. Lanping	per year	1	1	1	1	-	4	1,000,000	142,653	144.1	147.0	149.9	152.9	-	593.8	GOVT
6. Yongsheng:	per year	1	1	1	1	1	5	1,280,000	182,596	184.4	188.1	191.9	195.7	199.6	959.7	GOVT
7. Huaping	per year	1	1	1	1	1	5	920,000	131,241	132.6	135.2	137.9	140.7	143.5	689.8	GOVT
Subtotal										1 699.7	1 733.7	1 768.4	1 803.7	1 683.9	8 689.4	
B. Rural infrastructure: Counties																
1. Zhengxiong:																
Rural road, new construction	km	4.9	5.3	9.6	4.8	5.95	30.55	1,300,000	185,449	917.8	1 012.6	1 870.8	954.1	1 206.3	5 961.5	GOVT
New lateral road	km	3	4.12	2.12	2.16	1.6	13	900,000	128,388	389.0	544.9	286.0	297.2	224.6	1 741.8	GOVT
Rehabilitation of lateral road	km	5	7	7	4	-	23	600,000	85,592	432.2	617.2	629.6	367.0	-	2 046.0	GOVT
Miscellaneous structures	mu	-	300	300	400	-	1 000	3,000	428	-	132.3	134.9	183.5	-	450.7	GOVT
Subtotal										1 739.0	2 307.0	2 921.3	1 801.8	1 430.9	10 200.0	
2. Suijiang																
Fire-control observation tower	each	6	-	-	-	-	6	200,000	28,531	172.9	-	-	-	-	172.9	GOVT
Farm road	km	10	25	25	-	-	60	558,400	79,658	804.5	2 051.6	2 092.6	-	-	4 948.7	GOVT
Tractor road	km	12.5	12.5	12.5	12.5	-	50	713,500	101,783	1 285.0	1 310.7	1 336.9	1 363.7	-	5 296.3	GOVT
Canal road	km	7.5	7.5	7.5	7.5	-	30	300,000	42,796	324.2	330.7	337.3	344.0	-	1 336.1	GOVT
Subtotal										2 586.6	3 693.0	3 766.8	1 707.7	-	11 754.1	
3. Yongping																
Pumping stations	each	7	-	-	-	-	7	842,900	120,243	850.1	-	-	-	-	850.1	GOVT
Pipeline	km	5	5	-	-	-	10	280,000	39,943	201.7	205.7	-	-	-	407.5	GOVT
Electricity transmission line	km	5	5	-	-	-	10	600,000	85,592	432.2	440.9	-	-	-	873.1	GOVT
Farm road, transportable	km	13	9	9	-	-	31	1,580,600	225,478	2 960.5	2 090.6	2 132.4	-	-	7 183.5	GOVT
Tractor road	km	15	10	10	10	-	45	100,000	14,265	216.1	147.0	149.9	152.9	-	665.9	GOVT
Cross-drainage structures	each	1	1	-	-	-	2	1,000,000	142,653	144.1	147.0	-	-	-	291.0	GOVT
Subtotal										4 804.8	3 031.1	2 282.3	152.9	-	10 271.1	
4. Yunlong																
Farm road, transportable	km	15	15	15	15	-	60	572,000	81,598	1 236.2	1 260.9	1 286.1	1 311.9	-	5 095.2	GOVT
Water source development	lumpsum	-	1	-	-	-	1	2,759,400	393,638	-	405.5	-	-	-	405.5	GOVT
Irrigation canal	km	-	32	47	47	-	126	167,400	23,880	-	787.2	1 179.4	1 203.0	-	3 169.6	GOVT
Pipeline	km	-	89	89	-	-	178	49,500	7,061	-	647.4	660.4	-	-	1 307.8	GOVT
Subtotal										1 236.2	3 101.1	3 125.9	2 514.8	-	9 978.1	

To be continued....



From previous page...Table-2.2: Improving rural infrastructure system

<b>5. Lanping:</b>																
Farm road, transportable	km	8	-	-	-	-	8	300,000	42,796	345.8	-	-	-	-	345.8	GOVT
Land leveling	mu	110	150	150	100	-	510	38,000	5,421	602.3	837.7	854.4	581.0	-	2 875.4	GOVT
Pipeline	km	24	35	32	24	-	115	320,000	45,649	1 106.5	1 646.0	1 535.0	1 174.3	-	5 461.7	GOVT
Installations	LS	2	3	3	1	-	9	1,000,000	142,653	288.2	440.9	449.7	152.9	-	1 331.6	GOVT
Unspecified	each	-	1	1	-	-	2	300,000	42,796	-	44.1	45.0	-	-	89.1	GOVT
<b>Subtotal</b>										2 342.7	2 968.6	2 884.1	1 908.2	-	10 103.6	
<b>6. Yongsheng</b>																
Farm road, transportable	km	10	15	5	-	-	30	300,000	42,796	432.2	661.3	224.9	-	-	1 318.4	GOVT
Pipe line	km	22	42	37	-	-	101	-	-	-	-	-	-	-	-	GOVT
Pond, 5000m3 capacity	lumpsum	2	1	-	-	-	3	5,146,500	734,165	1 483.0	756.3	-	-	-	2 239.4	GOVT
Pond 1000 m3 capacity	each	10	20	10	-	-	40	1,125,000	160,485	1 620.9	3 306.6	1 686.4	-	-	6 613.9	GOVT
Canal rehabilitation	km	20	35	30	-	-	85	400,000	57,061	1 152.6	2 057.5	1 798.8	-	-	5 008.9	GOVT
<b>Subtotal</b>										4 688.8	6 781.8	3 710.0	-	-	15 180.6	
<b>7. Huaping</b>																
Farm road	km	8	8	8	8	-	32	700,000	99,857	806.8	823.0	839.4	856.2	-	3 325.5	GOVT
Sprinkler sets	mu	3 000	3 000	3 000	3 000	2 000	14 000	1,500	214	648.4	661.3	674.6	688.0	467.9	3 140.2	GOVT
Pond	each	15	15	15	15	15	75	70,000	9,986	151.3	154.3	157.4	160.5	163.8	787.3	GOVT
Storages	each	30	30	30	30	30	150	8,000	1,141	34.6	35.3	36.0	36.7	37.4	180.0	GOVT
Pumping stations	each	1	2	-	-	-	3	2,601,000	371,041	374.8	764.5	-	-	-	1 139.2	GOVT
Pipeline	km	10	10	10	10	12	52	200,000	28,531	288.2	293.9	299.8	305.8	374.3	1 562.0	GOVT
<b>Subtotal</b>										2 304.0	2 732.3	2 007.2	2 047.3	1 043.4	10 134.1	
<b>Subtotal</b>										19 702.2	24 614.9	20 697.6	10 132.7	2 474.3	77 621.7	
<b>Total Investment Costs</b>										21 401.9	26 348.6	22 466.0	11 936.4	4 158.1	86 311.1	
<b>II. Recurrent Costs</b>																
A. Annual maintenance /a	lumpsum									-	218.3	491.4	619.1	753.2	2 082.0	BEN ( 100% )
<b>Total Recurrent Costs</b>										-	218.3	491.4	619.1	753.2	2 082.0	
<b>Total</b>										21 401.9	26 566.9	22 957.4	12 555.5	4 911.3	88 393.1	

1a 1% of total investment cost per year

Table-3.1: Project management, M&E, KM and Policy.. Investment costs

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Table 3.1. Project Management, M&E, KM and Policy

Detailed Costs		Quantities						Unit Cost		Totals Including Contingencies (US\$ '000)						Fin. Rule	
		Unit	2020	2021	2022	2023	2024	Total	(CNY)	(US\$)	2020	2021	2022	2023	2024		Total
I. Investment Costs																	
A. Provincial PMO																	
1. Office equipment	lumpsum	1	-	-	-	-	1	500,000	71,327	72.0	-	-	-	-	72.0	GOVT	
2. Staff training																	
Management workshop & training	lumpsum	1	1	1	1	1	5	200,000	28,531	28.8	29.4	30.0	30.6	31.2	150.0	GOVT	
Gender focus training	lumpsum	1	-	1	-	-	2	60,000	8,559	8.6	-	9.0	-	-	17.6	GOVT	
M&E and KM training	lumpsum	1	1	1	1	1	5	100,000	14,265	14.4	14.7	15.0	15.3	15.6	75.0	GOVT	
Subtotal										51.9	44.1	54.0	45.9	46.8	242.6		
3. Knowledge management																	
Study tours	lumpsum	1	1	1	1	1	5	70,000	9,986	10.1	10.3	10.5	10.7	10.9	52.5	GOVT	
Knowledge documents & sharing	lumpsum	1	1	1	1	1	5	100,000	14,265	14.4	14.7	15.0	15.3	15.6	75.0	GOVT	
Subtotal										24.5	25.0	25.5	26.0	26.5	127.5		
4. Women federation capacity building																	
Capacity building	lumpsum	1	1	1	1	1	5	30,000	4,280	4.3	4.4	4.5	4.6	4.7	22.5	GOVT	
Knowledge document & sharing	lumpsum	1	1	1	1	1	5	50,000	7,133	7.2	7.3	7.5	7.6	7.8	37.5	GOVT	
Subtotal										11.5	11.8	12.0	12.2	12.5	60.0		
5. Monitoring, evaluation and policy																	
Baseline survey0,	lumpsum	1	-	1	1	-	3	300,000	42,796	43.2	-	45.0	45.9	-	134.1	GOVT	
MIS set up	lumpsum	1	-	-	-	-	1	700,000	99,857	100.9	-	-	-	-	100.9	GOVT	
Policy activities	lumpsum	-	1	1	1	1	4	50,000	7,133	-	7.3	7.5	7.6	7.8	30.3	GOVT	
Subtotal										144.1	7.3	52.5	53.5	7.8	265.2		
Subtotal										304.0	88.2	143.9	137.6	93.6	767.3		
B. Prefecture PMOs																	
1. Equipment and materials (4 sets)	lumpsum	4	-	-	-	-	4	100,000	14,265	57.6	-	-	-	-	57.6	GOVT	
2. Workshop and training																	
Management workshop	lumpsum	4	4	4	4	4	20	5,000	713	2.9	2.9	3.0	3.1	3.1	15.0	GOVT	
M&E and KM workshops	prefecture	4	4	4	4	4	20	5,000	713	2.9	2.9	3.0	3.1	3.1	15.0	GOVT	
Subtotal										5.8	5.9	6.0	6.1	6.2	30.0		
3. Knowledge management events																	
National study tours	prefecture	4	4	4	4	4	20	5,000	713	2.9	2.9	3.0	3.1	3.1	15.0	GOVT	
Knowledge documents sharing	prefecture	4	4	4	4	4	20	5,000	713	2.9	2.9	3.0	3.1	3.1	15.0	GOVT	
Subtotal										5.8	5.9	6.0	6.1	6.2	30.0		
Subtotal										69.2	11.8	12.0	12.2	12.5	117.6		
C. County PMOs																	
1. Office equipment /a	LS	7	-	-	-	-	7	155,000	22,111	156.3	-	-	-	-	156.3	IFAD ( 90% )	
2. Staff training																	
General management training	person	35	35	35	35	35	175	1,000	143	5.0	5.1	5.2	5.4	5.5	26.2	IFAD ( 100% )	
FM & procurement training	person	28	28	-	28	-	84	1,000	143	4.0	4.1	-	4.3	-	12.4	IFAD ( 100% )	
Social safe-guard training	person	7	7	-	7	-	21	1,000	143	1.0	1.0	-	1.1	-	3.1	IFAD ( 100% )	
Environmental safe-guard training	person	7	7	-	7	-	21	1,000	143	1.0	1.0	-	1.1	-	3.1	IFAD ( 100% )	
Other Technical training	person	70	70	70	70	70	350	500	71	5.0	5.1	5.2	5.4	5.5	26.2	IFAD ( 100% )	
Overseas training	team	-	7	7	-	-	14	50,000	7,133	-	51.4	52.5	-	-	103.9	IFAD ( 100% )	
Subtotal										16.1	67.9	63.0	17.1	10.9	175.0		
3. Study tours																	
Within the region	persons	91	91	91	91	91	455	2,500	357	32.8	33.4	34.1	34.8	35.5	170.6	IFAD ( 100% )	
Outside the region	LS/year	21	21	-	-	-	42	5,000	713	15.1	15.4	-	-	-	30.6	IFAD ( 100% )	
Overseas study tour	LS	-	-	14	-	-	14	50,000	7,133	-	-	104.9	-	-	104.9	IFAD ( 100% )	
Subtotal										47.9	48.9	139.0	34.8	35.5	306.1		
4. Consultants & short-term staff																	
Project planning and design	LS	7	7	7	7	-	28	200,000	28,531	201.7	205.7	209.9	214.1	-	831.4	IFAD ( 100% )	
Short-term staff	pers_month	14	14	14	14	14	70	36,000	5,136	72.6	74.1	75.5	77.1	78.6	377.9	IFAD ( 100% )	
Subtotal										274.3	279.8	285.4	291.1	78.6	1 209.3		
5. Workshops and meetings	Lumpsum	28	28	28	28	28	140	10,000	1,427	40.3	41.1	42.0	42.8	43.7	209.9	IFAD ( 100% )	
6. Monitoring and evaluation and KM	LS/year	7	7	7	7	7	35	250,000	35,663	252.1	257.2	262.3	267.6	272.9	1 312.1	IFAD ( 90% )	
Subtotal										787.2	694.9	791.7	653.4	441.6	3 368.8		
Total Investment Costs										1 160.3	794.8	947.6	803.3	547.6	4 253.7		

Table-3.1: Project management, M&E, KM and Policy.. Recurrent costs

<b>II. Recurrent Costs</b>																
<b>A. Provincial PMO</b>																
1. Staff salary ( 5 staff)	per year	1	1	1	1	1	5	600,000	85,592	86.4	88.2	89.9	91.7	93.6	449.9	GOVT
<b>2. Other operating costs</b>																
Travel	per year	1	1	1	1	1	5	500,000	71,327	72.0	73.5	75.0	76.4	78.0	374.9	GOVT
Vehicle hiring	per year	1	1	1	1	1	5	400,000	57,061	57.6	58.8	60.0	61.2	62.4	299.9	GOVT
Other operating costs	per year	1	1	1	1	1	5	400,000	57,061	57.6	58.8	60.0	61.2	62.4	299.9	GOVT
<b>Subtotal</b>										187.3	191.0	194.9	198.8	202.7	974.7	
<b>Subtotal</b>										273.8	279.2	284.8	290.5	296.3	1 424.6	
<b>B. Prefecture PMOS</b>																
1. staff salary (4 staff from each Prefecture)	per year	20	20	20	20	20	100	30,000	4,280	86.4	88.2	89.9	91.7	93.6	449.9	GOVT
<b>2. Other operating costs</b>																
Travel costs	per year	4	4	4	4	4	20	25,000	3,566	14.4	14.7	15.0	15.3	15.6	75.0	GOVT
Office operating costs	per year	4	4	4	4	4	20	25,000	3,566	14.4	14.7	15.0	15.3	15.6	75.0	GOVT
<b>Subtotal</b>										28.8	29.4	30.0	30.6	31.2	150.0	
<b>Subtotal</b>										115.3	117.6	119.9	122.3	124.8	599.8	
<b>C. County PMOs</b>																
Staff salary (three staff)	per year	7	7	7	7	7	35	274,600	39,173	277.0	282.5	288.1	293.9	299.8	1 441.3	GOVT
Vehicle hiring charges	per year	7	7	7	7	7	35	50,000	7,133	50.4	51.4	52.5	53.5	54.6	262.4	GOVT
Office operating costs	per year	7	7	7	7	7	35	300,000	42,796	302.6	308.6	314.8	321.1	327.5	1 574.6	GOVT
<b>Subtotal</b>										629.9	642.5	655.4	668.5	681.9	3 278.3	
<b>Total Recurrent Costs</b>										1 019.0	1 039.3	1 060.1	1 081.3	1 103.0	5 302.7	
<b>Total</b>										2 179.3	1 834.2	2 007.7	1 884.6	1 650.6	9 556.4	

\a Such as computer, printers, photo copier, projector, laptops, digital and video cameras, etc

## **China**

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### **Yunnan Rural Revitalization Demonstration Project Project Design Report**

#### **Annex 4: Economic and Financial Analysis**

Mission Dates: 16 to 25 September 2019  
Document Date: 27/02/2020  
Project No. 2000002358  
Report No. 5310-CN

Asia and the Pacific Division  
Programme Management Department



## **Annex 4: ECONOMIC AND FINANCIAL ANALYSIS**

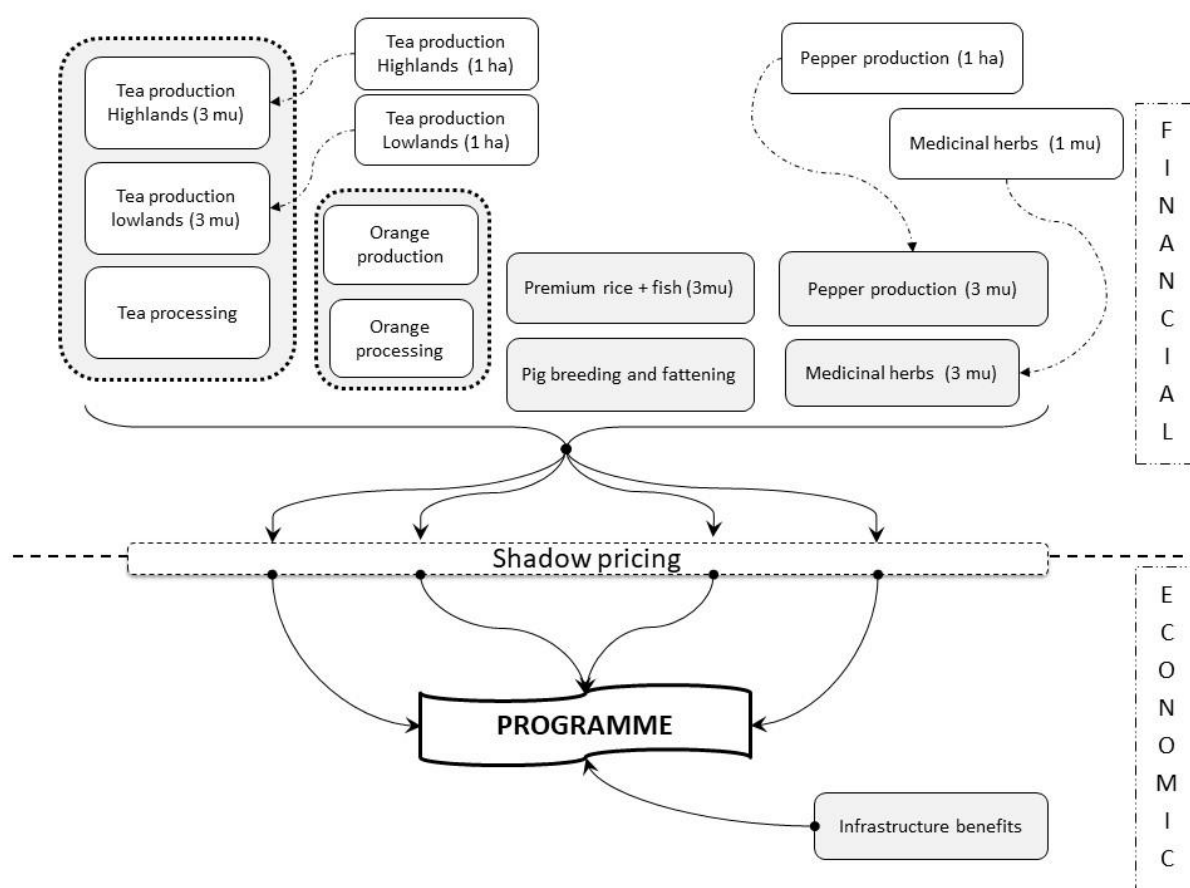
### **A. Introduction**

1. The programme is expected to generate substantial net incremental benefits for farmers, rural entrepreneurs and rural households in the project area. Benefits would directly accrue to farmers, women and youth through activities aimed at: i) diversifying productive activities for rural poor, ii) boosting agriculture through increase in production and productivity; iii) strengthening climate adaptation capacity, iv) facilitating access to market and access to finance; v) promoting entrepreneurship and value-addition to agricultural produce and vi) strengthening farmers cooperatives.
2. Benefits would accrue from: (i) increased water availability for both human and productive use; (ii) diversification of productive activities and sources of income; (iii) increased food availability for rural poor, (iv) increased value-added of agricultural outputs; (v) reduced transportation costs and enhanced processing efficiency through innovative technology and improved infrastructure; (vi) improved quality of processed products, thus attracting higher prices at local market; (vii) increased employment either for hired or family labour, for both on-farm and off-farm activities; and (viii) tax revenues as a result of increased volume of taxable production.
3. Increase in income would be largely dependent on farmers/household/rural entrepreneurial groups adopting improved technologies which the programme will promote through technical assistance, development plans and infrastructure investments, thus improving market access, supporting marketing linkages and generally creating a favourable economic environment that encourages farmers/rural entrepreneurs to produce more competitive products.
4. This annex presents the Economic and Financial Analysis (EFA) of programme's interventions through the use of indicative activity models. The analysis builds upon the precautionary principle, accounting for project benefits in a realistic and conservative manner. A cash-flow analysis is finally carried out to present the "with" and "without" programme analysis. The key-indicators used to carry out the analysis are Net Present Values (NPVs), Financial and Economic Internal Rate of Return (FIRR - EIRR), Benefit-cost ratio (B/C ratio) and switching values for both benefits and costs.

### **B. Methodology, assumptions and data**

5. Financial analysis. The primary objective of the financial analysis is to determine the financial viability and incentives for the programme target group as a result of their engagement in programme activities, and hence to examine Programme's impacts on family labour, cash flow and household incomes. A number of indicative economic activities to be supported by programme were identified during the programme design process. The following nine illustrative models are used in the EFA: (i) Transition from rice cultivation to premium rice and fish; (ii) Medicinal herb production; (iii) Pepper production; (iv) Tea production in highlands; (v) Green tea production in lowlands; (vi) Tea processing factory; (vii) Pig breeding and fattening; (viii) Orange production and ix) Orange processing. These models will be used as building blocks for the economic evaluation of the entire project once aggregated for the target population. All the technical assumptions within the models have been elaborated jointly with the team members on the basis of field surveys, national statistics, international and national expert consultation. The diagram in figure 1 **Figure 1** provides a logical sketch of the adopted approach and the selected value chains, while summary results from the financial models are presented in table 1.

**Figure 1: EFA diagram**



**Table 1: Summary of financial models**

MODELS	NPV (CNY) @ 7%	Return to family labour (CNY)	IRRf	B/C ratio	Switching value Benefits	Switching value Costs
Rice -> Premium rice + fish	23,363	227	n/a	1.40	-29%	40%
Medicinal herbs	186,187	645	45%	1.54	-35%	54%
Pepper production	138,491	280	11%	1.24	-20%	24%
Buddha tea production highlands	63,179	283	14%	1.52	-34%	52%
Green tea production lowlands	72,650	529	13%	1.73	-42%	73%
Orange production	68,580	391	19%	1.55	-35%	55%
Pig breeding	376,959	933	33%	1.18	-15%	18%
Tea processing	1,052,331	n/a	9%	1.37	-27%	37%
Orange processing	1,708,466	n/a	13%	1.04	-4%	4%

6. Programme target group and beneficiaries. The broad target group for the Programme will be smallholder farmers, rural and indigenous communities actively engaged in productive activities. The Programme will have a poverty focus and it is estimated that the number of direct and indirect beneficiaries of 88,200 HHs of whom 52,981 HHs are directly accounted for in the production models, in the cooperatives models and in the rural infrastructure benefits included in the EFA. Estimating the

precise number of HHs benefitting for processing units was not possible due to the different nature of the investment and the uncertainty regarding the forward and backward linkages in the market. Aggregation in this case is done on the number of facilities newly established or renovated. Nonetheless, an estimated 70 HHs are assumed to benefit for the establishment/renovation of the cooperatives.

7. Overall the programme will benefit women, youth and men directly involved in farm and off-farm activities proposed by the project as well as indirect beneficiaries employed in the value adding activities. Direct beneficiaries inclusion and phasing is described in table 2 below.

**Table 2: Beneficiaries and investment phasing**

MODELS	unit	Y1	Y2	Y3	Y4	Y5	Total
Rice -> Premium rice + fish	HHs	382	1032	1185	497	0	3,095
Medicinal herbs	HHs	382	1032	1185	497	0	3,095
Pepper production	HHs	153	413	474	199	0	1,238
Buddha tea production highlands	HHs	199	537	616	258	0	1,610
Green tea production lowlands	HHs	199	537	616	258	0	1,610
Orange production	HHs	183	495	569	238	0	1,486
Pig breeding	HHs	31	83	95	40	0	248
Tea processing	no.	4	12	13	6	0	35
Orange processing	no.	4	12	13	6	0	35

8. Key assumptions. The following source of information gathered during the design mission have been used to set up the analysis: interviews with farmers and entrepreneurs, documents and surveys from the Chinese Bureau of statistics, academic papers and mission estimates. In particular, information on labour and input requirements for various operations, capital costs, prevailing wages, yields, farm gate and market prices of commodities, input and farm-to-market transport costs were collected through pre-feasibility studies carried out prior to the mission. Conservative assumptions were made both for inputs and outputs, and take account of possible risks.

9. Exchange rate. The exchange rate used in the analysis is fixed at 1 USD = 7 CNY computed as an average of the exchange rate prevailing during design mission.

10. Numeraire and Prices. The adopted numeraire for the EFA is the domestic price level expressed in local currency unit. The financial prices for programme inputs and products represent average market prices and were collected in the field during the design mission (June 2019). Prices used represent estimates of the average seasonal prices and the analysis is carried out using nominal constant prices.

11. Labour. Family labour has been valued both in financial and economic analysis. It has been assumed that farm labour is provided by the households and is valued at CNY 85 day<sup>-1</sup> (USD 12). Hired labour (skilled) is priced at CNY 170 day<sup>-1</sup> (USD 24), which is the prevailing market rate.

12. Opportunity cost of capital. The discount rate for both the financial and the economic analysis have been calculated starting from the macroeconomic indicators of the financial market in China. As shown in table 3, estimates prove that the current financial discount rate would be equal to 5%. A higher value of 7% has been adopted to discount financial cash flows so to account for the higher interest rates charge by financial institutions when lending to rural farmers. The selected value is calculated as an average of the lending, deposit and money market interest rates.



**Table 3: Historical trend of money market rates**

	2009	2010	2011	2012	2013	2014	2015	2016	2017	Avg	
Real interest rate (%)	5%	-1%	-1%	4%	4%	5%	4%	3%	0%	3%	Fin. Rate 5%
Lending interest rate (%)	5%	6%	7%	6%	6%	6%	4%	4%	4%	5%	
Deposit interest rate (%)	2%	3%	4%	3%	3%	3%	2%	2%	2%	2%	
Money market interest rate (%)	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	
Long-term bond yield (%)	2%	2%	3%	1%	1%	2%	1%	2%	2%	2%	
Economic rate										4%	

Source: World Bank data

### C. Productive models

13. From rice to premium rice and fish production. Rice production is facing major challenges both in term of climate change and rice price volatility on the market. The country has constantly supported paddy production while also aiming at diversifying production and increase efficient use of resources. Rural households in various parts of the country are already adopting new premium rice varieties able to fetch a higher market price. The production system is combined with a fish production which is both sold on the market and self-consumed.

14. The total initial investment for rice seeds and fingerlings in year one would be around CNY 5,700 (USD 814). Operating costs over one year of production at full development would reach CNY 7,192 (USD 1,012) including cost for fertilizer acquisition, irrigation, tools, and transportation. Labour force requirement is of about 83 working days, fully provided by the family, for a total value of CNY 7,055 (USD 1,007).

15. Rice production would reach 4.2 tons ha<sup>-1</sup>, equivalent to 840 kg on the 3 mu<sup>1</sup> of land considered in the model, thus generating a potential revenue of CNY 33,600 (USD 4,800). Fish production represents a very marginal contribution to the family income fetching an average CNY 6,300 (USD 900) annually. In the without project (WoP) scenario, current rice production carried out with traditional seeds is considered as the activity counterfactual.

16. The activity presents positive returns. The cash-flow over the period of ten years, discounted at 7%, produces a NPV of CNY 73,511 M (USD 10,501). For every dollar invested, the activity would generate a 40-cent extra worth (B/C ratio equal to 1.40) and return to family labour of CNY 226 day<sup>-1</sup>. Finally, the activity would be no longer viable only if benefits decline by 29% or costs increase by 40%.

17. Medicinal herb production model (3 mu). Medicinal herbs production is a particularly important activity which could bring substantial economic return to the households involved in the target area. Yet, climate change, particularly drought and changes in rainfall patters, are having great impact on the quality and quantity of the produce. In recent years, droughts have reduced water resources and further depleted groundwater. As a result, insufficient water supply at farm level reduced productivity.

18. The programme will help stabilizing medicinal herb production by promoting management practices oriented towards sustainable production and a more efficient use of water resources. Investment costs in the model concern acquisition of drip irrigation system, small equipment, seedlings for new medicinal herb varieties and other tools with an initial outlay of about CNY 35,615 (USD 5,008).

<sup>1</sup> One mu of land is equivalent to one fifteenth of ha. One ha is equivalent to 15 mu. Average landholding in the province is equal to 3 mu.

Operating costs related to inputs, tools and utilities costs would sum up to an average CNY 28,773 per year (USD 4,000). Labour costs for family labour would instead reach CNY 6,290 (about USD 900).

19. At full development stage, production of three varieties of medicinal herbs (i.e. Codonopsis Pinosula, Geutiana, and Coptis) on the 3-mu land plot would reach 2.4 tons, therefore generating a revenue of CNY 76,500 M (USD 10,928). The traditional rice production income is used in the WoP scenario as a counterfactual to medicinal herb production.

20. The NPV of the model, is equal to CNY 186,187 M (USD 26,598) with a FIRR of 45%, B/C ratio equal to 1.54 and return to family labour of CNY 644 day<sup>-1</sup>. Activity results would turn negative in case of benefits declines of 35% or costs increase of 54%.

21. Pepper production model (3 mu). Like medicinal herbs, pepper is a plant that requires plenty of water during the dry season and the programme will promote more water-use efficient technologies and proper management practices for its cultivation.

22. The initial investment for cultivating pepper on 3 mu of land concerns small machinery and equipment, seedlings, and land preparation costs. The investment cost in year one would make up to around CNY 26,300 M (USD 3,760). Operating costs, mainly covering expenses for fertilizers and maintenance of equipment would roughly equal CNY 12,700 M (USD 1,814).

23. Pepper is sold at CNY 65 kg generating a gross revenue of about CNY 49,400 M (USD 7,057) once production reaches its full regime. In order to appreciate activity contribution to household income the proposed investment should have been nested in a broader HHs model. Unfortunately, lack of reliable data at design stage, concerning source of income for HHs, made it impossible to complete the task. Nonetheless - as a partial finding towards change in income - it is worth noticing that returns to labour will attain CNY 279 day<sup>-1</sup> - higher than the actual rural labour wage (i.e. CNY 170).

24. Activity results are positive with a NPV of CNY 27,698 M (USD 3,956) and a FIRR of 11%. B/C ratio is equal to 1.24 and switching values for benefits and costs of -20% and +24% respectively.

25. Tea production models (3 mu). In recent years, tea has played a big role in poverty reduction and it gradually progresses to sustain the livelihoods of smallholder tea farmers in various provinces of China. In addition to economic value, tea also plays an important role in creating jobs in rural areas; reforming agricultural economy, modernizing rural activities and developing new rural areas alongside with agricultural restructuring, contributing to greening bare hills as well as improving ecological environment.

26. However, the production, processing and consumption of tea have also faced many difficulties in terms of planting, tending techniques, intensive tea cultivation and production; meanwhile also seeking to ensure food safety, high-hygiene standards and meeting consumer taste.

27. The programme will support farmers groups or cooperatives involved in tea production to overcome current constraints and apply new farming techniques. Two models of tea production are elaborated to account for different production context (highlands vs lowlands). In both models, the initial investment cost includes improved varieties, land preparation and small equipment. The average cost for setting up the activity on a 3-mu farm would range between CNY 2,700 - 3,800 (USD 385 - 542). Operating costs related to inputs acquisition, utilities and maintenance expenses would instead on average range between CNY 2,742 - 3,674 (USD 390 - 525). At full development stage, labour cost for would equal to CNY 8,500 (USD 1,214).

28. Annually, green tea production in the lowlands is expected to fetch 12 tons ha<sup>-1</sup> (2.4 tons on 3 mu) while tea in the highlands would reach 11 tons ha<sup>-1</sup> (2.2 tons on 3 mu). Sales to processors would generate an average gross revenue of CNY 20,600 M (USD 2,942). The WoP scenario includes current practices of tea production in the region, where the crop is not properly managed, resulting in lower yields and lower quality.

29. The cash-flow over the period of 15 years, discounted at 7%, produces a NPV of CNY 14,530 (USD 2,075) and a FIRR of 13% in the lowlands. Similarly, results on the highlands show a NPV of CNY 12,636 (USD 1,805) and an FIRR of 14%. The B/C ratio ranges from 1.52 (highlands) to 1.73 (lowlands) while switching values for benefits range from -34% (highlands) to -42% (lowlands). Cost variations affecting final results for tea production in the highlands and lowlands would be instead equal to +52% and +73% respectively.

30. Tea processing model. Tea processors in the target area are interested in accessing better quality raw material and increase value-addition via investments in new machineries and equipment so as to reach high-quality standards and product certification. The programme will support enterprises and cooperatives to access finance and renovate their processing lines. In the foreseen scenario, processors would invest in new machineries and equipment; training on processing advanced techniques, food hygiene and labour safety.

31. Models details are presented in annex to this appendix. Activity's results are positive with NPV equal to CNY 1.05 M (USD 150,333 M) and FIRR of 9%. The investment will be fully recovered at the end of the eighth year. The benefit-cost ratio amounts to 1.37 while switching values for benefits and cost are equal to -27 % and +37 % percent respectively.

32. Orange production model (3 mu). Thanks to the support of the programme, farmer will establish fruit orchards and implement good management practices to achieve both product quality and high yields in fruit production. Expected changes are compared to returns from maize production, which in this case is considered being the counterfactual upon which orange production performances are evaluated.

33. The production scenario foresees planting of a new variety of certified oranges. Initial outlays for the activity is mainly related to acquisition of certified seedlings and fertilizers. Investment and operating costs in the first year would attain CNY 16,000 (USD 2,285). In subsequent years the operating cost - mainly related to disease control - will average CNY 5,700 (USD 814). Gross revenues at full development would on average equal CNY 30,400 M (USD 4,343). The model's cash-flow discounted at 7%, produces a NPV of CNY 68,580 M (USD 9,797) with an FIRR of 19%. Switching value are of - 35% for benefits and + 55% for cost while the benefit to cost ratio of the model is equal to 1.55.

34. Orange processing models. In order to consolidate the EFA around the value chain crops, a model describing an orange processing facilities is elaborated. Investment in orange processing will mainly concern the installation of processing lines including machinery and equipment for weighing, packing and sorting. The initial outlay for the investment is equal to CNY 2.4 M (USD 343,000) while operating cost at full development stage would roughly reach CNY 13.3 M (USD 1.9 M). Labour costs for 12 specialized workers would sum up to CNY 258,400 (USD 36,914). Administrative staff and managers would instead cost CNY 327,040 (USD 46,720). Gross revenues from sales of fresh product is equal to CNY 15.4 M (USD 2.2M). Given the lack of an alternative scenario, the counterfactual to this activity is given by the foregone opportunity labour of the workers employed in the facility.

35. The cash-flow over the period of 15 years, discounted at 7%, produces a NPV of CNY 1.7 M (USD 244,000) with an FIRR of 13%. The investments would be repaid within the first nine years. The B/C ratio is equal to 1.04 and switching values for benefits and cost are low showing that the activity is exposed to risk related to input-output price fluctuations. Indeed, increase or fall of costs and benefits of about  $\pm 4$  percent would provide a negative NPV.

36. Pig breeding and fattening models. The market for pig meat is large due to the high demand and a limited supply, with the latter being further affected by recent cases of swine fever in the target area. Vaccination and proper pigpen management are therefore deemed key to increase production while also ensuring animal welfare. Current production technique follows traditional methods mainly characterized by little use of vaccination and inadequate medication and feeding.

37. The investment for this activity includes the initial animal stock (16 females) and the construction of a pigsty with the hosting capacity of 100 animals. The average cost of the initial investment is equal to CNY 436,000 (USD 62,287). Operating costs related to vaccination, feeding, utilities and maintenance expenses would reach on average CNY 290,000 M (USD 41,400). Labour cost, provide by the family, would be equal to CNY 11,900 M (USD 1,700). Gross revenues from sales are expected to reach CNY 426,000 (USD 60,800).

38. The NPV of the activity is equal to about CNY 374,000 (USD 53,851) and a FIRR of 33%. The B/C ratio equal to 1.18 while switching values for benefits and costs are of -15% and +18 % respectively.

#### **D. Economic analysis**

39. The objectives of the economic analysis are: (i) to examine the overall Programme viability; (ii) to assess the Programme's impact and the overall economic rate of return; and (iii) to perform sensitivity analyses upon risks and variables affecting project's results.

40. Key Assumptions. Production and activity models considered in the financial analysis are used as building blocks for determining the viability of the whole programme, once addressing for market distortion and opportunity costs for inputs and outputs. The economic analysis of the programme hinges on the following assumptions: (i) Programme life has been assumed at 20 years in light of investments lifecycle; (ii) programme inputs and outputs are valued at their economic parity prices estimated upon international prices as reported by the World Bank commodity outlook, and on the basis of custom duties and taxes rates as provided by the national bureau of international trade; (iii) an economic discount rate of 5% has been calculated as the weighted average of saving interest rates, long term bonds yields and the real interest rate (table 3); (iv) family labour is valued at its opportunity cost; (v) the shadow exchange rate factor (SERF) of 1.02 is calculated upon international trade statistics and applied for the conversion of commodity prices when detailed conversion factor is not available; (vi) conversion factors for main inputs and outputs are calculated starting from international prices<sup>2</sup> and on the basis of import and export taxes and duties in China; and (vii) the shadow exchange rate (SER), estimated upon international trade data, is equal to CNY 7.1 ( table 4).

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<sup>2</sup> World Bank - Pink sheet - June 2019

**Table 4: Calculation of shadow factors - trade data in billions of CNY**

		2009	2010	2011	2012	2013	2014	2015	2016	2017	Average
Total imports of G&S	M	7,034	9,344	11,795	12,266	13,131	13,769	12,475	12,920	14,926	13,444
Total exports of G&S	X	8,537	10,849	12,964	13,730	14,586	15,130	14,710	14,618	16,342	15,077
Weighted average of import tariff rate	m	4%	5%	6%	4%	4%	5%	5%	4%	4%	4.1%
Import duties	Tm	277	434	707	491	525	653	564	457	572	554
Export duties	Tx										
Total international commerc	M+X	15,571	20,193	24,759	25,996	27,718	28,899	27,185	27,538	31,268	28,522
	M+Tm	7,311	9,778	12,501	12,757	13,656	14,422	13,039	13,377	15,498	13,999
	X-Tx	8,537	10,849	12,964	13,730	14,586	15,130	14,710	14,618	16,342	15,077
	SCF	0.98	0.98	0.97	0.98	0.98	0.98	0.98	0.98	0.98	0.981
	OER (CNY/USD)	6.83	6.77	6.46	6.31	6.20	6.14	6.23	6.64	6.76	
	SER	7	7	7	6	6	6	6	7	7	

Average SCF	0.98
Average SERF	1.02
SWRF	0.98
OER (2017)	7.0
SER (2017)	7.1

41. Programme Economic Costs. The economic analysis includes the investment and incremental recurrent costs of programme components. Programme financial costs have been converted to economic values by removal of taxes, duties and subsidies. In order to avoid double counting, the final aggregation considered only those costs that were not included in financial models. Specifically, the estimation of economic costs considered: (a) all investments costs deducted from taxes; (b) the recurrent costs of the program; and (c) the use of a conversion factor of 1.02 (SERF) to correct market costs to economic costs into Costab.

42. Benefits Estimation. The incremental benefits stream comprises the economic net values of all the models developed in the financial analysis. These benefits are then aggregated following the inclusion phasing foreseen for targeted households and cooperatives (table 2).

43. Infrastructure benefits. Rural infrastructure (i.e. roads and irrigation infrastructures) is estimated to account for an additional 20% of the net incremental benefits derived from the production models. At the time of the design, it was neither possible to validate, nor to further investigate, the economic benefits of rural infrastructure. Therefore, this very conservative approach only provides a notional figure to quantify the benefits for both the direct and the indirect target population. Moreover, this approach allows to partially offset the infrastructure investment cost.

44. Environmental externalities. The economic analysis includes a tentative assessment of the environmental externalities related to carbon emission/sequestration. Such effects are calculated and based on inputs and information included into the activity models included in the EFA. Information regarding infrastructure construction and rehabilitation, as well as use of fertilizers and change in cultivation patterns are included respecting the actual timing of occurrence throughout the programme lifespan.

45. Results below indicate that the programme would be responsible for a net emission of approximately 754,443 tons of CO<sub>2</sub> equivalent. The analysis considered the average 32.3 tons year<sup>-1</sup> ha<sup>-1</sup> emission in accordance with the phasing-in of production activities and infrastructure. Each ton of carbon has been valued at a very conservative price of 4 USD per ton, so as to determine the economic contribution of carbon reduction to the overall project worth. The net economic effect is estimated at an average annual outlay of CNY 2.2 M. (USD 321,000).

Table 5: Carbon Balance

Project Name	Yunnan revitalization		Climate	Cool Temperate (Moist)		Duration of the Project (Years)		20			
Continent	Asia (Continental)		Dominant Regional Soil Type	LAC Soils		Total area (ha)		1168			
Components of the project	Gross fluxes			Share per GHG of the Balance				Result per year			
	Without	With	Balance	All GHG in tCO2eq			Without	With	Balance		
Land use changes	All GHG in tCO2eq			CO2		N2O	CH4				
	Positive = source / negative = sink			Biomass	Soil	Other					
Deforestation	0	0	0	0	0	0	0	0	0	0	
Afforestation	0	0	0	0	0	0	0	0	0	0	
Other LUC	0	301,239	301,239	0	299,780	1,459	0	0	15,062	15,062	
Agriculture	Annual	-13,486	-1,686	0	12,157	-357	0	-674	-84	590	
	Perennial	0	-10,424	-10,424	0	-10,424	0	0	0	-521	
	Rice	0	0	0	0	0	0	0	0	0	
Grassland & Livestocks	Grassland	0	0	0	0	0	0	0	0	0	
	Livestocks	0	68,974	68,974			16,684	52,290	0	3,449	3,449
Degradation & Management	Forest degradation	0	0	0	0	0	0	0	0	0	
	Peat extraction	0	0	0	0	0	0	0	0	0	
	Drainage organic soil	0	0	0	0	0	0	0	0	0	
	Rewetting organic soil	0	0	0	0	0	0	0	0	0	
	Fire organic soil	0	0	0	0	0	0	0	0	0	
Coastal wetlands	0	0	0	0	0	0	0	0	0	0	
Inputs & Investments	132,371	515,215	382,844			229,104	153,740	0	6,619	25,761	19,142
Fishery & Aquaculture	0	0	0			0	0	0	0	0	0
Total	118,885	873,317	754,433	0	301,513	229,104	171,525	52,290	5,944	43,666	37,722
Per hectare	101.8	747.7	645.9	196.2	258.1	196.2	146.9	44.8			
Per hectare per year	5.1	37.4	32.3	9.8	12.9	9.8	7.3	2.2	5.1	37.4	32.3

Table 6: Fluxes (left) and balance (right) per component

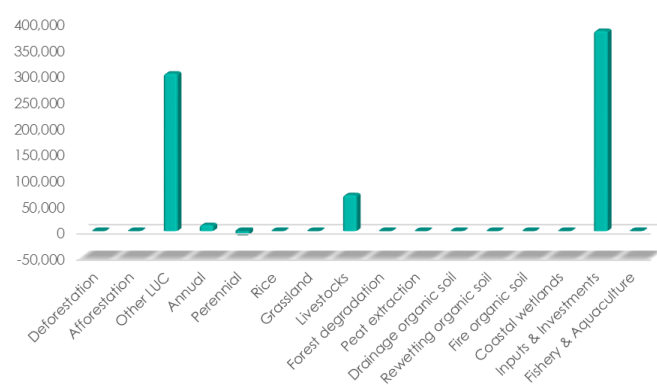
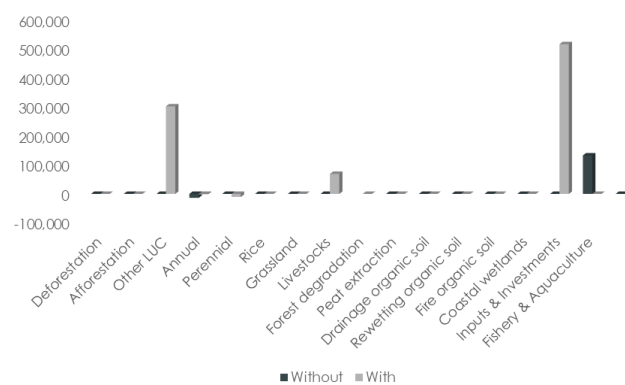
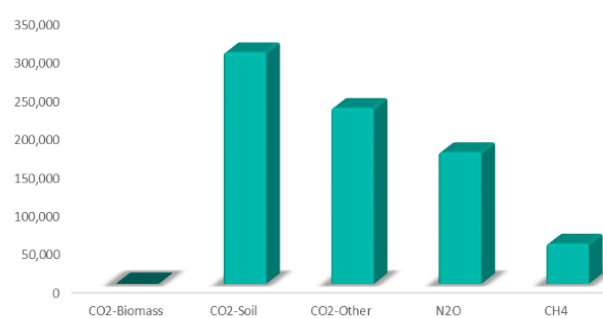
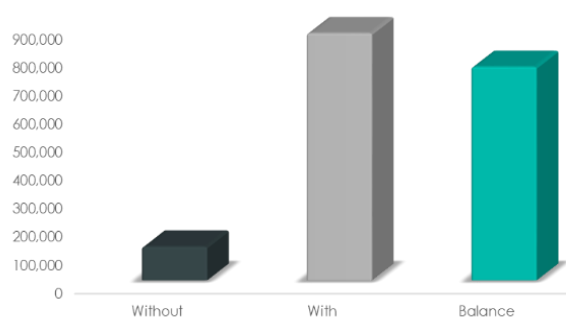


Table 7: GHG Balance and emission source



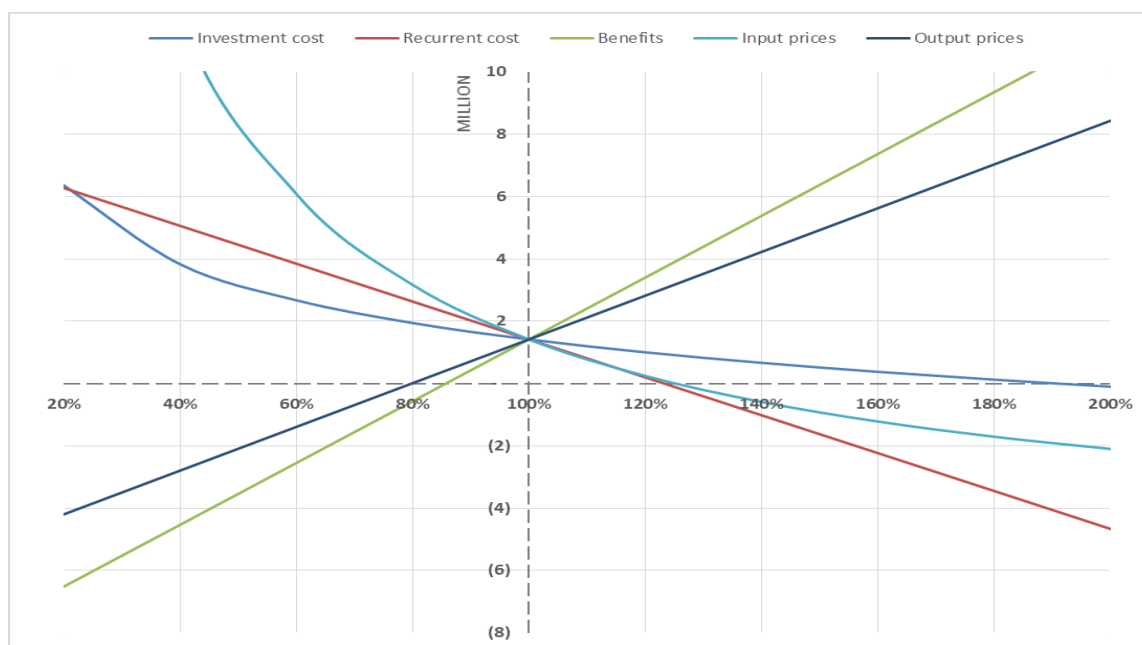
46. Economic Profitability. The programme is a technical and economically viable investment to the economy as a whole. The programme economic NPV of the net benefit stream, discounted at 5%, is CNY 1,390 million (USD 199 million) producing an EIRR of 15.3% for the base case scenario. The summary of economic analysis is presented in table 8.

**Table 8: Summary of the economic results (CNY million)**

	Total incremental benefits	Total costs		Environmental externalities	Total net incremental benefits
		Investment	Operating		
year 1	(79)	55	-	(0)	(134)
year 2	(224)	124	-	(1)	(349)
year 3	(270)	193	-	(2)	(464)
year 4	(109)	125	-	(2)	(235)
year 5	78	43	4	(2)	28
year 6	185	-	4	(2)	178
year 7	259	-	4	(2)	253
year 8	296	-	4	(2)	289
year 9	313	-	4	(2)	306
year 10	321	-	4	(2)	314
year 11	323	-	4	(2)	316
year 12	325	-	4	(2)	318
year 13	325	-	4	(2)	318
year 14	325	-	4	(2)	318
year 15	325	-	4	(2)	318
year 16	325	-	4	(2)	318
year 17	325	-	4	(2)	318
year 18	325	-	4	(2)	318
year 19	325	-	4	(2)	318
year 20	325	-	4	(2)	318
NPV (CNY M) @ 5%					1,390
NPV (USD M) @ 5%					199
EIRR					15.3%

47. Sensitivity Analysis. The section presents the effect of variations in Programme benefits and costs. Project results were tested to sensitivity analysis so as to measure variations due to unforeseen factors, hence identifying those variables affecting final results the most. (figure 2)**Error! Reference source not found.** depicts the extent to which a variable change (horizontal axis) would induce a change to the project NPV (vertical axis). The steeper the curve, the higher the impact and the change to the NPV. As one can notice, the project is more sensitive to changes in benefits and output prices costs, rather than changes in inputs prices and investment costs.

**Figure 2: Changes in NPV in response to changes in key variables**



48. However, only the variability and uncertainty around specific variables could put at risk the overall viability of the programme, and therefore need to be monitored more closely than others. Threshold values in variables changes are identified in Figure 3. For instance, an increase in recurrent cost of 40% (from 100% to 140%) would bring the NPV down to CNY -96 million. Similarly, the project would no longer be viable if benefits drop by 20% (from 100% to 80%).

**Figure 3: NPV thresholds determined by changes in key variables**

Investment cost			Recurrent cost			Benefits		
20%		6,310	20%		6,252	20%		(6,542)
40%		3,789	40%		5,037	40%		(4,559)
60%		2,640	60%		3,821	60%		(2,576)
80%		1,914	80%		2,605	80%		(593)
100%		1,390	100%		1,390	100%		1,390
120%		981	120%		174	120%		3,373
140%		645	140%		(1,041)	140%		5,356
160%		359	160%		(2,257)	160%		7,339
180%		108	180%		(3,473)	180%		9,322
200%		(116)	200%		(4,688)	200%		11,305

Input prices			Output prices		
20%		29,304	20%		(4,223)
40%		11,861	40%		(2,820)
60%		6,046	60%		(1,417)
80%		3,136	80%		(13)
100%		1,390	100%		1,390
120%		225	120%		2,793
140%		(608)	140%		4,196
160%		(1,234)	160%		5,600
180%		(1,721)	180%		7,003
200%		(2,111)	200%		8,406



49. More in detail, switching values and critical threshold have been identified for the main variables. In particular, the project would no longer be viable in case: a) investment costs increase of 73%; b) operating costs increases of 23%; c) benefits decline by 19%; d) input cost increase by 30%; e) output prices fall by 23% f) project beneficiaries involved in productive activities are less than 2,260 HHs.

50. Also, the sensitivity analysis allows to examine the effects of a simultaneous variation in some of the pre-identified key variables on the overall project profitability, hence determining all possible combinations of variables' changes that would result in a negative (or positive) NPV.

**Figure 4: Simultaneous sensitivity analysis**

		Investment cost									
		20%	40%	60%	80%	100%	120%	140%	160%	180%	200%
Benefits	20%	(22,852)	(12,904)	(9,421)	(7,629)	(6,542)	(5,823)	(5,320)	(4,956)	(4,687)	(4,486)
	40%	(15,561)	(8,731)	(6,406)	(5,243)	(4,559)	(4,122)	(3,829)	(3,627)	(3,488)	(3,394)
	60%	(8,271)	(4,558)	(3,391)	(2,857)	(2,576)	(2,421)	(2,338)	(2,299)	(2,290)	(2,301)
	80%	(980)	(385)	(376)	(472)	(593)	(720)	(846)	(970)	(1,091)	(1,208)
	100%	6,310	3,789	2,640	1,914	1,390	981	645	359	108	(116)
	120%	13,601	7,962	5,655	4,300	3,373	2,682	2,136	1,687	1,307	977
	140%	20,891	12,135	8,670	6,685	5,356	4,383	3,627	3,016	2,506	2,069
	160%	28,182	16,308	11,685	9,071	7,339	6,084	5,118	4,345	3,705	3,162
	180%	35,472	20,481	14,700	11,457	9,322	7,784	6,610	5,673	4,903	4,254
	200%	42,763	24,655	17,715	13,842	11,305	9,485	8,101	7,002	6,102	5,347

		Investment cost									
		20%	40%	60%	80%	100%	120%	140%	160%	180%	200%
Recurrent cost	20%	25,354	14,359	10,153	7,801	6,252	5,133	4,274	3,586	3,015	2,531
	40%	20,593	11,716	8,275	6,329	5,037	4,095	3,367	2,779	2,289	1,869
	60%	15,832	9,074	6,396	4,858	3,821	3,057	2,459	1,972	1,562	1,208
	80%	11,071	6,431	4,518	3,386	2,605	2,019	1,552	1,165	835	546
	100%	6,310	3,789	2,640	1,914	1,390	981	645	359	108	(116)
	120%	1,549	1,146	761	442	174	(57)	(263)	(448)	(619)	(778)
	140%	(3,211)	(1,496)	(1,117)	(1,029)	(1,041)	(1,096)	(1,170)	(1,255)	(1,345)	(1,439)
	160%	(7,972)	(4,139)	(2,996)	(2,501)	(2,257)	(2,134)	(2,077)	(2,062)	(2,072)	(2,101)
	180%	(12,733)	(6,782)	(4,874)	(3,973)	(3,473)	(3,172)	(2,985)	(2,868)	(2,799)	(2,763)
	200%	(17,494)	(9,424)	(6,752)	(5,445)	(4,688)	(4,210)	(3,892)	(3,675)	(3,526)	(3,424)

## **APPENDIX 1**

### **PRICES AND MODELS**

Table A 1: Prices and conversion factors

	Unit	Financial Prices (CNY)	Conversio n factors	Economic Prices (CNY)					
OUTPUTS					Lan (P205)	kg	2	1.02	2
Rice -> Maize & Beans					Ka li (KCl)	kg	4	0.82	4
Traditional paddy	kg	12.0	0.59	7.08	Medication cures & nourishes fruits	barrel	192	1.02	196
Rice by-product (Straw)	kg	0.5	0.59	0.29	Bagging	bag	2	1.02	2
Hybrid premium rice	kg	30.0	0.59	17.69	Machine	lumpsum	576	1.02	587
Fish	kg	60.0	1.02	61.17	Pump	lumpsum	576	1.02	587
Medical herbs					Wire, tube	lumpsum	296	1.02	301
Codonopsis Pinosula (dangsheng)	kg	25	1.06	26.42	Accessories	lumpsum	480	1.02	489
Geutiana	kg	55	1.06	58.20	Pillars	lumpsum	64	1.02	65
Coptis	kg	35	1.06	37.04	Transportation	ton	320	1.02	326
Pepper production					Bags (50 kg)	no.	1	1.02	1
Pepper	kg	65.0	1.02	66.26	Shan/Green tea production highlands/lowlands				
Buddha tea production highlands					Basal fertilizer (NPK, DAP, CAN)	kg	3	0.82	3
Tea WoP variety	kg	7	1.06	7.40	Top dress fertilizer (Urea)	kg	5.44	0.82	4
Tea WP variety	kg	9	1.06	9.51	Manure (organic)	kg	3.20	0.82	3
Green tea production lowlands					Foliar fertilizer	kg	3.84	0.82	3
Tea WOP variety	kg	7	1.06	7.40	Herbicide	kg	224	0.82	183
Tea WP variety	kg	9	1.06	9.51	Tools/equipment	lumpsum	96	1.02	98
Tea processing					Transportation	ton	320	1.02	326
Tea A	kg	60	1.06	63.39	Bags	no.	32	1.02	33
Tea B	kg	30	1.06	31.70	O&M expenses	lumpsum	128	1.02	130
Tea C	kg	5	1.06	5.28	Tea processing				
Orange production					Tea BP	kg	3	1.06	3
Maize	kg	4	1.02	4.08	Tea PF	kg	8	1.06	8
Certified oranges	kg	8	1.06	8.50	Tea PD	kg	3	1.06	3
Orange processing					Electricity (1432KW / 1 ton of product)	Kwh	0.90	1.00	1
Uncertified oranges	kg	8	1.06	8.50	Coal (0.61 m3/1 ton of product)	ton	2,560	1.02	2610
Certified oranges	kg	12	1.06	12.76	O&M building (3% of investment cost)	lumpsum	33,600	1.02	34253
Pig breeding					O&M machinery and equipment (5%)	lumpsum	94,000	1.02	95826
Piglets	head	3,000	1.06	3188.94	Tea sacks (60 kg)	no.	17.60	1.02	18
					Shipping to warehouses	ton	320	1.02	326
INVESTMENTS					Orange production				
Rice -> Maize & Beans					Certified seedling	tree	16	1.06	17
Rice Hybrid seeds	kg	60	0.59	35	Fertilizer:				
Fish	kg	40	1.02	41	Manure	kg	1	0.82	1
Pepper production / Medical herbs					Urea	kg	5	0.82	4
Machine	no.	7,680	1.02	7,829	Phosphat fertilizer	kg	2	0.82	2
Drip irrigation system	per mu	1,500	1.02	1,529	Potassium fertilizer	kg	10	0.82	8
Pump	no.	1,280	1.02	1,305	Organic fertilizer - foliar	kg	224	0.82	184
Wire, tube	roll	640	1.02	652	Lime powder	kg	1.0	0.82	1
Accessories	set	640	1.02	652	NPK	kg	4	0.82	3
Seedling	no.	22	1.02	23	Fish meal	kg	3	1.02	3
Pillars	no.	45	1.02	46	Kali chloride	kg	10	0.82	8
Soil treatment	lumpsum	2,304	1.02	2,349	Ketomium	kg	224	0.82	184
Shan tea/green tea production highlands/lowlands					AT micro-leaf fertilizers	kg	96	0.82	79
Infrastructure	lumpsum	1,280	1.02	1,305	AT disease and Insect-limited	kg	192	0.98	188
Equipment	lumpsum	128	1.02	130	Pesticide	kg	77	0.98	75
Improved seeds	kg	0.64	1.02	1	Tools/equipment	no.	2,560	1.02	2610
Shade trees/windbreaks	kg	3.20	1.02	3	Transportation	ton-km	320	1.02	326
Tea processing					Boxes/crates	no.	3	1.02	3
Warehouse (3000-4000 m2)	no.	1,120,000	1.02	1,141,761	Orange processing				
CTC production line	no.	1,760,000	1.02	1,794,196	Uncertified oranges	kg	6	1.02	7
Other supporting machines	no.	120,000	1.02	122,332	Certified oranges	kg	13	1.06	14
Certified seedling	tree	160	1.06	170	Electricity (786KW / 1 ton SP)	Kwh	0.9	1.00	1
Orange processing					Maintenance hygiene	CNY/ton	320	1.02	326
Warehouse	no.	1,428,571	1.02	1,456,328	O&M building (5% of investment cost)	lumpsum	71,429	1.02	72816
Processing machine	no.	714,286	1.02	728,164	O&M machinery and equipment (5%)	lumpsum	78,571	1.02	80098
Weighing machine	no.	535,714	1.02	546,123	Packaging	kg	0.4	1.02	0
Packing machine	no.	321,429	1.02	327,674	Transportation	ton	320	1.02	326
Pig breeding					Tools/equipment	lumpsum	1,280	1.02	1305
Female initial stock	head	6,500	1.02	6,626	Pig breeding				
Shed	no	332,000	1.02	338,451	Shed maintenance	Lumpsum	16,600	1.02	16923
OPERATING INPUTS					Feed	kg	10	1.02	10
Rice -> Maize & Beans					Artificial insemination	per female	50	1.02	51
Rice seeds	kg	30	0.59	18	Vaccinations	per head	250	1.02	255
Rice Hybrid seeds	kg	60	0.59	35	Water, electricity	lumpsum per animal	320	1.02	326
Fish	kg	40	1.02	41	Equipment and tools	lump sum	930	1.02	948
Tools/equipment	lumpsum	768	1.02	783	Fertilizers				
Irrigation	ha	192	1.02	196	Rice -> Maize & Beans				
Transportation	bag	4	1.02	5	Basal fertilizer (NPK, DAP, CAN)	kg	3	0.82	2
Bags/packaging (50 kg each)	no.	1	1.02	1	Top dress fertilizer (Urea)	kg	6	0.82	4.7
Pepper production / Medical herbs					Manure (organic)	kg	0	0.82	0
Medical herbs seedling (average)	no.	11	1.02	11	Others (for rice)	kg	5	0.82	4.211
Plastic cover	per mu	100	1.02	102	Chemical products				
Compound fertilizer	kg	3	1.02	3	Pesticides (for rice)	liter	49	0.98	48
Chemical fertilizer	lt	30	1.02	31	Herbicides	liter	47	0.82	38
Powdered lime	kg	2	0.82	2	Pesticide (for coffee)	kg	38	0.98	38
Manure	bag	26	0.82	21	Energy and others				
Phosphate	kg	3	0.82	2	Electricity	Kwh	1	1.00	1
Microbial organic fertilizer	kg	2	1.02	2	Gasoline	lt	9	0.97	9
Urea	kg	4	0.82	3	Labour				
SA	kg	2	0.82	2	Skilled labour	pers.day	170	0.98	166.37
					Family labour	pers.day	85	0.98	83.19
					Administrative staff, managers	pers.day	448	0.98	438.44
					Taxes	%	10%	0	0
					Insurance	%	22%	0%	0%
					Discount rate	%	7%		5%

Table A 2: Premium rice + fish model

[illegible]

FINANCIAL BUDGET ('000 CNY)				WITHOUT PROJECT		WITH PROJECT							
ITEMS		1	1	2	3	4	5	6	7	8	9	10	
Main production revenue													
Rice/paddy		19,800	0	0	0	0	0	0	0	0	0	0	
	Selfconsumption	240	0	0	0	0	0	0	0	0	0	0	
Rice by-product (Straw)		743	0	0	0	0	0	0	0	0	0	0	
Hybrid premium rice		0	25,200	25,200	25,200	25,200	25,200	25,200	25,200	25,200	25,200	25,200	
Fish		0	6,300	6,300	6,300	6,300	6,300	6,300	6,300	6,300	6,300	6,300	
Post harvest losses		5,136	4,725	4,725	4,725	4,725	4,725	4,725	4,725	4,725	4,725	4,725	
Total revenue		15,167	26,775	26,775	26,775	26,775	26,775	26,775	26,775	26,775	26,775	26,775	
Investment input costs													
Rice Hybrid seeds		0	2,100	0	0	0	0	0	0	0	0	0	
Fish		0	3,600	0	0	0	0	0	0	0	0	0	
Sub-total investment costs		0	5,700	0	0	0	0	0	0	0	0	0	
Operating inputs													
Rice seeds		1,200	0	0	0	0	0	0	0	0	0	0	
Rice Hybrid seeds		0	0	2,100	2,100	2,100	2,100	2,100	2,100	2,100	2,100	2,100	
Fish		0	0	3,600	3,600	3,600	3,600	3,600	3,600	3,600	3,600	3,600	
Fertilizer:													
Basal fertilizer (NPK, DAP, CAN)		205	256	256	256	256	256	256	256	256	256	256	
Top dress fertilizer (Urea)		288	461	461	461	461	461	461	461	461	461	461	
Manure (organic)		36	18	18	18	18	18	18	18	18	18	18	
Others		0	51	51	51	51	51	51	51	51	51	51	
Chemicals:													
Pesticides		99	246	246	246	246	246	246	246	246	246	246	
Herbicides		187	327	327	327	327	327	327	327	327	327	327	
Tools/equipment		768	768	0	0	0	768	0	0	0	768		
Irrigation		38	38	38	38	38	38	38	38	38	38	38	
Transportation		111	72	72	72	72	72	72	72	72	72	72	
Bags/equipment		35	23	23	23	23	23	23	23	23	23	23	
Sub-total operating costs		2,966	2,260	7,192	7,192	7,192	7,192	7,960	7,192	7,192	7,192	7,960	
											1,027		
Labour costs													
Skilled labour costs		0	0	0	0	0	0	0	0	0	0	0	
Unskilled labour costs													
Family labour costs		3,230	7,055	7,055	7,055	7,055	7,055	7,055	7,055	7,055	7,055	7,055	
Sub-total labour costs		3,230	7,055	7,055	7,055	7,055	7,055	7,055	7,055	7,055	7,055	7,055	
Total production costs		6,196	15,015	14,247	14,247	14,247	14,247	15,015	14,247	14,247	14,247	15,015	
Net Benefits (after labour costs)		8,971	11,760	12,528	12,528	12,528	12,528	11,760	12,528	12,528	12,528	11,760	
Net Incremental Benefits (NIB)			2,789	3,557	3,557	3,557	3,557	2,789	3,557	3,557	3,557	2,789	
Net Benefits (before labour costs)*		11,961	18,815	19,583	19,583	19,583	19,583	18,815	19,583	19,583	19,583	18,815	

\*Farm liquidity= Net benefits from sales plus family labour

farm liquidity= net benefits from sales plus family labour	
<b>Return to family labour*</b>	<b>226.68</b>
*consider full development year family labour requirements	
<b>Discount rate</b>	<b>7%</b>
<b>NPV (CNY) @ 0.07</b>	<b>23,363</b>
<b>IRR</b>	<b>#NUM!</b>
<b>NPVb</b>	<b>81,531</b>
<b>NPVc</b>	<b>58,168</b>
<b>B/C ratio</b>	<b>1.40</b>
<b>Switching values Benefits</b>	<b>-29%</b>
<b>Switching values Costs</b>	<b>40%</b>

Table A 3: Medicinal herbs (3 mu)

FIELDS AND INPUTS				WITHOUT P										WITH PROJECT									
ITEMS	UNIT	PRICE (CNY)		0	1	2	3	4	5	6	7	8	9	10-15									
Main production																							
Codonopsis Pinosula (dangsheng)	kg	25			480	720	960	1,200	1,200	1,200	1,200	1,200	1,200	1,200									
Geutiana	kg	55			180	270	360	450	450	450	450	450	450	450									
Coptis	kg	35			300	450	600	750	750	750	750	750	750	750									
By-product	kg																						
Post harvest losses	%				15%	15%	15%	15%	15%	15%	15%	15%	15%	15%									
Investment inputs																							
Drip irrigation system	per mu	1,500			3																		
Pump	no.	1,280			1																		
Wire, tube	roll	640			30																		
Accessories	set	640			3																		
Seedling	no.	11			765																		
Plastic cover	per mu	100			3																		
Operating inputs																							
Seedling	no.	11			0	765	765	765	765	765	765	765	765	765									
Fertilizer:																							
Compound fertilizer	kg	3			237	237	237	237	237	237	237	237	237	237									
Manure	bag	26			195	195	195	195	195	195	195	195	195	195									
Chemical fertilizers	lt	30			36	36	36	36	36	36	36	36	36	36									
Urea	kg	4			750	750	750	750	750	750	750	750	750	750									
SA	kg	2			240	240	240	180	180	180	180	180	180	180									
Lan (P205)	kg	2			360	600	600	600	600	600	600	600	600	600									
Ka li (KCl)	kg	4			360	360	360	420	420	420	420	420	420	420									
Tools/equipment maintenance:																							
Machine	npsum per r	576			3	3	3	3	3	3	3	3	3	3									
Pump	npsum per r	576			3	3	3	3	3	3	3	3	3	3									
Wire, tube	npsum per r	296			3	3	3	3	3	3	3	3	3	3									
Accessories	npsum per r	480			3	3	3	3	3	3	3	3	3	3									
Diesel for irrigation	lt	9			136	136	136	136	136	136	136	136	136	136									
Transportation	ton	4			1.0	1.4	1.9	2.4	2.4	2.4	2.4	2.4	2.4	2.4									
Bags (50 kg)	no.	1			19	29	38	48	48	48	48	48	48	48									
Labour																							
Land preparation / Planting	pers. day	S/F			35																		
Operations	pers. day	S/F			35	35	35	35	35	35	35	35	35	35									
Harvesting	pers. day	S/F			35	35	35	35	35	35	35	35	35	35									
Post harvesting	pers. day	S/F			4	4	4	4	4	4	4	4	4	4									
Sub-total labour				0	109	74	74	74	74	74	74	74	74	74									
Skilled (paid) labour (S)	pers. day	170		0	0	0	0	0	0	0	0	0	0	0									
Family labour (F)	pers. day	85		0	109	74	74	74	74	74	74	74	74	74									

FINANCIAL BUDGET				WITHOUT P										WITH PROJECT									
ITEMS				1	1	2	3	4	5	6	7	8	9	10-15									
Main production revenue																							
Codonopsis Pinosula (dangsheng)			0		12,000	18,000	24,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000									
Geutiana			0		9,900	14,850	19,800	24,750	24,750	24,750	24,750	24,750	24,750	24,750									
Coptis			0		10,500	15,750	21,000	26,250	26,250	26,250	26,250	26,250	26,250	26,250									
Sales			0		32,400	48,600	64,800	81,000	81,000	81,000	81,000	81,000	81,000	81,000									
Selfconsumption			0		0	0	0	0	0	0	0	0	0	0									
By-product			0		0	0	0	0	0	0	0	0	0	0									
Post harvest losses			0		1,800	2,700	3,600	4,500	4,500	4,500	4,500	4,500	4,500	4,500									
Total revenue			0		30,600	45,900	61,200	76,500	76,500	76,500	76,500	76,500	76,500	76,500									
Investment input costs																							
Drip irrigation system			0		4,500	0	0	0	0	0	0	0	0	0									
Pump			0		1,280	0	0	0	0	0	0	0	0	0									
Wire, tube			0		19,200	0	0	0	0	0	0	0	0	0									
Accessories			0		1,920	0	0	0	0	0	0	0	0	0									
Seedling			0		8,415	0	0	0	0	0	0	0	0	0									
Plastic cover			0		300	0	0	0	0	0	0	0	0	0									
Sub-total investment costs			0		35,615	0	0	0	0	0	0	0	0	0									
Operating input costs																							
Seedling			0		0	8,415	8,415	8,415	8,415	8,415	8,415	8,415	8,415	8,415									
Fertilizer:																							
Compound fertilizer			0		711	711	711	711	711	711	711	711	711	711									
Manure			0		4,992	4,992	4,992	4,992	4,992	4,992	4,992	4,992	4,992	4,992									
Chemical fertilizers			0		1,080	1,080	1,080	1,080	1,080	1,080	1,080	1,080	1,080	1,080									
Urea			0		3,072	3,072	3,072	3,072	3,072	3,072	3,072	3,072	3,072	3,072									
SA			0		599	599	599	449	449	449	449	449	449	449									
Lan (P205)			0		691	1,152	1,152	1,152	1,152	1,152	1,152	1,152	1,152	1,152									
Ka li (KCl)			0		1,567	1,567	1,567	1,828	1,828	1,828	1,828	1,828	1,828	1,828									
Tools/equipment maintenance:																							
Machine			0		1,728	1,728	1,728	1,728	1,728	1,728	1,728	1,728	1,728	1,728									
Pump			0		1,728	1,728	1,728	1,728	1,728	1,728	1,728	1,728	1,728	1,728									
Wire, tube			0		887	887	887	887	887	887	887	887	887	887									
Accessories			0		1,440	1,440	1,440	1,440	1,440	1,440	1,440	1,440	1,440	1,440									
Diesel for irrigation			0		1,219	1,219	1,219	1,219	1,219	1,219	1,219	1,219	1,219	1,219									
Transportation			0		4	6	9	11	11	11	11	11	11	11									
Bags (50 kg)			0		25	37	49	61	61	61	61	61	61	61									
Sub-total operating costs			0		19,742	28,633	28,647	28,773	28,773	28,773	28,773	28,773	28,773	28,773									
Labour costs																							
Skilled (paid) labour costs			0		0	0	0	0	0	0	0	0	0	0									
Family labour costs			0		9,265	6,290	6,290	6,290	6,290	6,290	6,290	6,290	6,290	6,290									
Sub-total labour costs			0		9,265	6,290	6,290	6,290	6,290	6,290	6,290	6,290	6,290	6,290									
Total production costs			0		64,622	34,923	34,937	35,063	35,063	35,063	35,063	35,063	35,063	35,063									
Income (after labour costs)				8,971	-34,022	10,977	26,263	41,437	41,437	41,437	41,437	41,437	41,437	41,437									
Incremental net income					-42,993	2,007	17,292	32,466	32,466	32,466	32,466	32,466	32,466	32,466									
Income (before labour costs)				0	-24,757	17,267	32,553	47,727	47,727	47,727	47,727	47,727	47,727	47,727									

Return to family labour*	644.96
*consider full development year family labour requirements	
Discount rate	7%
NPV (CNY) @ 0.07	186,187
IRR	45%
NPVb	532,938
NPVc	346,751
B/C ratio	1.54
Switching values Benefits	-35%
Switching values Costs	54%

Table A 4: Pepper production (3 mu)

YIELDS AND INPUTS			WITHOUT P										
ITEMS	UNIT	PRICE (CNY)	WITH PROJECT										
			-	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10-15
Main production													
Pepper	kg	65.0	-	-	-	-	456.0	532.0	608.0	760.0	760.0	760.0	760.0
By-product	kg												
Post harvest losses	%			0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Investment inputs													
Machine	no.	7,680.0		0.2									
Pump	no.	1,280.0		0.2									
Wire, tube	roll	640.0		2.0									
Accessories	set	640.0		2.0									
Seedling	no.	22.4		480.0									
Pillars	no.	44.8		240.0									
Soil treatment	lumpsum	2,304.0		0.2									
Operating inputs													
Fertilizer:													
Powdered lime	kg	1.9		100.0									
Manure	bag	25.6		60.0	60.0	60.0							
Phosphate	kg	2.6		100.0									
Microbial organic fertilizer	kg	1.9		720.0	1,200.0	1,200.0	1,200.0	1,200.0	1,200.0	1,200.0	1,200.0	1,200.0	1,200.0
Urea	kg	4.1		72.0	72.0	72.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0
SA	kg	2.5		48.0	48.0	48.0	36.0	36.0	36.0	36.0	36.0	36.0	36.0
Lan (P205)	kg	1.9		72.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
Ka li (KCl)	kg	4.4		80.0	72.0	72.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0
Medication cures & nourishes fruit	barrel	192.0		6.0	5.0	5.0	15.8	15.8	15.8	15.8	15.8	15.8	15.8
Bagging	bag	1.9					14.0	14.0	14.0	14.0	14.0	14.0	14.0
Tools/equipment maintenance:													
Machine	lumpsum	576.0		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Pump	lumpsum	576.0		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Wire, tube	lumpsum	295.7		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Accessories	lumpsum	480.0		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Pillars	lumpsum	64.0		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Diesel for irrigation	lt	9.0		136.0	136.0	136.0	108.0	108.0	108.0	108.0	108.0	108.0	108.0
Transportation	ton-km	320.0					9.1	10.6	12.2	15.2	15.2	15.2	15.2
Bags (50 kg)	no.	1.3					9.1	10.6	12.2	15.2	15.2	15.2	15.2
Labour													
Land preparation / Planting	pers. day	S/F		86.2									
Operations	pers. day	S/F		32.0	46.0	46.0	13.8	13.8	13.8	13.8	13.8	13.8	13.8
Harvesting	pers. day	S/F					40.0	40.0	40.0	40.0	40.0	40.0	40.0
Post harvesting	pers. day	S/F					4.8	4.8	4.8	4.8	4.8	4.8	4.8
Sub-total labour			-	118.2	46.0	46.0	58.6	58.6	58.6	58.6	58.6	58.6	58.6
Skilled (paid) labour (S)	pers. day	170.0	-	65.0	13.8	25.3	32.2	32.2	32.2	32.2	32.2	32.2	32.2
Family labour (F)	pers. day	85.0	-	53.2	32.2	20.7	26.4	26.4	26.4	26.4	26.4	26.4	26.4

FINANCIAL BUDGET		WITHOUT P		WITH PROJECT									
ITEMS		1.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10-15	
Main production revenue													
Pepper		-	-	-	-	29,640.0	34,580.0	39,520.0	49,400.0	49,400.0	49,400.0	49,400.0	
Sales		-	-	-	-	29,640.0	34,580.0	39,520.0	49,400.0	49,400.0	49,400.0	49,400.0	
Selfconsumption		-	-	-	-	-	-	-	-	-	-	-	
By-product		-	-	-	-	-	-	-	-	-	-	-	
Post harvest losses		-	-	-	-	4,446.0	5,187.0	5,928.0	7,410.0	7,410.0	7,410.0	7,410.0	
Total revenue		-	-	-	-	25,194.0	29,393.0	33,592.0	41,990.0	41,990.0	41,990.0	41,990.0	
Investment input costs													
Machine		-	1,536.0	-	-	-	-	-	-	-	-	-	
Pump		-	256.0	-	-	-	-	-	-	-	-	-	
Wire, tube		-	1,280.0	-	-	-	-	-	-	-	-	-	
Accessories		-	1,280.0	-	-	-	-	-	-	-	-	-	
Seedling		-	10,752.0	-	-	-	-	-	-	-	-	-	
Pillars		-	10,752.0	-	-	-	-	-	-	-	-	-	
Soil treatment		-	460.8	-	-	-	-	-	-	-	-	-	
Sub-total investment costs		-	26,316.8	-	-	-	-	-	-	-	-	-	
Operating input costs													
Fertilizer:													
Powdered lime		-	192.0	-	-	-	-	-	-	-	-	-	
Manure		-	1,536.0	1,536.0	1,536.0	-	-	-	-	-	-	-	
Phosphate		-	256.0	-	-	-	-	-	-	-	-	-	
Microbial organic fertilizer		-	1,382.4	2,304.0	2,304.0	2,304.0	2,304.0	2,304.0	2,304.0	2,304.0	2,304.0	2,304.0	
Urea		-	294.9	294.9	294.9	393.2	393.2	393.2	393.2	393.2	393.2	393.2	
SA		-	119.8	119.8	119.8	89.9	89.9	89.9	89.9	89.9	89.9	89.9	
Lan (P205)		-	138.2	230.4	230.4	230.4	230.4	230.4	230.4	230.4	230.4	230.4	
Ka li (KCl)		-	348.2	313.3	313.3	365.6	365.6	365.6	365.6	365.6	365.6	365.6	
Medication cures & nourishes fruits		-	1,152.0	960.0	960.0	3,033.6	3,033.6	3,033.6	3,033.6	3,033.6	3,033.6	3,033.6	
Bagging		-	-	-	-	26.9	26.9	26.9	26.9	26.9	26.9	26.9	
Tools/equipment maintenance:													
Machine		-	115.2	115.2	115.2	115.2	115.2	115.2	115.2	115.2	115.2	115.2	
Pump		-	115.2	115.2	115.2	115.2	115.2	115.2	115.2	115.2	115.2	115.2	
Wire, tube		-	59.1	59.1	59.1	59.1	59.1	59.1	59.1	59.1	59.1	59.1	
Accessories		-	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	
Pillars		-	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	
Diesel for irrigation		-	1,218.6	1,218.6	1,218.6	967.7	967.7	967.7	967.7	967.7	967.7	967.7	
Transportation		-	-	-	-	2,918.4	3,404.8	3,891.2	4,864.0	4,864.0	4,864.0	4,864.0	
Bags (50 kg)		-	-	-	-	11.7	13.6	15.6	19.5	19.5	19.5	19.5	
Sub-total operating costs		-	7,036.4	7,375.4	7,375.4	10,739.6	11,228.0	11,716.3	12,693.0	12,693.0	12,693.0	12,693.0	
Labour costs													
Skilled (paid) labour costs		-	11,051.7	2,346.0	4,301.0	5,479.1	5,479.1	5,479.1	5,479.1	5,479.1	5,479.1	5,479.1	
Family labour costs		-	4,521.2	2,737.0	1,759.5	2,241.5	2,241.5	2,241.5	2,241.5	2,241.5	2,241.5	2,241.5	
Sub-total labour costs		-	15,572.9	5,083.0	6,060.5	7,720.6	7,720.6	7,720.6	7,720.6	7,720.6	7,720.6	7,720.6	
Total production costs		-	48,926.1	12,458.4	13,435.9	18,460.2	18,948.5	19,436.9	20,413.5	20,413.5	20,413.5	20,413.5	
Income (after labour costs)		2,241.5	-48,926.1	-12,458.4	-13,435.9	6,733.8	10,444.5	14,155.1	21,576.5	21,576.5	21,576.5	21,576.5	
Incremental net income			-51,167.5	-14,699.8	-15,677.3	4,492.4	8,203.0	11,913.7	19,335.0	19,335.0	19,335.0	19,335.0	
Income (before labour costs)		-	-44,404.9	-9,721.4	-11,676.4	8,975.3	12,685.9	16,396.6	23,817.9	23,817.9	23,817.9	23,817.9	

Return to family labour\* 279.8

\*consider full development year family labour requirements

Discount rate 7%

NPV (CNY) @ 0.07 27,698.1

IRR 11%

NPVb 244,855.3

NPVc 196,742.2

B/C ratio 1.24

Switching values Benefits -20%

Switching values Costs 24%

Table A 5: Pig breeding and fattening

Production parameters					Without project		With project							
Items	Unit	Price	1	1	2	3	4	5	6	7	8	9	10	
Production parameters														
Farrowings a year	no.		1	1	1	1	1	1	1	1	1	1	1	
Farrowing percentage	%		94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	
Age at first farrowing	month		12											
Farrowing interval	months		3	3	3	3	3	3	3	3	3	3	3	
Number of piglets per sow per farrowing	month		10	10	10	10	10	10	10	10	10	10	10	
Mortality piglets	%		20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	
Mortality adults	%		10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	
Body weight of animals	kg		20	30	30	30	30	30	30	30	30	30	30	
Culling rate	%		16%	16%	16%	16%	16%	16%	16%	16%	16%	16%	16%	
Sex ratio (% of sows)	ratio		0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	
Off-take rate piglets	%		70%	97%	97%	97%	97%	97%	97%	97%	97%	97%	97%	
Off-take rate female	%		70%	65%	65%	64%	64%	64%	64%	64%	64%	64%	64%	
Off-take rate male	%		70%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	
Manure production per day per pig	kg		3	3	3	3	3	3	3	3	3	3	3	
Stock growth model														
F7-8yrs			0	0	0	0	0	0	0	0	0	0	0	
F6-7yrs			0	0	0	0	0	0	0	0	0	0	0	
F5-6yrs			0	0	0	0	0	0	0	0	0	0	0	
F4-5yrs			0	0	0	1	0	0	0	0	0	0	0	
F 3-4yrs			0	0	3	0	1	1	1	1	1	1	1	
F 2-3yrs				10	2	3	3	3	3	3	3	3	3	
F 1-2yrs				6	11	11	11	11	12	12	12	12	12	
Piglets 0-1yr				150	150	143	142	145	144	146	147	148	149	
M1-2yrs			0	0	0	0	0	0	0	0	0	0	0	
M2-3yrs			0	0	0	0	0	0	0	0	0	0	0	
M3-4yrs			0	0	0	0	0	0	0	0	0	0	0	
M4-5yrs			0	0	0	0	0	0	0	0	0	0	0	
M5-6yrs			0	0	0	0	0	0	0	0	0	0	0	
M6-7yrs			0	0	0	0	0	0	0	0	0	0	0	
M7-8yrs			0	0	0	0	0	0	0	0	0	0	0	
Female in stock			0	16	15	15	15	15	16	16	16	16	16	
Male in stock			0	0	0	0	0	0	0	0	0	0	0	
Total stock			0	166	166	158	157	160	160	162	162	164	165	
Yields and inputs														
Items	Unit	Price	1	1	2	3	4	5	6	7	8	9	10	
Main production output (yields)														
Piglets	head	3,000	0	146	146	139	138	140	140	142	142	144	144	
Adults female	head													
Sales	head		0	136	131	124	123	125	125	127	127	129	129	
Selfconsumption	head		0	10	15	15	15	15	15	15	15	15	15	
Manure	kg		0	181,770	181,387	173,495	172,201	175,240	175,058	177,293	177,710	179,523	180,304	
Culled sow	head		0	3	2	2	2	2	2	2	3	3	3	
Investment inputs														
Female initial stock	head	6,500		16										
Shed	no	332,000		1										
Operating inputs														
Shed maintenance	Lumpsum	16,600			1	1	1	1	1	1	1	1	1	
Feed	kg	10	0	18,675	18,636	17,825	17,692	18,004	17,985	18,215	18,258	18,444	18,524	
Artificial insemination	per female	50	0	16	15	15	15	15	16	16	16	16	16	
Vaccinations	per head	250	0	166	166	158	157	160	160	162	162	164	165	
Water, electricity	lumpsum													
Equipment and tools	per animal	320	0	166	166	158	157	160	160	162	162	164	165	
	lump sum	930												
Labour														
Skilled (paid) labour (S)	pers. day			140	140	140	140	140	140	140	140	140	140	
Family labour (F)	pers. day	85												
Financial budget					Without project		With project							
Items			1	1	2	3	4	5	6	7	8	9	10	
Main production revenue														
Piglets			0	436,500	437,664	417,149	412,840	421,034	419,925	425,798	426,413	431,055	432,713	
Sales			0	0	0	0	0	0	0	0	0	0	0	
Selfconsumption			0	0	0	0	0	0	0	0	0	0	0	
Manure			0	0	0	0	0	0	0	0	0	0	0	
Culled sow			0	0	0	0	0	0	0	0	0	0	0	
Total revenue			0	436,500	437,664	417,149	412,840	421,034	419,925	425,798	426,413	431,055	432,713	
Investment costs														
Female initial stock			0	104,000	0	0	0	0	0	0	0	0	0	
Shed			0	332,000	0	0	0	0	0	0	0	0	0	
Sub-total investment costs			0	436,000	0	0	0	0	0	0	0	0	0	
Operating cost														
Shed maintenance			0	0	16,600	16,600	16,600	16,600	16,600	16,600	16,600	16,600	16,600	
Feed			0	186,750	186,356	178,248	176,919	180,041	179,854	182,150	182,579	184,441	185,244	
Artificial insemination			0	800	763	755	770	768	778	779	788	791	798	
Vaccinations			0	41,500	41,413	39,611	39,315	40,009	39,968	40,478	40,573	40,987	41,165	
Water, electricity			0	53,120	53,008	50,702	50,324	51,212	51,158	51,812	51,933	52,463	52,692	
Equipment and tools			0	930	930	930	930	930	930	930	930	930	930	
Sub-total operating inputs costs			0	283,100	299,069	286,845	284,858	289,560	289,288	292,749	293,403	296,213	297,428	
Labour														
Skilled (paid) labour costs			0	0	0	0	0	0	0	0	0	0	0	
Family labour costs			0	11,900	11,900	11,900	11,900	11,900	11,900	11,900	11,900	11,900	11,900	
Sub-total labour costs			0	11,900	11,900	11,900	11,900	11,900	11,900	11,900	11,900	11,900	11,900	
Total production costs			0	731,000	310,969	298,745	296,758	301,460	301,188	304,649	305,303	308,113	309,328	
Income (after labour costs)			11,900	-294,500	126,695	118,404	116,082	119,574	118,736	121,149	121,110	122,943	123,385	
Incremental net income				-306,400	114,795	106,504	104,182	107,674	106,836	109,249	109,210	111,043	111,485	
Income (before labour costs)														
			11,900	-282,600	138,595	130,304	127,982	131,474	130,636	133,049	133,010	134,843	135,285	

<b>Return to family labour*</b>	<b>933.12</b>
*consider full development year family labour requirements	
<b>Discount rate</b>	<b>7%</b>
<b>NPV @ 0.07</b>	<b>376,959</b>
<b>IRR</b>	<b>33%</b>
<b>NPVb</b>	<b>2,993,470</b>
<b>NPVc</b>	<b>2,532,930</b>
<b>B/C ratio</b>	<b>1.18</b>
<b>Switching values Benefits</b>	<b>-15%</b>
<b>Switching values Costs</b>	<b>18%</b>

Table A 6: Tea production (highlands) - 3mu

YIELDS AND INPUTS			WITHOUT PROJECT	WITH PROJECT									
ITEMS	UNIT	PRICE (CNY)	1	1	2	3	4	5	6	7	8	9	10-20
<b>Main production</b>													
Tea WoP variety	kg	7	1,200	-	-	-	-	-	-	-	-	-	-
Tea WP variety	kg	9	-	-	-	-	1,126	1,408	1,760	2,200	2,200	2,200	2,200
By-product	kg	-	-	-	-	-	-	-	-	-	-	-	-
Post harvest losses	%	-	-	-	-	-	-	-	-	-	-	-	-
<b>Investment inputs</b>													
Infrastructure	lumpsum	1,280	-	0	-	-	-	-	-	-	-	-	-
Equipment	lumpsum	128	-	2	-	-	-	-	-	-	-	-	-
Improved seedlings	kg	1	-	3,000	-	-	-	-	-	-	-	-	-
Shade trees/windbreaks	kg	3	-	100	-	-	-	-	-	-	-	-	-
<b>Operating inputs</b>													
Seedlings for replantation	no.	1	-	-	300	-	-	-	-	-	-	-	-
<b>Fertilizer:</b>													
Basal fertilizer (NPK, DAP, CAN)	kg	3	100	144	83	80	94	94	94	94	94	94	94
Top dress fertilizer (Urea)	kg	5	24	20	34	42	42	42	42	42	42	42	42
Manure (organic)	kg	3	80	400	-	200	-	200	-	200	-	200	-
Foliar fertilizer	kg	4	-	-	-	160	100	100	100	100	100	100	100
<b>Chemicals:</b>													
Herbicide	kg	224	1	1	1	1	1	1	1	1	1	1	1
Tools/equipment	lumpsum	96	0	0	0	0	0	0	0	0	0	0	0
Transportation	ton-km	320	1	-	-	-	1	1	2	2	2	2	2
Bags	no.	32	24	-	-	-	23	28	35	44	44	44	44
O&M expenses	lumpsum	128	-	-	0	0	0	0	0	0	0	0	0
<b>Labour</b>													
Planting	pers. day	S/F	-	10	-	-	-	-	-	-	-	-	-
Operations	pers. day	S/F	24	24	28	32	36	36	36	36	36	36	36
Harvesting	pers. day	S/F	18	-	-	-	24	24	24	24	24	24	24
Sub-total labour			42	34	28	32	60	60	60	60	60	60	60
Skilled (paid) labour (S)	pers. day	170	22	14	14	14	40	40	40	40	40	40	40
Family labour (F)	pers. day	85	20	20	14	18	20	20	20	20	20	20	20

FINANCIAL BUDGET			WITHOUT PROJECT	WITH PROJECT									
ITEMS			1	1	2	3	4	5	6	7	8	9	10-20
<b>Main production revenue</b>													
Tea WOP variety			8,400	-	-	-	10,138	12,672	15,840	19,800	19,800	19,800	19,800
Tea WP variety			-	-	-	-	-	-	-	-	-	-	-
<i>Sales</i>			8,400	-	-	-	10,138	12,672	15,840	19,800	19,800	19,800	19,800
<i>Selfconsumption</i>			-	-	-	-	-	-	-	-	-	-	-
By-product			-	-	-	-	-	-	-	-	-	-	-
Post harvest losses			-	-	-	-	-	-	-	-	-	-	-
<b>Total revenue</b>			8,400	-	-	-	10,138	12,672	15,840	19,800	19,800	19,800	19,800
<b>Investment input costs</b>													
Infrastructure			-	256	-	-	-	-	-	-	-	-	-
Equipment			-	256	-	-	-	-	-	-	-	-	-
Improved seeds			-	1,920	-	-	-	-	-	-	-	-	-
Shade trees/windbreaks			-	320	-	-	-	-	-	-	-	-	-
<b>Sub-total investment costs</b>			-	2,752	-	-	-	-	-	-	-	-	-
<b>Operating input costs</b>													
Seeds/rooted cuttings			-	-	192	-	-	-	-	-	-	-	-
<b>Fertilizer:</b>													
NPK			320	461	266	256	300	300	300	300	300	300	300
Urea			131	109	185	228	228	228	228	228	228	228	228
Manure (organic)			256	1,280	-	640	-	640	-	640	-	640	-
Foliar fertilizer			-	-	-	614	384	384	384	384	384	384	384
<b>Chemicals:</b>													
Herbicide			224	224	134	134	224	224	224	224	224	224	224
Tools/equipment			19	19	19	19	19	19	19	19	19	19	19
Transportation			384	-	-	-	360	451	563	704	704	704	704
Bags			768	-	-	-	721	901	1,126	1,408	1,408	1,408	1,408
O&M expenses			-	-	6	6	6	6	6	6	6	6	6
<b>Sub-total operating costs</b>			2,102	2,093	803	1,899	2,243	3,153	2,851	3,914	3,274	3,914	3,274
<b>Labour costs</b>													
Skilled (paid) labour costs			3,740	2,380	2,380	2,380	6,800	6,800	6,800	6,800	6,800	6,800	6,800
Family labour costs			1,700	1,700	1,190	1,530	1,700	1,700	1,700	1,700	1,700	1,700	1,700
<b>Sub-total labour costs</b>			5,440	4,080	3,570	3,910	8,500	8,500	8,500	8,500	8,500	8,500	8,500
<b>Total production costs</b>			7,542	8,925	4,373	5,809	10,743	11,653	11,351	12,414	11,774	12,414	11,774
<b>Income (after labour costs)</b>			858	-8,925	-4,373	-5,809	-605	1,019	4,489	7,386	8,026	7,386	8,026
<b>Incremental net income</b>				-9,783	-5,231	-6,667	-1,464	160	3,631	6,528	7,168	6,528	7,168
<b>Income (before labour costs)</b>			2,558	-7,225	-3,183	-4,279	1,095	2,719	6,189	9,086	9,726	9,086	9,726

Discounted return to labour* (CNY/day)	283
*consider full development year family labour requirements	
Discount rate (%)	7%
NPV (CNY) @ 0.07	12,636
IRR (%)	14%
NPVb (CNY)	36,776
NPVc (CNY)	24,141
B/C ratio	1.52
Switching values Benefits (%)	-34%
Switching values Costs (%)	52%



Table A 7: Tea production (lowlands) - 3 mu

YIELDS AND INPUTS		WITHOUT PROJECT		WITH PROJECT									
ITEMS	UNIT	PRICE (CNY)	1	1	2	3	4	5	6	7	8	9	10-15
<b>Main production</b>													
Tea WOP variety	kg	7.00	1,400	-	-	-	-	-	-	-	-	-	-
Tea WP variety	kg	9.00	-	-	-	-	1,229	1,536	1,920	2,400	2,400	2,400	2,400
<b>Total Sales</b>	kg		1,400	-	-	-	1,229	1,536	1,920	2,400	2,400	2,400	2,400
<i>Selfconsumption</i>	kg		-	-	-	-	-	-	-	-	-	-	-
By-product	kg		-	-	-	-	-	-	-	-	-	-	-
Post harvest losses	%		-	-	-	-	-	-	-	-	-	-	-
<b>Investment inputs</b>													
Infrastructure	lumpsum	1,280.00	-	0	-	-	-	-	-	-	-	-	-
Equipment	lumpsum	128.00	-	2	-	-	-	-	-	-	-	-	-
Improved seedlings	kg	0.64	-	4,600	-	-	-	-	-	-	-	-	-
Shade trees/windbreaks	kg	3.20	-	40	-	-	-	-	-	-	-	-	-
<b>Operating inputs</b>													
Seedlings for replanting	kg	0.64	-	-	460	-	-	-	-	-	-	-	-
Shade trees for replanting	kg	3.20	-	-	4	-	-	-	-	-	-	-	-
<b>Fertilizer:</b>													
Basal fertilizer (NPK, DAP, CAN)	kg	3.20	120	40	60	80	94	94	94	94	94	94	94
Top dress fertilizer (Urea)	kg	5.44	40	40	34	25	30	30	30	30	30	30	30
Manure (organic)	kg	3.20	-	500	400	400	400	400	400	400	400	400	400
Phosphate/foliar fertilizer	kg	3.84	80	176	90	40	80	80	80	80	80	80	80
<b>Chemicals:</b>													
Herbicide	kg	224.00	1	1	1	0	1	1	1	1	1	1	1
Tools/equipment	no.	96.00	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Transportation	ton-km	320.00	1	-	-	-	1	2	2	2	2	2	2
Bags	no.	32.00	28	-	-	-	25	31	38	48	48	48	48
Operation & maintenance	lumpsum	128.00	-	-	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
<b>Labour</b>													
Planting	pers. day	S/F	-	16	-	-	-	-	-	-	-	-	-
Operations	pers. day	S/F	32	38	32	37	38	38	38	38	38	38	38
Harvesting	pers. day	S/F	18	-	-	-	20	20	20	20	20	20	20
<i>Sub-total labour</i>			50	54	32	37	58	58	58	58	58	58	58
Skilled (paid) labour (S)	pers. day	170.00	30	34	12	17	38	38	38	38	38	38	38
Family labour (F)	pers. day	85.00	20	20	20	20	20	20	20	20	20	20	20

FINANCIAL BUDGET		WITHOUT PROJECT		WITH PROJECT									
ITEMS			1	1	2	3	4	5	6	7	8	9	10-15
<b>Main production revenue</b>													
Tea WOP variety			9,800.00	-	-	-	11,059.20	13,824.00	17,280.00	21,600.00	21,600.00	21,600.00	21,600.00
Tea WP variety			-	-	-	-	-	-	-	-	-	-	-
<b>Total revenue</b>			9,800.00	-	-	-	11,059.20	13,824.00	17,280.00	21,600.00	21,600.00	21,600.00	21,600.00
<b>Investment input costs</b>													
Infrastructure			-	256.00	-	-	-	-	-	-	-	-	-
Equipment			-	256.00	-	-	-	-	-	-	-	-	-
Improved seeds			-	2,944.00	-	-	-	-	-	-	-	-	-
Shade trees/windbreaks			-	128.00	-	-	-	-	-	-	-	-	-
<b>Sub-total investment costs</b>			-	3,584.00	-	-	-	-	-	-	-	-	-
<b>Operating input costs</b>													
Seeds/rooted cuttings			-	-	294.40	-	-	-	-	-	-	-	-
Improved seeds (hybrid)			-	-	12.80	-	-	-	-	-	-	-	-
<b>Fertilizer:</b>													
NPK			384.00	128.00	192.00	256.00	299.52	299.52	299.52	299.52	299.52	299.52	299.52
Urea			217.60	217.60	184.96	136.00	163.20	163.20	163.20	163.20	163.20	163.20	163.20
Manure (organic)			-	1,600.00	1,280.00	1,280.00	1,280.00	1,280.00	1,280.00	1,280.00	1,280.00	1,280.00	1,280.00
Foliar fertilizer			307.20	675.84	345.60	153.60	307.20	307.20	307.20	307.20	307.20	307.20	307.20
<b>Chemicals:</b>													
Herbicide			224.00	224.00	134.40	67.20	179.20	179.20	179.20	179.20	179.20	179.20	179.20
Tools/equipment			19.20	19.20	19.20	19.20	19.20	19.20	19.20	19.20	19.20	19.20	19.20
Transportation			448.00	-	-	-	393.22	491.52	614.40	768.00	768.00	768.00	768.00
Bags			896.00	-	-	-	786.43	983.04	1,228.80	1,536.00	1,536.00	1,536.00	1,536.00
Operation & maintenance			-	-	6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.40
<b>Sub-total operating costs</b>			2,496.00	2,864.64	2,469.76	1,918.40	3,434.37	3,729.28	4,097.92	4,558.72	4,558.72	4,558.72	4,558.72
<b>Labour costs</b>													
Skilled (paid) labour costs			5,100.00	5,780.00	2,040.00	2,890.00	6,460.00	6,460.00	6,460.00	6,460.00	6,460.00	6,460.00	6,460.00
Family labour costs			1,700.00	1,700.00	1,700.00	1,700.00	1,700.00	1,700.00	1,700.00	1,700.00	1,700.00	1,700.00	1,700.00
<b>Sub-total labour costs</b>			6,800.00	7,480.00	3,740.00	4,590.00	8,160.00	8,160.00	8,160.00	8,160.00	8,160.00	8,160.00	8,160.00
<b>Total production costs</b>			9,296.00	13,928.64	6,209.76	6,508.40	11,594.37	11,889.28	12,257.92	12,718.72	12,718.72	12,718.72	12,718.72
<b>Income (after labour costs)</b>			504.00	13,928.64	6,209.76	6,508.40	535.17	1,934.72	5,022.08	8,881.28	8,881.28	8,881.28	8,881.28
<b>Incremental net income</b>			-	14,432.64	6,713.76	7,012.40	1,039.17	1,430.72	4,518.08	8,377.28	8,377.28	8,377.28	8,377.28

<b>Income (before labour costs)</b>			2,204.00	12,228.64	4,509.76	4,808.40	1,164.83	3,634.72	6,722.08	10,581.28	10,581.28	10,581.28	10,581.28
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Return to family labour\* (CNY/day) 529.06

\*consider full development year family labour requirements

Discount rate (%) 7%

NPV (CNY) @ 0.07 14,530.09

IRR (%) 13%

NPVb (CNY) 34,323.85

NPVc (CNY) 19,793.76

B/C ratio 1.73

Switching values Benefits (%) -42%

Switching values Costs (%) 73%

Table A 8: Tea processing model

YIELDS AND INPUTS			WITHOUT PROJECT	WITH PROJECT									
ITEMS	UNIT	PRICE (CNY)	1	1	2	3	4	5	6	7	8	9	10
Main production													
Tea A	kg	60	192,400	127,083	152,499	177,916	203,332	254,165	254,165	254,165	254,165	254,165	254,165
Tea B	kg	30	249,600	164,864	197,837	230,810	263,782	329,728	329,728	329,728	329,728	329,728	329,728
Tea C	kg	5	78,000	51,520	61,824	72,128	82,432	103,040	103,040	103,040	103,040	103,040	103,040
Post-processing losses	%		5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Investment inputs													
Factory (3000-4000 m2)	no.	1,120,000	0	1									
CTC production line	no.	1,760,000	0	1									
Other supporting machines	no.	120,000	0	1									
Operating inputs													
Tea A	kg	3	641,333	363,093	435,712	508,331	580,949	726,187	726,187	726,187	726,187	726,187	726,187
Tea B	kg	8	832,000	471,040	565,248	659,456	753,664	942,080	942,080	942,080	942,080	942,080	942,080
Tea C	kg	3	260,000	147,200	176,640	206,080	235,520	294,400	294,400	294,400	294,400	294,400	294,400
Electricity (1432KW / 1 ton of product)	Kwh	0.90	744,640	491,844	590,213	688,582	786,951	983,689	983,689	983,689	983,689	983,689	983,689
Coal (0.61 m3/1 ton of product)	ton	2,560	317	210	251	293	335	419	419	419	419	419	419
O&M building (3% of investment cost)	lumpsum	33,600	1		1	1	1	1	1	1	1	1	1
O&M machinery and equipment (5%)	lumpsum	94,000	1		1	1	1	1	1	1	1	1	1
Tea sacks (60 kg)	no.	18	8,667	5,724	6,869	8,014	9,159	11,449	11,449	11,449	11,449	11,449	11,449
Shipping to warehouses	ton	320	520	343	412	481	550	687	687	687	687	687	687
Labour													
Operations	pers. day	S/F	5,632	3,364	4,037	4,709	5,382	6,728	6,728	6,728	6,728	6,728	6,728
Managers	pers. day	S/F	78	600	600	600	600	600	600	600	600	600	600
Administrative staff, managers, etc	pers. day	S/F	390	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000
Sub-total labour			6,100	6,964	7,637	8,309	8,982	10,328	10,328	10,328	10,328	10,328	10,328
Skilled (paid) labour (S)	pers. day	170	5,632	3,364	4,037	4,709	5,382	6,728	6,728	6,728	6,728	6,728	6,728
Administrative staff, manaagers, etc	pers. day	448	468	3,600	3,600	3,600	3,600	3,600	3,600	3,600	3,600	3,600	3,600
FINANCIAL BUDGET			WITHOUT PROJECT	WITH PROJECT									
ITEMS			1	1	2	3	4	5	6	7	8	9	10
Main production revenue													
Tea A			11,544,000	7,624,960	9,149,952	10,674,944	12,199,936	15,249,920	15,249,920	15,249,920	15,249,920	15,249,920	15,249,920
Tea B			7,488,000	4,945,920	5,935,104	6,924,288	7,913,472	9,891,840	9,891,840	9,891,840	9,891,840	9,891,840	9,891,840
Tea C			390,000	257,600	309,120	360,640	412,160	515,200	515,200	515,200	515,200	515,200	515,200
Sales			19,422,000	12,828,480	15,394,176	17,959,872	20,525,568	25,656,960	25,656,960	25,656,960	25,656,960	25,656,960	25,656,960
Selfconsumption			0	0	0	0	0	0	0	0	0	0	0
Post-processing losses			577,200	381,248	457,498	533,747	609,997	762,496	762,496	762,496	762,496	762,496	762,496
Total revenue			18,844,800	12,447,232	14,936,678	17,426,125	19,915,571	24,894,464	24,894,464	24,894,464	24,894,464	24,894,464	24,894,464
Investment input costs													
Factory (3000-4000 m2)			0	1,120,000	0	0	0	0	0	0	0	0	0
CTC production line			0	1,760,000	0	0	0	0	0	0	0	0	0
Other supporting machines			0	120,000	0	0	0	0	0	0	0	0	0
Sub-total investment costs			0	3,000,000	0	0	0	0	0	0	0	0	0
Operating input costs													
Tea A			2,052,267	1,161,899	1,394,278	1,626,658	1,859,038	2,323,797	2,323,797	2,323,797	2,323,797	2,323,797	2,323,797
Tea B			6,389,760	3,617,587	4,341,105	5,064,622	5,788,140	7,235,174	7,235,174	7,235,174	7,235,174	7,235,174	7,235,174
Tea C			832,000	471,040	565,248	659,456	753,664	942,080	942,080	942,080	942,080	942,080	942,080
Electricity (1432KW / 1 ton of product)			667,197	440,692	528,831	616,969	705,108	881,385	881,385	881,385	881,385	881,385	881,385
Coal (0.61 m3/1 ton of product)			812,032	536,358	643,629	750,901	858,172	1,072,715	1,072,715	1,072,715	1,072,715	1,072,715	1,072,715
O&M building (3% of investment cost)			33,600	0	33,600	33,600	33,600	33,600	33,600	33,600	33,600	33,600	33,600
O&M machinery and equipment (5%)			94,000	0	94,000	94,000	94,000	94,000	94,000	94,000	94,000	94,000	94,000
Tea sacks (60 kg)			152,533	100,750	120,900	141,050	161,200	201,500	201,500	201,500	201,500	201,500	201,500
Shipping to warehouses			166,400	109,909	131,891	153,873	175,855	219,819	219,819	219,819	219,819	219,819	219,819
Sub-total operating costs			11,199,789	6,438,235	7,853,483	9,141,130	10,428,777	13,004,071	13,004,071	13,004,071	13,004,071	13,004,071	13,004,071
Labour costs													
Skilled (paid) labour costs			957,372	571,838	686,205	800,573	914,940	1,143,675	1,143,675	1,143,675	1,143,675	1,143,675	1,143,675
Family labour costs			209,664	1,612,800	1,612,800	1,612,800	1,612,800	1,612,800	1,612,800	1,612,800	1,612,800	1,612,800	1,612,800
Sub-total labour costs			1,167,036	2,184,638	2,299,005	2,413,373	2,527,740	2,756,475	2,756,475	2,756,475	2,756,475	2,756,475	2,756,475
Total production costs			12,366,825	11,622,873	10,152,488	11,554,502	12,956,517	15,760,546	15,760,546	15,760,546	15,760,546	15,760,546	15,760,546
Gross income (after labour costs)			6,477,975	824,359	4,784,191	5,871,623	6,959,055	9,133,918	9,133,918	9,133,918	9,133,918	9,133,918	9,133,918
Taxes (5%)			647,797	82,436	478,419	587,162	695,905	913,392	913,392	913,392	913,392	913,392	913,392
Insurance on labour (22%)			256,748	480,620	505,781	530,942	556,103	606,425	606,425	606,425	606,425	606,425	606,425
Net income (after labour costs)			5,573,429	261,303	3,799,991	4,753,518	5,707,046	7,614,102	7,614,102	7,614,102	7,614,102	7,614,102	7,614,102
Net Incremental income				-5,312,126	-1,773,438	-819,911	133,617	2,040,673	2,040,673	2,040,673	2,040,673	2,040,673	2,040,673
incremental costs													
Net income (before labour costs)			6,740,465	2,445,940	6,098,996	7,166,891	8,234,786	10,370,577	10,370,577	10,370,577	10,370,577	10,370,577	10,370,577

Return to family labour*	n/a
*consider full development year family labour requirements	
Discount rate	7%
NPV (CNY) @ 0.07	1,052,331
IRR	9%
NPVb	12,977,742
NPVc	9,498,228
B/C ratio	1.37
Switching values Benefits	-27%
Switching values Costs	37%

Table A 9: Orange production - 3 mu

YIELDS AND INPUTS			WITHOUT PROJECT										
ITEMS	UNIT	PRICE (CNY)	1	1	2	3	4	5	6	7	8	9	10-20
<b>Main production</b>													
Maize	kg	4	107	-	-	-	-	-	-	-	-	-	-
Certified oranges	kg	8	-	-	-	-	1,520	1,900	2,280	2,660	3,040	3,420	3,800
<b>Total Sales</b>	kg		107	-	-	-	1,520	1,900	2,280	2,660	3,040	3,420	3,800
<i>Selfconsumption</i>	kg												
By-product	kg												
Post harvest losses	%												
<b>Investment inputs</b>													
Certified seedling	tree	160	-	100	-	-	-	-	-	-	-	-	-
<b>Operating inputs</b>													
<b>Fertilizer:</b>													
Manure	kg	1	-	3,000	3,000	3,000	4,000	-	-	-	-	-	-
Urea	kg	5	-	20	20	20	50	50	50	50	50	50	50
Phosphat fertilizer	kg	2	-	90	90	90	150	150	150	150	150	150	150
Potassium fertilizer	kg	10	-	40	40	40	36	36	36	36	36	36	36
Organic fertilizer - foliar	kg	224	-	1	1	1	-	-	-	-	-	-	-
Lime powder	kg	1	-	300	300	300	300	300	300	300	300	300	300
NPK	kg	4	-	-	-	-	240	240	240	240	240	240	240
Fish meal	kg	3	-	-	-	-	200	200	200	200	200	200	200
Kali chloride	kg	10	-	-	-	-	60	60	60	60	60	60	60
Ketomium	kg	224	-	-	-	-	4	4	4	4	4	4	4
AT micro-leaf fertilizers)	kg	96	-	-	-	-	4	4	4	4	4	4	4
AT disease and Insect-limited	kg	192	-	-	-	-	2	2	2	2	2	2	2
<b>Chemicals:</b>													
Pesticide	kg	77	-	2	2	3	3	3	3	3	3	3	3
Tools/equipment	no.	2,560	-	0	-	-	-	0	-	-	-	0	-
Transportation	ton	320	-	-	-	-	2	2	2	3	3	3	4
Boxes/crates	no.	3	-	-	-	-	20	20	20	20	20	20	20
<b>Labour</b>													
Planting	pers. day	S/F	-	9	-	-	-	-	-	-	-	-	-
Operations	pers. day	S/F	-	23	22	26	34	34	34	34	34	34	34
Harvesting	pers. day	S/F	-	-	-	-	4	5	7	8	9	10	11
Post harvest management	pers. day	S/F	-	-	-	-	-	-	-	-	-	-	-
<i>Sub-total labour</i>			-	32	22	26	38	39	41	42	43	44	45
Skilled (paid) labour (S)	pers. day	170	-	13	9	10	15	16	16	17	17	18	18
Family labour (F)	pers. day	85	-	19	13	16	23	24	24	25	26	26	27

FINANCIAL BUDGET			WITHOUT PROJECT										
ITEMS			1	1	2	3	4	5	6	7	8	9	10-20
<b>Main production revenue</b>													
Maize			428	-	-	-	-	-	-	-	-	-	-
Certified oranges			-	-	-	-	12,160	15,200	18,240	21,280	24,320	27,360	30,400
<b>Sales</b>			428	-	-	-	12,160	15,200	18,240	21,280	24,320	27,360	30,400
<i>Selfconsumption</i>			-	-	-	-	-	-	-	-	-	-	-
By-product			-	-	-	-	-	-	-	-	-	-	-
Post harvest losses			-	-	-	-	-	-	-	-	-	-	-
<b>Total revenue</b>			428	-	-	-	12,160	15,200	18,240	21,280	24,320	27,360	30,400
<b>Incremental revenues</b>													
<b>Investment input costs</b>													
Certified seedling			-	16,000	-	-	-	-	-	-	-	-	-
<b>Sub-total investment costs</b>			-	16,000	-	-	-	-	-	-	-	-	-
<b>Operating input costs</b>													
<b>Fertilizer:</b>													
Manure			-	1,920	1,920	1,920	2,560	-	-	-	-	-	-
Urea			-	109	109	109	272	272	272	272	272	272	272
Phosphat fertilizer			-	202	202	202	336	336	336	336	336	336	336
Potassium fertilizer			-	384	384	384	346	346	346	346	346	346	346
Organic fertilizer - foliar			-	224	224	224	-	-	-	-	-	-	-
Lime powder			-	288	288	288	288	288	288	288	288	288	288
NPK			-	-	-	-	845	845	845	845	845	845	845
Fish meal			-	-	-	-	640	640	640	640	640	640	640
Kali chloride			-	-	-	-	576	576	576	576	576	576	576
Ketomium			-	-	-	-	896	896	896	896	896	896	896
AT micro-leaf fertilizers)			-	-	-	-	384	384	384	384	384	384	384
AT disease and Insect-limited			-	-	-	-	384	384	384	384	384	384	384
<b>Chemicals:</b>													
Pesticide			-	138	138	215	215	215	215	215	215	215	215
Tools/equipment			-	512	-	-	-	512	-	-	-	512	-
Transportation			-	-	-	-	486	608	730	851	973	1,094	1,216
Boxes/crates			-	-	-	-	64	64	64	64	64	64	64
<b>Sub-total operating costs</b>			-	3,777	3,265	3,341	8,292	6,365	5,975	6,097	6,218	6,852	6,461
<b>Labour costs</b>													
Skilled (paid) labour costs			-	2,162	1,496	1,768	2,607	2,681	2,755	2,829	2,903	2,976	3,050
Family labour costs			-	1,622	1,122	1,326	1,955	2,011	2,066	2,122	2,177	2,232	2,288
<b>Sub-total labour costs</b>			-	3,784	2,618	3,094	4,563	4,692	4,821	4,950	5,080	5,209	5,338
<b>Total production costs</b>			-	23,561	5,883	6,435	12,855	11,057	10,796	11,047	11,298	12,061	11,799
<b>Income (after labour costs)</b>			428	-23,561	-5,883	-6,435	-695	4,143	7,444	10,233	13,022	15,299	18,601
<b>Incremental net income</b>				-23,989	-6,311	-6,863	-1,123	3,715	7,016	9,805	12,594	14,871	18,173
<b>Incremental costs</b>													
<b>Income (before labour costs)</b>			428	-21,939	-4,761	-5,109	1,261	6,153	9,510	12,355	15,199	17,532	20,888

Return to family labour\* 391.22

\*consider full development year family labour requirements

Discount rate 7%

NPV (CNY) @ 0.07 68,580

IRR 19%

NPVb 194,018

NPVc 125,438

B/C ratio 1.55

Switching values Benefits -35%

Switching values Costs 55%

Table A 10: Orange processing

YIELDS AND INPUTS			WITHOUT PROJECT	WITH PROJECT									
ITEMS	UNIT	PRICE (CNY)	1	1	2	3	4	5	6	7	8	9	10-15
<b>Technical parameters</b>													
Processing capacity (of which)	kg/year												
Uncertified oranges	kg/year												
Certified oranges	kg/year		0	589,760	737,200	884,640	1,032,080	1,179,520	1,326,960	1,474,400	1,474,400	1,474,400	1,474,400
<b>Input to output ratio</b>													
Uncertified oranges	%		95%	9%	9%	9%	9%	9%	9%	9%	9%	9%	9%
Certified oranges	%		91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%
<b>Orange production shares</b>													
Uncertified oranges	%		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Certified oranges	%		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
<b>Main production</b>													
Uncertified oranges	kg	8	0	53,078	66,348	79,618	92,887	106,157	119,426	132,696	132,696	132,696	132,696
Certified oranges	kg	12	0	536,682	670,852	805,022	939,193	1,073,363	1,207,534	1,341,704	1,341,704	1,341,704	1,341,704
<b>Total Sales</b>	kg		0	589,760	737,200	884,640	1,032,080	1,179,520	1,326,960	1,474,400	1,474,400	1,474,400	1,474,400
<b>Selfconsumption</b>	kg												
Processing losses	%		10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%
<b>Investment inputs</b>													
Warehouse	no.	1,142,857	0	1									
Processing machine	no.	571,429	0	1									
Weighing machine	no.	428,571	0	1									
Packing machine	no.	257,143	0	1									
<b>Operating inputs</b>													
Uncertified oranges	kg	6	0	53,078	66,348	79,618	92,887	106,157	119,426	132,696	132,696	132,696	132,696
Certified oranges	kg	8	0	536,682	670,852	805,022	939,193	1,073,363	1,207,534	1,341,704	1,341,704	1,341,704	1,341,704
Electricity (58.6KW / 1 ton SP)	Kwh	1	0	34,560	43,200	51,840	60,480	69,120	77,760	86,400	86,400	86,400	86,400
Maintenance hygiene	CNY/ton	320		590	737	885	1,032	1,180	1,327	1,474	1,474	1,474	1,474
O&M building (5% of investment cost)	lumpsum	57,143			1	1	1	1	1	1	1	1	1
O&M machinery and equipment	lumpsum	62,857			1	1	1	1	1	1	1	1	1
Packaging	kg	0.4		589,760	737,200	884,640	1,032,080	1,179,520	1,326,960	1,474,400	1,474,400	1,474,400	1,474,400
Transportation	ton	320.0		590	737	885	1,032	1,180	1,327	1,474	1,474	1,474	1,474
Tools/equipment	lumpsum	1,280		1	1	1	1	1	1	1	1	1	1
<b>Labour</b>													
Operations (0.1 FTE days per 100 kgs)	pers. day	S/F		590	737	885	1,032	1,180	1,327	1,474	1,474	1,474	1,474
Harvesting	pers. day	S/F											
Administrative staff, managers, etc	pers. day	S/F		730	730	730	730	730	730	730	730	730	730
<b>Sub-total labour</b>			0	1,320	1,467	1,615	1,762	1,910	2,057	2,204	2,204	2,204	2,204
Skilled (paid) labour (S)	pers. day	170	0	590	737	885	1,032	1,180	1,327	1,474	1,474	1,474	1,474
Administrative staff, managers, etc	pers. day	448	0	730	730	730	730	730	730	730	730	730	730

FINANCIAL BUDGET			WITHOUT PROJECT	WITH PROJECT									
ITEMS			1	1	2	3	4	5	6	7	8	9	10-15
<b>Main production revenue</b>													
Uncertified oranges			0	424,627	530,784	636,941	743,098	849,254	955,411	1,061,568	1,061,568	1,061,568	1,061,568
Certified oranges			0	6,440,179	8,050,224	9,660,269	11,270,314	12,880,358	14,490,403	16,100,448	16,100,448	16,100,448	16,100,448
0			0	0	0	0	0	0	0	0	0	0	0
<b>Sales</b>			0	6,864,806	8,581,008	10,297,210	12,013,411	13,729,613	15,445,814	17,162,016	17,162,016	17,162,016	17,162,016
<b>Selfconsumption</b>			0	0	0	0	0	0	0	0	0	0	0
<b>Post-processing losses</b>			0	686,481	858,101	1,029,721	1,201,341	1,372,961	1,544,581	1,716,202	1,716,202	1,716,202	1,716,202
<b>Total revenue</b>			0	6,178,326	7,722,907	9,267,489	10,812,070	12,356,652	13,901,233	15,445,814	15,445,814	15,445,814	15,445,814
<b>Investment input costs</b>													
Warehouse			0	1,142,857	0	0	0	0	0	0	0	0	0
Processing machine			0	571,429	0	0	0	0	0	0	0	0	0
Weighing machine			0	428,571	0	0	0	0	0	0	0	0	0
Packing machine			0	257,143	0	0	0	0	0	0	0	0	0
<b>Sub-total investment costs</b>			0	2,400,000	0	0	0	0	0	0	0	0	0
<b>Operating input costs</b>													
Uncertified oranges			0	339,702	424,627	509,553	594,478	679,404	764,329	849,254	849,254	849,254	849,254
Certified oranges			0	4,293,453	5,366,816	6,440,179	7,513,542	8,586,906	9,660,269	10,733,632	10,733,632	10,733,632	10,733,632
Electricity (58.6KW / 1 ton SP)			0	30,966	38,707	46,449	54,190	61,931	69,673	77,414	77,414	77,414	77,414
Maintenance hygiene			0	188,723	235,904	283,085	330,266	377,446	424,627	471,808	471,808	471,808	471,808
O&M building (5% of investment cost)			0	0	57,143	57,143	57,143	57,143	57,143	57,143	57,143	57,143	57,143
O&M machinery and equipment			0	0	62,857	62,857	62,857	62,857	62,857	62,857	62,857	62,857	62,857
Packaging			0	226,468	283,085	339,702	396,319	452,936	509,553	566,170	566,170	566,170	566,170
Transportation			0	188,723	235,904	283,085	330,266	377,446	424,627	471,808	471,808	471,808	471,808
Tools/equipment			0	1,280	1,280	1,280	1,280	1,280	1,280	1,280	1,280	1,280	1,280
<b>Sub-total operating costs</b>			0	5,269,315	6,706,323	8,023,332	9,340,340	10,657,349	11,974,358	13,291,366	13,291,366	13,291,366	13,291,366
<b>Labour costs</b>													
Skilled (paid) labour costs			0	100,259	125,324	150,389	175,454	200,518	225,583	250,648	250,648	250,648	250,648
Administrative staff, managers, etc			0	327,040	327,040	327,040	327,040	327,040	327,040	327,040	327,040	327,040	327,040
<b>Sub-total labour costs</b>			0	427,299	452,364	477,429	502,494	527,558	552,623	577,688	577,688	577,688	577,688
<b>Total production costs</b>			0	8,096,614	7,158,687	8,500,761	9,842,834	11,184,907	12,526,981	13,869,054	13,869,054	13,869,054	13,869,054
<b>Gross income (after labour costs)</b>			0	-1,918,288	564,220	766,728	969,236	1,171,744	1,374,252	1,576,760	1,576,760	1,576,760	1,576,760
Taxes (5%)			0	0	56,422	76,673	96,924	117,174	137,425	157,676	157,676	157,676	157,676
Insurance on labour (22%)			0	94,006	99,520	105,034	110,549	116,063	121,577	127,091	127,091	127,091	127,091
<b>Net Income (after labour costs)</b>			577,688	-2,012,294	408,278	585,021	761,764	938,507	1,115,250	1,291,993	1,291,993	1,291,993	1,291,993
<b>Incremental net income</b>				-2,589,982	-169,410	7,333	184,076	360,819	537,562	714,305	714,305	714,305	714,305
<b>Net income (before labour costs)</b>			577,688	-1,584,995	860,642	1,062,450	1,264,257	1,466,065	1,667,873	1,869,681	1,869,681	1,869,681	1,869,681

Return to family labour\*

2,285

\*consider full development year family labour requirements

Discount rate

7%

NPV (CNY) @ 0.07

1,708,466

IRR

13%

NPVb

108,614,800

NPVc

104,800,504

B/C ratio

1.04

Switching values Benefits

-4%

Switching values Costs

4%

Table A 11: Project costs

China

Yunnan Rural Revitalization Demonstration Project

## Project Components by Year -- Base Costs

Economic Costs (RMB Million)

		Base Cost (RMB Million)					
		2020	2021	2022	2023	2024	Total
<b>A. Supporting Inclusive Rural Development</b>							
<b>1. Improving chanye fupin models /a</b>							
Upgrading Cooperative Meeting Operational Standards /b		-	15.1	15.1	7.6	-	37.8
Cooperative Co-investor support		-	50.4	67.2	33.6	-	151.2
Company-cooperative/household models		42.0	63.0	63.0	21.0	-	189.0
Other Innovative Models		14.0	21.0	21.0	7.0	-	63.0
Establishment of County Traceability Systems		0.0	0.2	0.2	0.2	0.2	1.0
Improving Climate Information and Adaptation Advice		2.2	-	-	-	-	2.2
<b>Subtotal Improving chanye fupin models</b>		<b>58.2</b>	<b>149.8</b>	<b>166.6</b>	<b>69.4</b>	<b>0.2</b>	<b>444.2</b>
<b>2. Stimulating entrepreneurship/attracting investors</b>							
Business Incubation/Service Centers		6.8	6.0	6.0	6.0	5.0	29.7
Investment Support for Start-ups /c		-	7.0	35.0	35.0	7.0	84.0
Improved Access to Financing		-	5.4	-	-	-	5.4
<b>Subtotal Stimulating entrepreneurship/attracting investors</b>		<b>6.8</b>	<b>18.3</b>	<b>41.0</b>	<b>41.0</b>	<b>12.0</b>	<b>119.0</b>
<b>Subtotal Supporting Inclusive Rural Development</b>		<b>65.0</b>	<b>168.1</b>	<b>207.5</b>	<b>110.4</b>	<b>12.3</b>	<b>563.2</b>
<b>B. Climate Proofed Public Infrastructure Planning &amp; Development</b>							
<b>1. Infrastructure for improved climate resilience</b>							
Climate proofed irrigation planning, design & decision making		0.7	2.2	-	-	-	2.9
Piloting Climate proofed Smart irrigation Investments /d		-	6.4	20.2	35.1	11.7	73.3
<b>Subtotal Infrastructure for improved climate resilience</b>		<b>0.7</b>	<b>8.6</b>	<b>20.2</b>	<b>35.1</b>	<b>11.7</b>	<b>76.2</b>
<b>2. Rural Infrastructure /e</b>		<b>15.4</b>	<b>47.5</b>	<b>82.0</b>	<b>25.4</b>	<b>8.4</b>	<b>178.6</b>
<b>Subtotal Climate Proofed Public Infrastructure Planning &amp; Development</b>		<b>16.1</b>	<b>56.1</b>	<b>102.2</b>	<b>60.5</b>	<b>20.0</b>	<b>254.9</b>
<b>C. Project Management, M&amp;E and Learning</b>							
Management		13.4	12.8	11.4	8.0	8.3	53.9
M&E and Learning		2.1	0.4	1.7	0.4	2.2	6.7
<b>Subtotal Project Management, M&amp;E and Learning</b>		<b>15.5</b>	<b>13.2</b>	<b>13.1</b>	<b>8.4</b>	<b>10.5</b>	<b>60.6</b>
<b>TOTAL PROJEC COST</b>		<b>96.6</b>	<b>237.4</b>	<b>322.7</b>	<b>179.2</b>	<b>42.8</b>	<b>878.7</b>
<b>Project cost balance from components not used in the models</b>		<b>55</b>	<b>124</b>	<b>193</b>	<b>125</b>	<b>43</b>	
<b>Investment costs for final aggregation</b>		<b>55</b>	<b>124</b>	<b>193</b>	<b>125</b>	<b>43</b>	

## Expenditure Accounts by Years -- Base Costs

Economic Costs

		Base Cost (RMB Million)					
		2020	2021	2022	2023	2024	Total
<b>I. Investment Costs</b>							
A. Works		15.4	53.9	102.2	60.5	20.0	252.0
B. Consultancies		3.4	18.5	17.6	8.2	2.4	50.2
C. Good, Services&Inputs		16.7	17.0	11.3	9.0	8.4	62.5
D. Grants and Subsidies		56.0	141.4	186.2	96.6	7.0	487.2
E. Operating costs		4.4	4.4	4.4	4.4	4.4	22.1
F. Training		0.7	2.1	1.0	0.5	0.5	4.8
G. Results Based Lending		-	-	-	-	-	-
<b>Total Investment Costs</b>		<b>96.6</b>	<b>237.4</b>	<b>322.7</b>	<b>179.2</b>	<b>42.8</b>	<b>878.7</b>
<b>II. Recurrent Costs</b>							
<b>Total BASELINE COSTS</b>		<b>96.6</b>	<b>237.4</b>	<b>322.7</b>	<b>179.2</b>	<b>42.8</b>	<b>878.7</b>
<b>Recurrent costs for final aggregation</b>		<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	

## **China**

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### **Yunnan Rural Revitalization Demonstration Project Project Design Report**

#### **Annex 5: Social Environment and Climate Assessment (SECAP) Review Note**

Mission Dates: 16 to 25 September 2019  
Document Date: 27/02/2020  
Project No. 2000002358  
Report No. 5310-CN

Asia and the Pacific Division  
Programme Management Department



## Annex 8. SECAP Review Note

### 1. Major landscape characteristics and issues (social, health, environmental and climate change)

#### 1. Country Context:

1. **National context:** The Government of China is planning to eradicate extreme rural poverty, measured against the prevailing national poverty standards (i.e. approximately US\$1.90/day), by 2020 - making China the first developing country to achieve SDG1, ten years ahead the global target. There is broad consensus that China has achieved an historic reduction in absolute poverty since the initiation of the rural reform process in 1978. Based on the international poverty line of \$1.90 per day (expressed in 2011 purchasing power parity), the World Bank estimates that the incidence of poverty in China declined from 878 million in 1981 to 87 million in 2012 (or from 88% to 6.5% of the population). Official government estimates indicate a similarly sharp and prolonged decline in the number of poor, and that the number of rural poor had declined to about 16.6 million by end of 2018.
2. However, sustaining this achievement, reducing inequalities (between coastal and western provinces, urban and rural areas, and among population. i.e. relative poverty), and avoiding that the people moved out of poverty fall back into poverty will remain priorities for the Government in the years following 2020. In addition to this, the Government has recently coined a Rural Revitalization strategy (2017), a long-term, comprehensive strategy which aims at rebalancing the existing divide between urban and rural areas by accelerating the development of rural areas and making them attractive for living. Key strategies for pursuing and sustaining poverty reduction efforts and developing rural areas include: agricultural "industrialization" (i.e. the development of lead "industries" through the support of agro-enterprises and cooperatives), creation of employment opportunities, and comprehensive infrastructure development - among other strategies.
3. **Geography explains much of the inequality in China.** Several studies indicate that disparities between urban and rural areas represent the largest share of total inequality. Unequal access to infrastructure and municipal services, which is associated with rural-urban disparity, is a significant contributor to overall inequality. Disparities between coastal and inland provinces are also high. Substantial state-led investments in the interior provinces have reduced the income gap in recent years but at the cost of capital misallocation, which is increasingly evident. The challenge to create sustainable income opportunities in the interior provinces thus remains.
4. **Demographic transition and aging population are also boding ill to China socio-economic sustainability.** The widening urban-rural population gap and ageing population are becoming new challenges for China to meet social security and keep agriculture labour force intact which are backbone of china food security depending on 250 million small farm holders. Today about 42 percent of the Chinese population are registered in rural areas, which is predicted to be down to 31% by 2030. Between 1950 and 2015, the total fertility rate per woman declined from 6.11 to 1.6. over the same time, the overall mortality rate also declined significantly resulting in a steady increase in life expectancy. In addition, due to large scale rural labor migration, China rural and agriculture feminization and aging became a common phenomenon



5. **The rural development context.** China is going through a fundamental transformation in rural areas. Over the past decades, China has experienced a massive migration of the active workforce from the rural to the urban areas due to the gap between the urban and rural salaries and the limited income-generating opportunities in the rural areas. Rural villages today are characterized by a population which mainly comprises elderly, some middle generation women taking care of the elderly parents (the so-called “left-behind women”, who represent about 60% of the labour force in rural areas), young children, and sick and/or people with disabilities. Rural families from poverty vulnerable households are often dependent on the remittances provided by migrant worker family members, complemented by some income from production and local labor.
6. In response to this situation, the government has recently established a "rural revitalization" strategy (2017), a long-term, comprehensive strategy which aims at rebalancing the existing divide between urban and rural areas by accelerating the development of rural areas and making them attractive for living. Key strategies for pursuing and sustaining poverty reduction efforts and developing rural areas include: agricultural "industrialization" (i.e. the development of lead "industries" through the support of agro-enterprises and cooperatives), creation of employment opportunities, and comprehensive infrastructure development - among other strategies.

### **Gender and social inclusion**

7. The propose project contributes to reduce the gender gap. As of end-2015, women comprised about half of the 56 million rural poor population in China.<sup>1</sup> According to State Statistic Bureau survey in the nationally designated poor counties, the degree of poverty was greater among women than among men. In 2010, women’s poverty incidence was 9.8% while men’s was 9.4%, and the incidence of low-income women was 0.6 percentage points higher than that of men. Rural women’s average level of education in Midwestern China was 6.8 years, which was 0.8 years less than those in Eastern China.
8. The majority of labor force of female is engaged in agriculture, about 80.6%, mostly in primary industry as compared to 58.8% of male labor in 2017<sup>2</sup>. According to National Bureau of Statistics of China, the education level of female labor in poor area was far behind that of male labor (Table ).

Educatin level of Female/Male labor in poor area of China

1. Education level	2. Female labor (%)	3. Male labor (%)
4. No school	5. 11.9	6. 3.7
7. Primary school	8. 39.4	9. 29.0
10. Middle school	11. 40.4	12. 51.7
13. High school	14. 5.9	15. 11.5
16. College and above	17. 2.4	18. 4.1

Source: Poverty Monitoring Report of Rural China 2018

<sup>1</sup> X.L. Wang and R. Gao. Poverty Reduction of Rural Women: Objective, Challenge and Policy Option. Collection of Women’s Studies, No. 6 Ser. No. 138, Nov. 2016. Pages 5-8.

<sup>2</sup> Department of Household Surveys, National Bureau of Statistics of China. Poverty Mornitoring Report of Rural China (2018). China Statistic Press, Dec. 2018.

## Ethnic Minority and Poverty

9. There are fifty-five ethnic minorities in China and one third of the ethnic minority population live in the Yunnan province. The main provinces home to ethnic minorities are eight western provinces including Inner Mongolia, Guangxi, Guizhou, Yunnan, Tibet, Qinghai, Ningxia and Xinjiang named Eight Minority Province/Autonomous Region (*Minzu Bashengqu*). According to National Ethnic Affairs Commission, there were 421 minority autonomous counties among 832 nationally designated poor county, accounting 51%. Similarly eleven of fourteen contiguous poverty blocks (*Sanqu Sanzhou*) are located in the key minority area. The poverty incidence of key minority area has remained higher than the national average, and the share of key minority area in country poor population increased 3.5 percentage point between 2010 to 2017<sup>3</sup>.

## Rural Youth

10. Presently, China doesn't have an explicitly written, unified national youth policy or official executive mechanism for carrying out and monitoring national or regional youth affairs. Youth policy is regarded as a component of the overall policy of the CPC which is ideologically oriented and politically dominated. Communist Youth League (CYL), the sole national organisation managing youth affairs in China, focuses its efforts on young people between 14 and 28 years. The literacy rate among youth is 99% in both sexes. Over last three decades the youth unemployment remained average of 9 to 10%.
11. Since 1980s when China economic reform started, rural labor has been being migrated to urban on a large scale majorly due to the income gap between rural and urban. According to NBS, there was 179.69 million rural labor migrated to urban by 2017<sup>4</sup>. The rural labor under 40 years old was the majority of the labor migration, and 66% of them migrated to eastern China<sup>5</sup>. With such big scale rural labor migration, China rural and agriculture feminization and aging became a common phenomenon.
12. In September 2018, central government issued "Strategy Planning for Rural Revitalization (2018-2022)", to promote rural revitalization of industry, human resource, culture, ecology and organization. Obviously, rural youth is the key human resource for rural revitalization, and achievement of rural revitalization will create opportunity to pull youth back to rural.
13. The proposed project would focus on fostering local youth, facilitating migrated youth back to rural by giving them business startup ideas and opportunities. In addition, the project would also support the Chinese government 'Mass Rural Youth Volunteer Program', which would facilitate sending over ten million of young volunteers from large cities to rural areas<sup>6</sup>.

## Nutrition Situation Analysis

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<sup>3</sup> National Ethnic Affairs Commission. Poverty Monitoring Result of Minority Area (2017). <http://www.gov.cn/xinwen/2018-08/15/5313944/files/a0182850dccb49998471b5b3d584c279.pdf>

<sup>4</sup> National Bureau of Statistics. <http://data.stats.gov.cn/search.htm?s=2017%20%E5%85%A8%E5%9B%BD%20%E5%A4%96%E5%87%BA%E5%8A%A1%E5%B7%A5%E5%8A%B3%E5%8A%A8%E5%8A%9B>

<sup>5</sup> Xu Xiaohua, et al. The Trend Forecast and Management of the Chinese Agricultural Surplus Labor Transfer During 2014 — 2030. *Management Review*, Vol. 30, No. 1, Jan. 2018. 221-229

<sup>6</sup> Update on Key Developments in China, April 2019.

14. China has made significant progress in recent decades in improving malnutrition. Overall situation is improving drastically. China reduced the level of undernourishment in the country from 23.9 percent in 1990-92 to 9.3 percent in 2014-16. Rates of child malnutrition are also dropping. From 1990 to 2010, the number of underweight children under 5 fell by 74 percent and rates of stunting dropped by 70 percent. Current levels are lower than most other developing countries.
15. Similarly the nutrition status of children and adolescent aged 5-19 has improved remarkably over the last 15 years as shown in graph below where the underweight reduced to 17% in year 2015 from 27% in 1999. However the overweight and obesity has greatly worsened over the same period for same population group.
16. Rural-urban disparities, however, have a big impact on nutritional status. The risk of underweight and stunting is 3-4 times higher for children in rural areas than for those in cities. According to WHO World Health Report 2017, (having data from 2013) the prevalence of stunting, underweight and wasting among children under 5 were 8.1%, 2.4%, and 1.9% in the overall China showing great achievement in nutrition.
17. On the other end, better nutrition has significantly improved the health and quality of life of Chinese children. Mortality in under 5s due to malnutrition dropped from 22 to 13 percent between 2000 and 2010. Meanwhile The food supply has also improved remarkably, and undernourishment of population reduced from 16% in 2000 to 9% in 2016. But overweight and obesity are becoming prominent in cities, and gradually appearing in rural areas: 23 percent of boys and 14 percent of girls under 20 were now found to be overweight or obese. The health and nutrition improvement in china population is also resulted from improved drinking water coverage and improved sanitation coverage. China's value in the Global Hunger Index fell from 25.1 in 1990 (serious hunger level), to 7.6 in 2018 (low hunger level).

### **Provincial context:**

18. Yunnan has consistently been a priority area of the Chinese government's poverty reduction program given it hosts the largest share of poor people in the country (10.6% of the national poor in 2018). In 2018, 88 out of 129 counties (mostly in the Western and North-East parts of the province) were still classified as nationally-designated poor counties. Yunnan further distinguishes itself from other Chinese provinces by hosting one third of total 55 ethnic groups in the country. Although absolute poverty will be eradicated in these counties by 2020, they will remain vulnerable and with limited income opportunities.
19. **Project Target Area:** The Project will be implemented in seven nationally-designated poor counties within the four municipalities/prefectures of Zhaotong, Dali, Lijiang and Nujiang in the North-East and Western part of Yunnan province (i.e. Zhenxiong and Suijiang counties in Zhaotong municipality; Yunlong and Yongping counties in Dali prefecture; Huaping and Yongsheng counties in Lijiang municipality; and Lanping county in Nujiang prefecture). Meanwhile, all seven counties are located in contiguous poverty block, where five counties -- Yunlong and Yongping of Dali, Huaping and Yongsheng of Lijiang and Lanping of Nujiang are belong to west Yunnan border mountain area, while other two counties of Zhaotong are from Wumeng mountain area. In addition, Dali and

Nujiang are minority autonomous prefectures, and minority population takes more than 60% in Lijiang Prefecture.

## 1.1 Sociocultural context

20. **The province of Yunnan** located in the southwest of China is characterized by overlapping mountainous, ethnic minorities, border and poverty. With more than 94% mountainous territory and more than 4,000 km border line with Myanmar, Laos and Vietnam, there are 16 prefectures in Yunnan, under them, there are 129 districts / cities / counties.
21. **Poverty profile.** There are 88 counties or 68.22% of counties in Yunnan are categorized as poor counties, which took 10.6% of that in China. Simultaneously with the poverty reduction achievement in China, poor population in Yunnan reduced from 8.04 million in 2012 to 1.81million in 2018, while poverty incidence decreased from 21.7% to 5.39% accordingly. It is expected 48 poor counties will be out of poverty until 2020, which contributed to 11.1% of the country poverty reduction achievement.<sup>7</sup>
22. The total rural population of seven project counties was 2.98 million in 2018, and 15.6% of them live in the project area. Farmers' net income per capita was CNY 9,408 in project area and CNY 10,272 in project counties, which was 87.4% and 95.4% of the provincial level. Besides, the average per capita farmland was 1.51 mu in project counties and 1.72 mu in project area, and that of project area in Suijiang and Huaping even less than 1 mu. The average income from agriculture sector per household is around 30-50% and the rest come from migrant workers.<sup>8</sup>
23. According to the poverty rate data provided by county PMOs, the poverty rate of project counties was estimated as 16.88% in 2018 with 0.50 million poor population, while that of project area was 22.53% and 0.097 million, and the project area shared 19.31% of the poor people in the project counties. The poverty rate varied greatly among counties and project area. However, the data should be further confirmed in appraisal. Based on the present data, the poor population in seven project counties took account 27.6% of that in the province, and the poverty rate of the project counties was three times of the province level.
24. According to the monitoring of local government, the major poverty causes included natural disaster (flooding, drought, etc), disability, illness, education cost, lack of skill, lack of labor, lack of investment. However, lack of skill is the leading reason caused poverty in the project area, then followed by illness and heavy burden of education cost beyond Nine-year Compulsory Education.
25. **The characteristics of different wealth categories.** Village visits showed that the farm households in different location have slightly different livelihood pattern, and their wealth situation can be categorized into three groups.

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<sup>7</sup> Yunnan Province statistics bureau and PMO office

<sup>8</sup> CPMO/PPMOs/Mission discussions

Table 1. Households characteristics of different categories<sup>9</sup>

<i>Category</i>	<i>% of HH</i>	<i>Characteristics</i>
<i>Better-off</i>	10-15	Good housing condition with good decoration and enough electronic appliances. Each household has CNY50,000-60,000 annual cash income from comparatively big and diversified agricultural products such as tobacco, tea, walnut, etc.
<i>Vulnerable</i>	60-70	House with simple decoration and necessary electronic appliances. Annual income of CNY20,000 - 30,000 per household mainly from migrant labor, and diversified agricultural production such as tea, walnut, pig, tobacco, honeysuckle, etc.
<i>Poor</i>	20-30	Registered poor households greatly supported by the Targeted Poverty Alleviation Policy. Poor skill, health condition and housing condition. Annual income of CNY 10,000 - 15,000 per household from agricultural products and/or seasonal labor work.

Information source: Interview and discussion in two villages.

26. **Labour and Migration Situation.** Migrant labour income dependency accounts to 48.25% of households due to low income from agriculture. About 0.74 million labour or 55.46% of the labour in project counties (except Yongping and Huaping) were engaged in migrant labour work. As long as there is a surplus labour, migrant labour income is significant source for poor households. Limited data showed that youth between 15 to 34 years old took more than half of migrant labour force in three project counties averagely.
27. **Access to technology and credit.** The Agro-Technical Extension Stations at county and township levels are the main technical service providers throughout the country. According to the available data from five project counties, only 17.70% rural labours were trained by the government extension system in 2018; 50.61% trainees were women, and 30.51% were ethnic minorities. There are evidence of credit support in market area but well below national average. The labour with education of high school and above made up 1/4 in the project area, but only 16.35% in the project counties.

#### **Nutrition status.**

28. Due to high economic growth complementing with enormous progress in poverty reduction over the past forty years, China has made significant progress in improving the food security and nutritional status of its people. Similarly Yunnan has given high importance to reducing child malnutrition in its ‘Yunnan Child Development Plan (2011-2020)’, and clear targets, in terms of prevalence of severe malnutrition, prevalence of moderate to severe anemia, and anemia prevalence of primary and secondary students, are set for the province.

<sup>9</sup> The table is summarized from interviews of Wenxing Bai Village and Jiaju Bai Village in Yunlong County, and Dapingtan Village in Yongping County; all of them are poor villages identified by county poverty alleviation office. China official poverty line is \$1.9 US per capita/day

29. Based on the data of National Children Nutrition and Health Monitoring Program, from 2012 to 2018<sup>10</sup>, the prevalence of anemia and stunting among children under 5 in rural Yunnan have decreased from 50.28% to 21.98% and from 17.84% to 3.69% respectively; and the prevalence of underweight and wasting among children under 5 have also decreased to 1.16% and 0.68% respectively in 2018. Though the figures are still significantly higher than those of urban area, yet such great improvement is driven by the national programs of health management for children under 6 and publicity of breastfeeding and reasonable complementary foods since 2009, and children nutrition improvement project in poor rural area in recent years.
30. Limited data from the three project counties visited during design (i.e. Suijiang, Yunlong, and Yongping) showed that some of the targets (e.g. prevalence of moderate to severe anemia of children under 5 maintained under 12%) have already been achieved, suggesting the overall situation in the project area is not alarming and in line with the objectives of the provincial development plan.

### **Rural youth.**

31. Like other parts of country, Yunnan Communist Youth League (CYL) is the most extensive youth organization in the province and at the county level that positioned itself as the sole organization systematically serving for youth development widely on youth ideology and morality, youth education, youth health, youth career-orientation and employment, youth social inclusion and participation and youth social security
32. About 55% of the workforce in the project area is engaged in migrant labour; more than half of the migrant workers are represented by youth between 15 to 34 years old of age. To revert this trend, a central pillar of the new rural revitalization strategy focuses on creating new employment opportunities in the rural areas to retain or attract back the active population to the rural areas [1], particularly young people. The project will contribute to this objective by (i) providing incentives and support to entrepreneurs and investors (particularly young and - considering women represent the majority of the workforce in the rural areas - women) to start their own business in the project area (Ref. Sub-component A.2); and (ii) facilitating women participation in supported cooperatives, including leading roles (Ref. Sub-component A.1).
33. According to a village head, it was not easy for poor labor to stay with urban job due to not enough skill, low pay, or inadaptation. However, labor migration is still one of the local government promotion to improve income of rural households, especially registered poor households. Even so, there was about 1/3 youth could not find suitable job out of rural according to the head of Yongping CYL. The literacy rate among youth at the project counties are about 97%, compared to 99% in both sexes at national level. At national level over last three decades the youth unemployment remained average of 9 to 10% as compared to county level where 1/3 of youth could not find suitable jobs.

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<sup>10</sup> X. Zhu, et al. Analysis of Nutrition and Health Condition Monitoring of Children under 5 Years Old in Urban and Rural Areas of Yunnan Province from 2012 – 2018. Chinese Journal of Children Health Care, Vol. 27, No. 5. May 2019. P571–573.

### **Ethnic minorities.**

34. Yunnan is widely known for its cultural diversity in China having one third of its population as ethnic minorities. The province has 25 native ethnic groups (46%) out of the 55 ethnic minority groups of the country. Five of the seven project counties are located in the so-called "cultural diversity area" of Yunnan. Dali and Nujiang are classified "minority autonomous prefectures". In Lijiang prefecture, 60% of the population belong to ethnic minority groups. Overall, about 29% of the population in the project area belong to ethnic minority groups. Main ethnic minority groups in the project area are: Hui, Bai, Yi, Miao, Lisu, Naxi, Lahu, Pumi, Dai and Nu people. These minority are now without traditional institutions and are in general well integrated in the existing socio-economic context. They have livelihood strategies similar to those of the other rural populations, are not excluded from existing economic opportunities, are not discriminated, and have no distinct needs from the rest of the population. They are vulnerable not because belonging to an ethnic minority group, but because they live in poor and not well developed areas. Government policies targeting rural poor and vulnerable households in Yunnan province do not differentiate based on ethnicity, but target based on poverty indicators. The project engagement approach with pro-poor cooperatives and agro-businesses will be based on informed consultations to ensure that particular livelihood strategies of the different ethnic groups are taken into account, where existing. Even though an FPIC agreement will not be signed, since there are no traditional institutions and authorities to provide for a such signature, FPIC principles will as such be followed in the planning and formulation of project interventions.

### **Gender.**

35. There were 23.24 million women in Yunnan Province in 2018, which took 48.11% of the total population. There was 1.42 million women living in the project counties, and that figure was 0.20 million in the project area<sup>11</sup>. However, the male-female ratio was differ county by county, and average proportion of women in seven project counties was lower than the provincial level. At household level, women with formal household head title took only 8.64% in project counties and 17.30% in project area, and the figure was very low in Yunlong County. In the project counties, women only took 9.90% and 16.51% of village leadership in the project counties and project area. While most of the rural male labors are engage in migrated works, most of the rural women have to stay taking care of the family and agricultural production, and they account for more than 70% of rural labors working on agriculture in the villages.
36. **Decision making in household and community.** Mostly the patrilineal system is practiced in the project area. In general, the overall socio-economic status of women is poor than men in terms of education, health and access to technical and information services. Most women still cultivate the land under their husbands' name due to the practice of traditional marriage pattern where men are registered as family head. Therefore, women with formal household head title accounts only 6.14% in project counties and 17.53% in project area, number increased due to male outmigration.

Following the common practice of official and uniform administration system in China, most affairs at the community level are officially managed by villagers' committees in administrative villages with village committee head where men are the major decision

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<sup>11</sup> PPMO/CPMOs Briefings

makers at all levels. The women village leadership in the project counties accounts only 9.90% while 17.14% in project area.

37. **Labour Division:** Men generally play the key role in transactions and heavy manual work, while women take care of daily farming activities that require less manual labour but are more constant and time consuming. Often women end up the main labour for farming activities due to migration of men. The overall women labour force in project counties are about 40% whereas almost 70% accounts in village agriculture labour force
38. **Women's participation in Farmers' Cooperative.** There are about 4,871 cooperatives in seven project counties mostly led by men and dominated by male members despite the fact that key labor force in the project area is dominated by women. Besides cultural reason, membership of women who is not registered as household head, would cause the difficulty to the cooperative when dealing with different agencies for cooperative establishment and operation, as the agencies require the membership consistent with household head. Nevertheless, field visit of the mission found that women are keen to play significant role in the cooperative.

## 1.2 Natural resources condition and management

39. **Geographical condition.** Yunnan is the only low-latitude plateau area in China. It is located in the transition zone between the eastern monsoon region and the Qinghai-Tibet alpine region. The total area is 394,000 square kilometers, accounting for 4.1% of the total area of the country. It is a transitional zone affected by various monsoon circulation, which leads to frequent meteorological disasters and is one of the provinces with the largest types of meteorological disasters in China.
40. Yunnan is a mountainous plateau terrain, with a mountainous area of 3,311,000 square kilometres, accounting for 84% of the total land area of the province; a plateau area of 39000 square kilometres, accounting for 10% of the total land area of the province; a basin area of 24000 square kilometres, accounting for 6.0% of the total land area of the province.
41. The terrain is divided into two parts: Yuanjiang Valley and Yunling mountain south wide valley. The eastern part of Yunnan is the eastern and central Yunnan Plateau, which is an integral part of the Yunnan Guizhou Plateau, with an average altitude of about 2000 meters. It is characterized by undulating and gentle low mountains and round hills, and various types of karst (karst) landforms are developed; the western part is characterized by alternate mountains and valleys, with steep terrain, and the relative height difference between mountains and valleys is more than 1000 meters.
42. Over 5000 meters of snow covers the top of the mountain all the year round, forming a strange and majestic mountain glacier landform. The altitude of the whole province is quite different. The highest point is 6740 meters above sea level. At the junction of Yunnan and Tibet, Kawagebo, the main peak of Meili Snow Mountain in Nushan Mountain in Deqin County, is 76.4 meters above sea level. At the junction of Nanxi River and Honghe River in Hekou County, there is a straight-line distance of about 900 kilometers and an altitude difference of more than 6000 meters.
43. The terrain and landform of Yunnan Province are complex, and the mountainous area accounts for 94% of the total area. It declines in a gradient shape from northwest to southeast. The mountainous areas with a slope greater than 25 degrees account for 39.3% of the province, while the northwest and north-eastern Yunnan account for 60-90% and the forest coverage rate is about 44.3%. The mountainous areas, high mountains, steep



slopes, less vegetation, concentrated rainfall, complicated geological structure and differential movement of faults and faults lead to frequent landslides and debris flows in Yunnan due to rainstorms. Drought is serious in mountainous areas as well.

44. The climate of Yunnan basically belongs to the subtropical plateau monsoon type, with remarkable three-dimensional climate features, many types, small annual temperature difference, large daily temperature difference, distinct dry and wet seasons, and abnormal vertical change of temperature with the terrain. Northwest Yunnan has a cold zone climate, long winter without summer, short spring and autumn. In a province, there are three zones of cold, temperature and heat (including subtropics). The average temperature drops 0.6° C to 0.7° C every 100 meters above sea level.
45. **Weather and Precipitation.** The seasonal and regional distribution of precipitation in the whole province is very uneven. The dry and wet seasons are distinct, the wet season (rainy season) is from May to October, with 85% of the rainfall concentrated; the dry season (dry season) is from November to April of the next year, with only 15% of the annual rainfall. The regional distribution of precipitation in the whole province is quite different. The annual precipitation in the most places can reach 2200-2700 mm, the least is 584 mm, and the annual precipitation in most areas is more than 1000 mm (Yunnan met office).
46. There is a long frost free period in the whole province. The frost free period is 300-330 days in the southern border area, about 250 days in the central area, and 210-220 days in the cold northwest and northeast of Yunnan(Yunnan met office)
47. **Water Resources.** According to the preliminary evaluation, Yunnan's self-produced water resources account for 7.0% of the national water resources, and the per capita water resources amount is 2.4 times of the national per capita water resources amount. Although Yunnan is a province with abundant water resources in terms of total amount and per capita water resources, the distribution of per capita water resources is quite different. 94% of the mountainous areas with fewer people, less land, but have more water. Only 6% of the dam area has more people, more land and less water.
48. The allocation of water and soil resources is extremely unbalanced, and the distribution of water resources is extremely inadaptable to the needs of economic development. The shortage of water resources and water quality in important economic zones is serious. At the same time, because of the deep valleys in mountainous areas, it is difficult to develop and utilize; the tributaries of flat dam are short, water resources are scarce and water demand is large; the soil erosion in mountainous areas is serious and tends to aggravate; the contradiction between urban water supply and demand is prominent, water shortage and water pollution are serious.
49. **Economic potentials.** According to the three-dimensional climate model and rich natural resources, Yunnan vigorously adjusts the agricultural production structure, develops diversified management, and develops township enterprises, so as to gradually transform the agricultural economy from the natural economy to the commodity economy, and transform the single grain production to the all-round development of agriculture, forestry, animal husbandry, fishing, industry and commerce.
50. In addition to the traditional food crop planting, the areas should vigorously develop characteristic industries such as Chinese herbal medicine, tobacco industry, Tang industry and tea industry, rubber industry and flower industry. In 2018, the province's added value of agriculture, forestry, animal husbandry and fishery reached 255.278 billion yuan, an

increase of 6.3% year on year, ranking the second in the country. The grain planting area is 4.1746 million hectares, and the output is 18.61 million tons.

51. The comprehensive production capacity has been steadily improved for three consecutive years. 642,700 hectares of rice and wheat grain production functional areas and important agricultural product production and protection areas have been designated, and 162,600 hectares of high-standard farmland have been constructed. The supply of main agricultural products is stable, and the ratio of agricultural product processing output value to total agricultural output value is increased to 1.11:1.
52. The export volume of agricultural products reached 3.875 billion US dollars, ranked as the first place in the western region for many years in a row, and maintaining the position of the largest category of export commodities in the province. In 2017, 6384 reservoirs were built in the province, with a total reservoir capacity of 13.242 billion cubic meters. The irrigated area of arable land reached 1.8514 million hectares, accounting for 29.8% of the cultivated land area in the province (Yunnan statistic year book, 2018).
53. Considering that Yunnan has large mountainous areas but small flatland areas, in 2011, Yunnan Province put forward the strategy of propelling the urbanization to gentle rolling hills and aimed at the goal of constructing towns toward hillside and leaving fertile farmland to descendants. In the future, mountains over 25° are prohibited to exploitation, and low-slope hilly lands within 6° and 25° will become the key development zones.
54. These farmlands are easily degraded during the traditional urban sprawl occurring in the Bazi region (Liu et al., 2014a). Besides the demand for farmland protection, natural ecosystems like Cangshan Mountain and Erhai Lake also put high ecological protection pressures on urban construction.
55. In our project, seven counties proposed the development strategy. Suijiang, Yongping, Huaping are assessed with relative lower ecosystem carrying capacity, contrast with the other 4 counties. This was due to less land area and less per capita water resources. Thus the study area can be grouped into 3 categories considering trade-offs between mountain development and ecological protection. That is priority areas for development, areas suitable for short-term conservation but long-term development, areas suitable for short-term development but long-term conversation.

### **1.3 Climate**

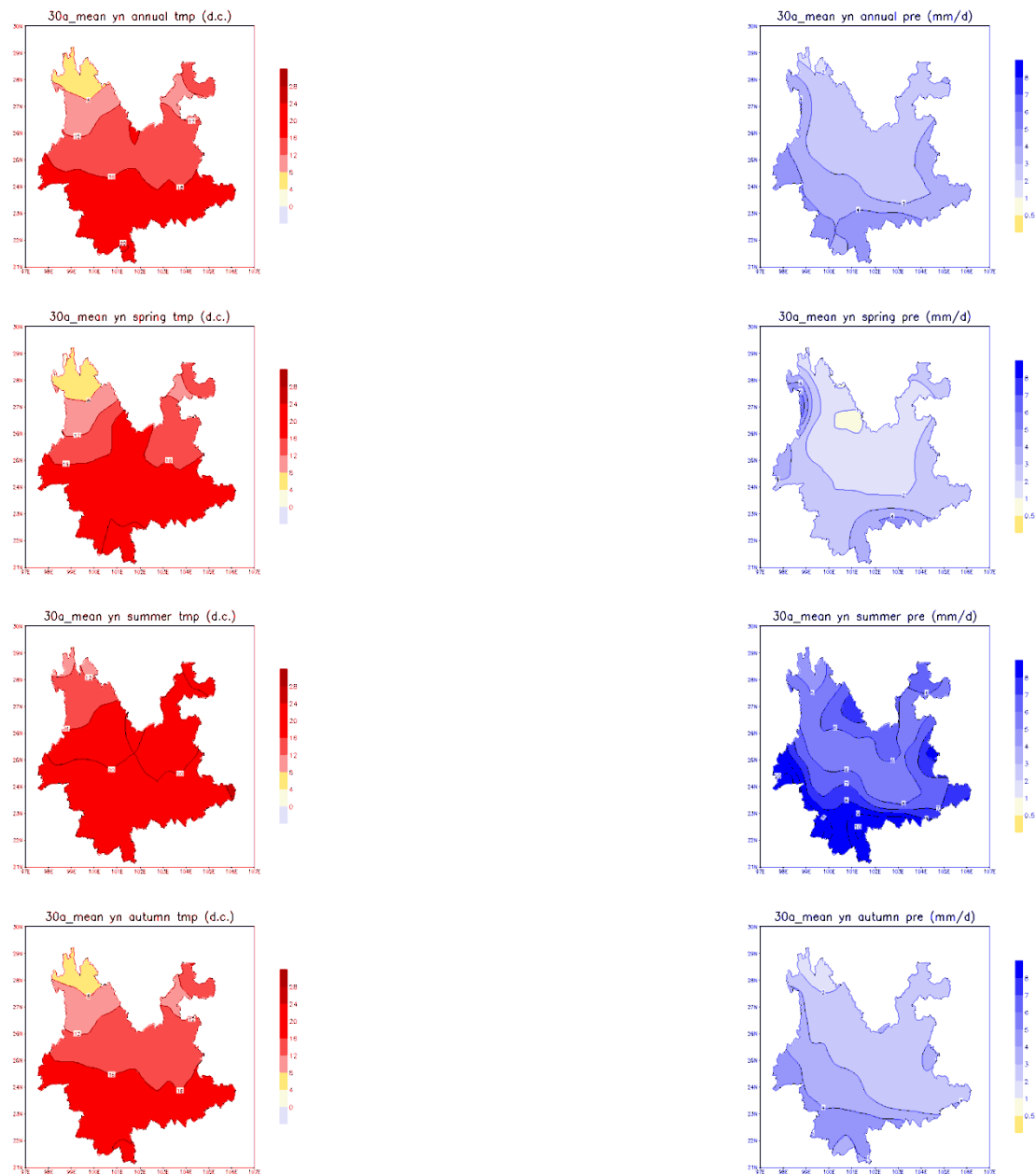
56. Since the 1970s, the boundary of Yunnan's climate belt has moved northward, and the area of tropical and subtropical zone has been expanding. With the continuous increase of temperature, this trend became more evident after 1990s. The distribution of climate zones showed a trend of overall expansion to high altitude and northward migration to high latitude under the situation of climate warming.
57. Climate warming has improved the heat resources in high altitude and latitude areas, promoted the adjustment of crop planting structure, changed the current planting system, reduced the area of one-cropping area, moved north in two-cropping area, and increased the proportion of three-cropping system. This has brought opportunities for the increase of multi-cropping system and the development of winter agriculture in Yunnan. At present, the region and scope of winter agricultural development in Yunnan have been expanded, and four dominant industrial belts of winter agricultural development have been gradually formed in southern hot areas, central Yunnan, northeast Yunnan and northwest Yunnan.

58. It should be noted, however, that the most significant season for warming is winter, and the warming range in summer is obviously small, which does not improve the growth and development conditions of warm-season crops. As the temperature rises, the evapotranspiration of soil moisture will increase, the available water resources of some crops will decrease, and the favourable factors for the increase of heat resources may not be fully utilized due to the lack of water resources, which has a more obvious effect on winter agriculture.
59. The increase of temperature in winter will be beneficial to the safe overwintering of pests and pathogens, increase the base number of pests and diseases in spring and summer next year, and lead to the expansion of damage area and aggravation of harm degree. Increasing temperature in spring and autumn will prolong the fertile period of pests and pathogens, which is conducive to the early onset of pests and diseases in spring, delayed dormancy in winter and prolonged the damage period. Increasing accumulated temperature will increase the generation of pests and diseases breeding in one year and increase the probability of crop damage.
60. The main agrometeorological disasters in Yunnan are drought and cold damage. Disaster analysis shows that the greenhouse effect has a tendency to further aggravate climate warming and increase meteorological disasters. Climate change in the future may change the original pattern of Agrometeorological disasters, and increase the risk of adjustment of agricultural planting structure due to northward migration of climate zone and expansion to high altitude.
61. The current mean climatic state and drought and flood of 7 counties, including Zhenxiong, Suijiang in the northeastern Yunnan province and Yunlong, Yongping, Yongsheng, Huaping and Lanping in the northwestern Yunnan Province, were investigated by using the gridded meteorological observation data from 1981 to 2010. Based on current climate analysis, the future climate condition and change under RCP 8.5 in 7 counties, including mean state and drought and flood risk, were analyzed with the simulation of 5 ESMs (Earth System Models) in 1981-2010 and 2021-2050.
62. Meteorological observation data and climate scenarios simulation data are employed in this climate analysis. The meteorological observation data is the gridded daily dataset of CN05.1, which generated by Wu and Gao (2013) from National Climate Centre, based on interpolation from 2416 weather stations. As did by Xu et al. (2009), the CN05.1 dataset is constructed following the ‘anomaly approach’ during the interpolation.
63. In the ‘anomaly approach’, a gridded mean climatology is first calculated by thin-plate smoothing splines, then a gridded daily anomaly derived via an angular weighting method is added to it. The geographic coverage of the dataset is 69.75°E-140.25°E, 14.75°N-55.25°N, in which the range of valid data is mainland China. The horizontal resolution of CN05.1 is 0.25°×0.25°, but in order to keep consistent with the resolution of the climate scenario simulation data, its grid point to 0.5°×0.5° was skipped. It used the daily temperature and precipitation of all grids in Yunnan province from 1981 to 2010.
64. Climate scenarios simulation data is derived from 5 ESMs used in Coupled Model Inter-comparison Project Phase 5 (CMIP5). The 5 ESMs simulate the global climate from 1951-2099 under Representative Concentration Pathways 8.5 (RCP 8.5, for short) (van Vuuren et al., 2011a, 2011b; Riahi et al., 2011), and some variables commonly used in climate change work such as temperature, precipitation were interpolated into 0.5° × 0.5° horizontal resolution and bias corrected with respect to historical observations by Hempel et al.

(2013a, 2013b) to remove systematic errors. The 5 ESMs are respectively GFDL-ESM2M, HadGEM2-ES, IPSL-CM5A-LR, MIROC-ESM-CHEM and NorESM1-M. It calculate ensemble of 5 ESMs using the interpolated and corrected daily mean temperature and precipitation of 1981-2010 and 2021-2050.

### 1.3.1 Current climate

65. **Climate mean state.** The current annual mean temperature and precipitation in 7 counties is moderate. The temperature is highest in summer and lowest in winter, but the annual range of temperature is not large. The dry and wet season are distinct. It rains more often in summer with a mild temperature. The mean temperature of the five counties in the north western Yunnan is mostly between 15-20°C and that of Zhenxiong and Suijiang in the northeast is between 19-23°C in summer, which is not easy to suffer from high temperature and heat damage and suitable for crop growth. Winter is the dry season, with little rainfall and low temperatures, which are not friendly to crops.



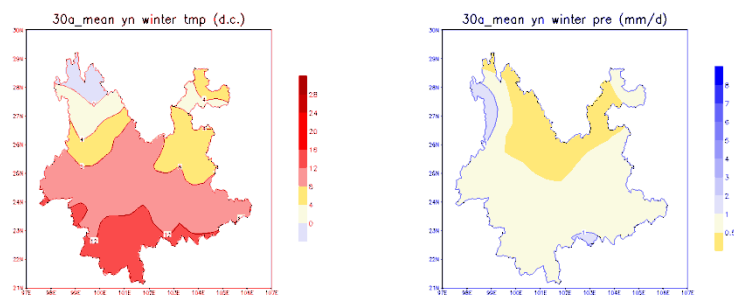


Figure 1. Mean temperature and precipitation in Yunnan province from 1981-2010

Left: mean temperature (°C); Right: precipitation (mm/d)

From top to bottom are the mean values of years, spring, summer, autumn and winter respectively

66. **Extreme climate.** The temporal distribution of precipitation are relatively balanced in Zhenxiong, Yunlong, Yongping and Lanping, i.e. the disaster level is not high, especially Zhenxiong is unlikely to suffer a drought. Suijiang is also unlikely to drought, but compared with other areas in Yunnan, its flood disaster level is higher than medium, which needs to be paid attention to. Yongsheng, on the contrary, is not easy to flood, but the drought level is moderate to higher. The most notable one is Huaping, where the temporal distribution of rain is unbalanced so that both flood and drought disasters should be paid more attention to, and, the drought is most severe in the province which requires special attention.

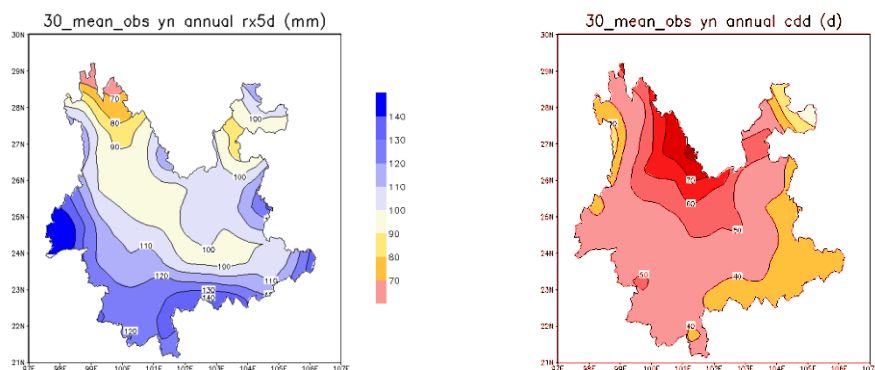


Figure 2. Average drought and flood in Yunnan province from 1981 to 2010

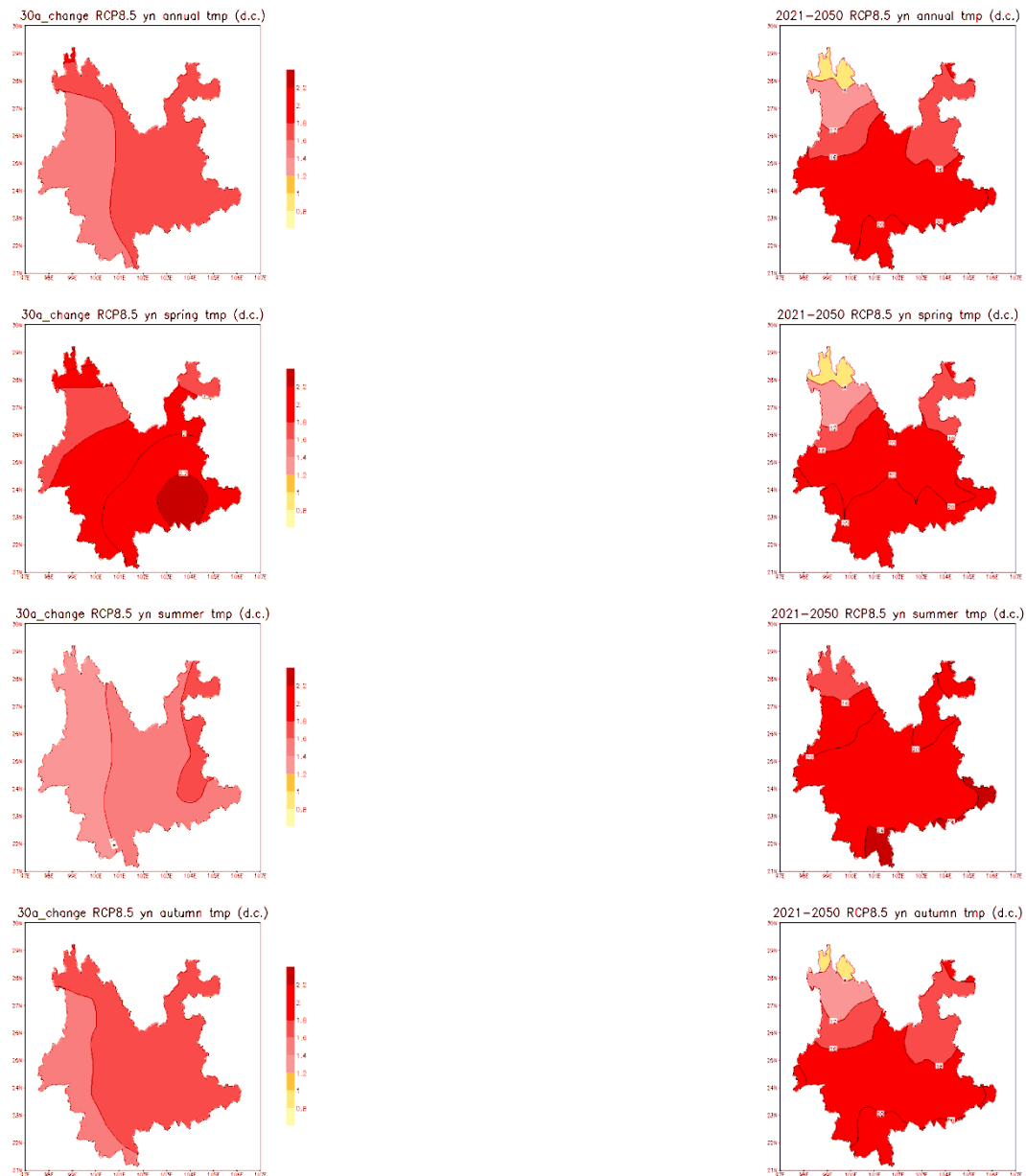
Left: rain for 5 consecutive days (mm/5d); Right: maximum consecutive dry days (d)

### 1.3.2 Future climate and climate change

67. **Climate mean state.** The ensemble results of 5 ESMs show that, compared with 1981-2010, the annual or seasonal mean temperature in 2021-2050 will all increase. In the four seasons, except Zhenxiong and Suijiang, which have the highest temperature rise in autumn and the lowest in winter, all the other 5 counties have the highest warming in spring and the lowest in summer, and the warming in winter is greater than that in summer, so the annual range of temperature will be reduced in 5 counties.
68. Under RCP 8.5, annual precipitation will slightly increase in Yongping, Yongsheng and Huaping, while will decrease in Zhenxiong, Suijiang and Lanping, and it will increase over some areas meanwhile decrease over other area in Yunlong. In general, the annual

precipitation will change little with an amplitude no more than 4%. The precipitation in summer will increase slightly in Lanping and decrease on the whole in the other 6 counties, in which Zhenxiong and Suijiang have the biggest drop in precipitation, and in spring, the precipitation in all 7 counties show a decreasing trend, and the maximum decreasing amplitude in spring is -7% in Lanping. Spring is the sowing season for most crops, and rain in spring has a great impact on crop growth. Therefore, future changes in spring precipitation should be attached more importance to. Although the percentage change in autumn and winter is relatively large, it will have little influence on the total amount of precipitation because it is less in the dry season.

69. Under RCP 8.5, from 2021-2050, all 7 counties will have the highest temperature and most precipitation in summer and the lowest temperature and least precipitation in winter. The temperature in Lanping will be the lowest, less than 16°C in summer and less than 4°C Cover coldest area in winter.



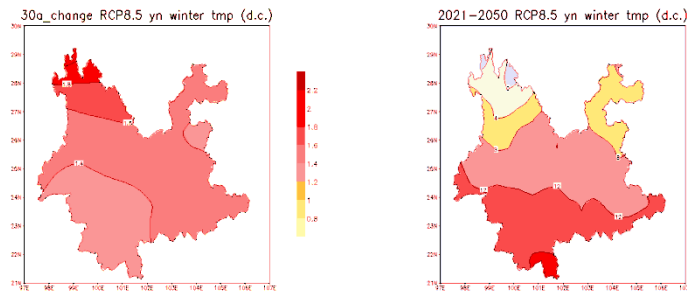


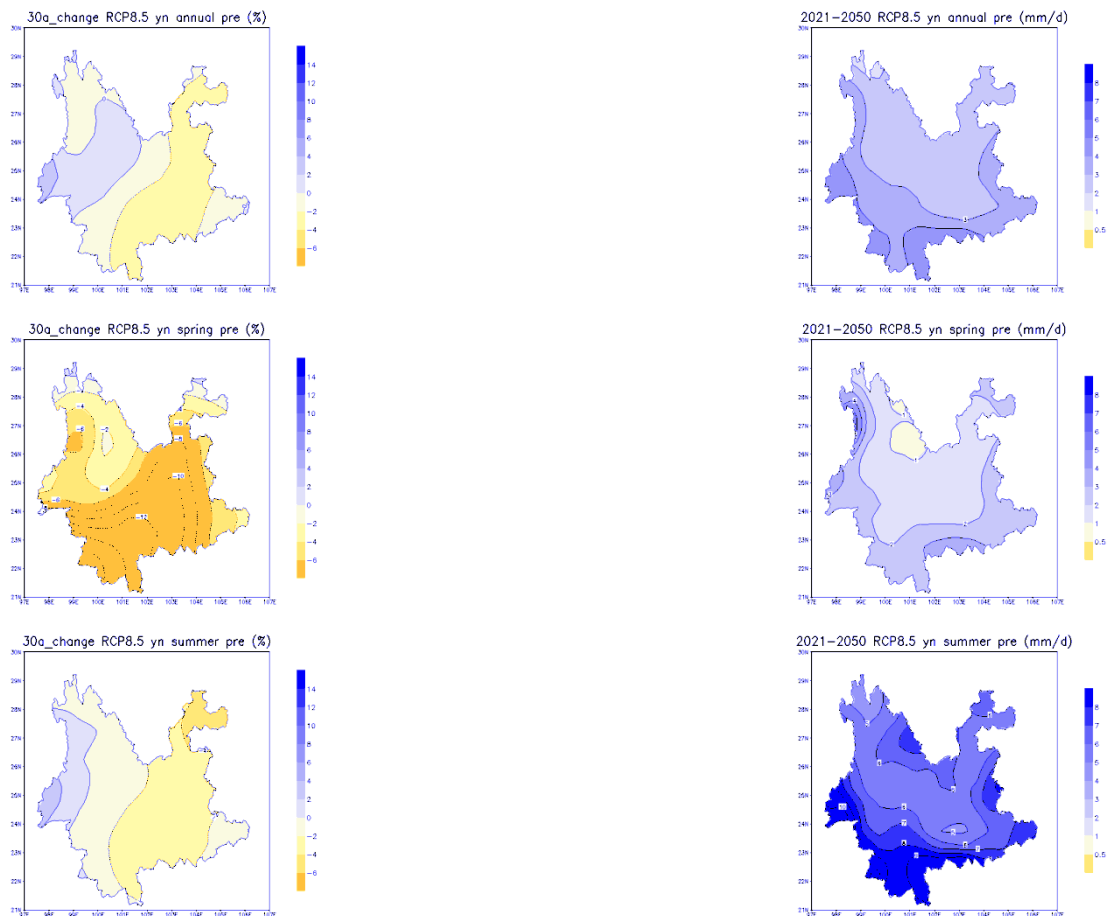
Figure 3. Change of mean temperature in Yunnan province from 2021-2050 under RCP 8.5

Left: the change of mean temperature of 2021-2050 relative to that in 1981-2010(°C);

Right: mean temperature of 2021-2050(°C)

From top to bottom are the mean values of years, spring, summer, autumn and winter respectively

70. As for annual precipitation under RCP 8.5, the 7 counties will have similar precipitation amount, among which the precipitation of Lanping will be slightly higher, about 3mm/d. The precipitation of Lanping will be distributed evenly in four seasons, about 5-6mm/d in summer and 1mm/d in the driest winter. However, the precipitation of Yongsheng and Huaping in Lijiang city show a significant seasonal difference: the precipitation in the areas with heavy precipitation in summer will reach nearly 8mm/d, while it will be almost all below 0.5mm/d in winter.



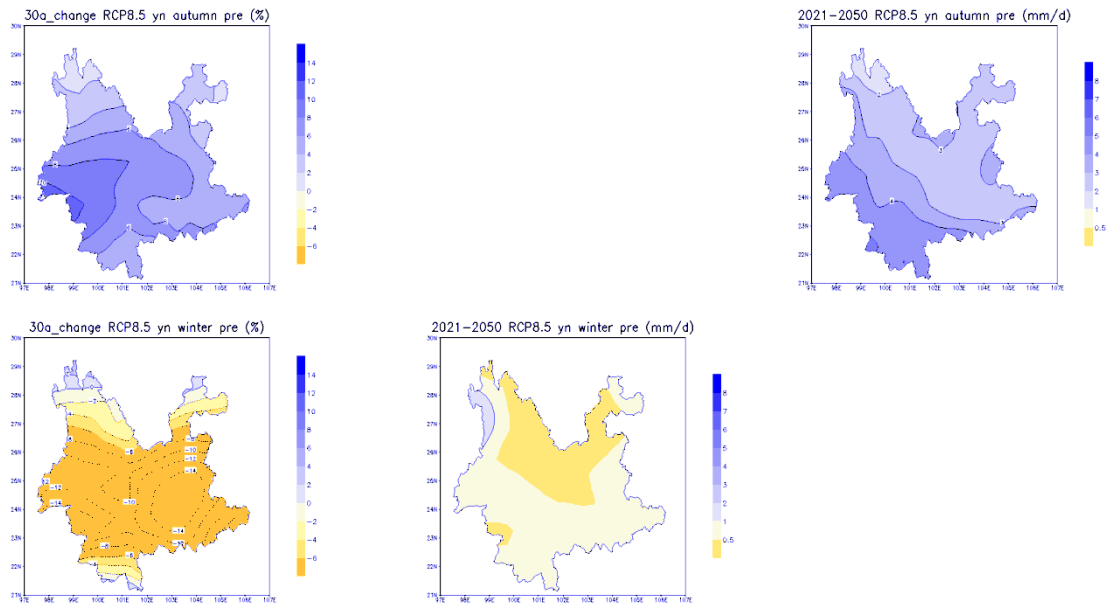


Figure 4.Change of precipitation in Yunnan province from 2021-2050 under RCP 8.5

Left: the change of precipitation of 2021-2050 relative to that in 1981-2010 (%);

Right: mean precipitation of 2021-2050 (mm/d)

From top to bottom are the mean values of years, spring, summer, autumn and winter respectively

71. **Extreme climate.** Under RCP8.5, from 2021 to 2050, flood risk will increase in most areas of 7 counties, among which Huaping has the largest increase and Lanping has the smallest. Drought risk in most areas of 7 counties will increase, but the increase are not significant, basically within 3 days.
72. In the future, the flood risk in 7 counties will deserve more attention than the drought risk. Due to the uniform seasonal distribution of precipitation, the risk of flood and drought will be not obvious in Lanping. The most noteworthy is Huaping, which will have a higher risk of drought and flood so that needs special attention. Then is Yongsheng, which also belongs to Lijiang city as Huaping, where the risk of drought and flood should also be prevented because of its quite high risk.

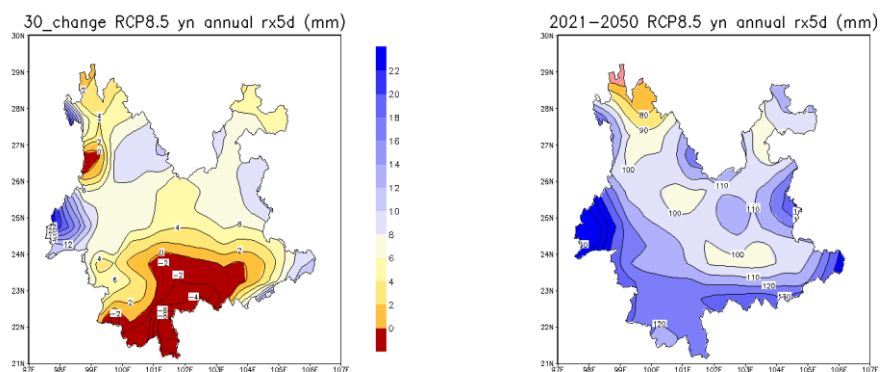


Figure 5.Changes of rain for 5 consecutive days in Yunnan province from 2021-2050 under RCP8.5

Left: the change of precipitation of 2021-2050 relative to that in 1981-2010 (mm/5d);

Right: mean precipitation of 2021-2050 (mm/5d)



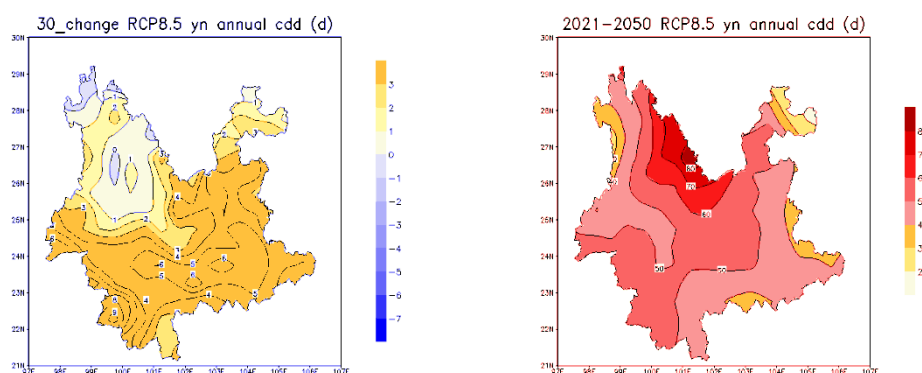


Figure 6.Changes of maximum consecutive dry days in Yunnan province from 2021-2050 under RCP8.5  
 Left: the change of precipitation of 2021-2050 relative to that in 1981-2010 (d);  
 Right: mean precipitation of 2021-2050 (d)

## 2. Potential project's impacts and risks

### 2.1 Key potential impacts of the project on social and environmental

#### Project Structure

73. The project goal is to sustainably maintain the poor and vulnerable households in the project area out of poverty. The development objective is to enhance the income generating opportunities for the poor and vulnerable households in the project area, and the inclusiveness of the benefit-sharing mechanisms from agro-industries.
74. This will be achieved by (i) strengthening and supporting cooperatives, committed to poverty alleviation in terms of inclusiveness of poor households among their members and fair shareholding and benefit sharing mechanisms, to become more competitive and generate more revenues; (ii) stimulating additional and more diversified income opportunities in the project areas, by providing services and stimulating local entrepreneurship, and attracting new investors in agricultural or (rural/resource-based) non-agricultural activities; (iii) improving access to finance; and (iv) addressing some of the major gaps in the current infrastructure system in the project area which may limit or constrain the implementation of the proposed project activities. Climate change considerations will be mainstreamed throughout the project by strengthening the capacity of the government and beneficiaries to assess climate risks and identify adaptation options - and plan and decide accordingly, and improving the climate-resilience of the infrastructure system.
75. The Project consists of 3 components: (1) Component A: Supporting Inclusive Rural Development; (2) Component B: Climate-proofed Public Infrastructures Planning and Development; and (3) Component C: Project management, M&E, Knowledge Management, and Policy.
76. Component A will cover specific production and processing infrastructure of agribusiness entities in their respective investment plans, while Component B will mainly complete the gaps of the village level public infrastructure systems to support the proposed agribusiness

development, and also provide public services to local villagers particularly support demonstration and development of climate proofed smart irrigation. Meanwhile the major public infrastructure systems in the targeted project areas will be covered by relevant government investments.

77. **Key indicators:** The impact of the project would be measured through the following key indicators: (i) Number of rural producers' organizations engaged in formal partnership/agreements or contracts with public or private entities; (ii) Number of Pro-poor Farmer Professional Cooperatives meeting the operational standards; (iii) new jobs created; (iv) increase in cooperatives' profits; (v) Percentage of supported rural enterprises reporting an increase in profit; (vi) %age of people reporting adoption of environmentally sustainable and climate resilient tech and practices. Indicators will be disaggregated by gender, age, and ethnic group, when relevant.
78. **Expected outcomes:** Expected outcomes include: (i) Strengthening participation of poor and vulnerable population in rural economic growth; (ii) Up-grading/developing Pro-poor farmer cooperatives; (iii) economic opportunities for women and youth enhanced; (iv) resilience to the negative effects of climate change enhanced.

### **Impact Evaluation**

79. **Social Impacts.** In the context of rural revitalization strategy, most of project's socially derived impacts are expected to be largely positive. The Y2RDP strategy calls for the transformation of poor Yunnan project areas that will be supported through the project mainly through increasing post-production agricultural activities, introducing and improving value addition efficiencies, provision of off-farm employment, promotion of greater market access and climate smart community smart development infrastructure.
80. All project activities will be supported through forming 'new economic entities' which, in the China revitalization strategy context, are cooperatives, lead/big households, family farms and lead enterprise. Due to development of urban labour markets and male migration many of the beneficiaries remaining in project counties will be female and the elderly and priority will be given to youth and particularly the returnee young investors. At the village level adequate safeguards have been built into project design per PRC IFAD policies to ensure fair distribution benefits among these and other groups including ethnic minorities in the project areas.
81. At the village level major benefits derived from the project would include higher incomes and well-being derived from increased and diversified sustainable production and post-production practices driven by improvements in water management, construction of new and improvements of existing roads, land terracing and land levelling and provision of off-farm employment opportunities and the capture of value-added associated with support for adopting a value chain approach based on one or more selected commodities.
82. At the household/individual level improved health conditions will be achieved through programme support for provision of safe drinking water, safer use of agro-chemicals, reduced exposure to pollution from modernized agro-industries participating in the project, better worker conditions per existing PRC policies and nutrition enhancement.
83. Specifically, the project would assist an expected 414540 primary beneficiaries (individuals) including 50% women, 30% youth and 60% ethnic minorities. In addition to these beneficiaries, the project would benefit 100% of the population in the participating

villages as many of the Y2RDP's investments in village access roads, drinking water, and other public investments would spread to other non-targeted village members

84. Gender focus is applied in the project design by responding to the needs of women due to their increasing role in household businesses. Every cooperative eligible for IFAD funds must have at least 50% of women membership. Women led cooperatives and business entities will be given priorities. With improvement of economic empowerment by the project activities, women will be more actively involved in post-production and marketing activities, which will improve their status in the household. Together with their collective participation in cooperative management, women through the project process will increase their capacity to speak out in the community and gradually strengthen their role in the community decision-making. Women's participation in programme activities will be ensured by applying gender-sensitive M&E indicators.

### **Environmental Impacts and Risks.**

85. The Y2RDP Project targets 7 counties with a high level of poverty in 3 prefectures, namely Yunlong, Yongping counties in Dali Prefecture; Lanping county in Nujiang Prefecture; and Zhengxiong and Suijiang counties in Zhaotong City; and Yongsheng and Huaping counties in Lijiang Prefectures. It aims at supporting the Government in consolidating its achievements in poverty eradication and implementing rural revitalization strategies.
86. The targeted counties are located in the four prefectures (cities) in northeast and western Yunnan where ethnic minorities are concentrated. Common nature conditions in these areas are mountainous topography, high elevation level, comparatively rich precipitation, and land block due to mountains. Elevation level ranges from 380 meter to 4400 meter above the sea; and average annual precipitation ranges from 800 mm to 1,100 mm. Traditionally, rain-fed agriculture is a dominant practice. Seasonal droughts, floods and landslides are a common phenomenon. Underdeveloped infrastructure systems, especially rural roads, agriculture water management systems and drinking water supply facilities, have been one of the major constraints to local agriculture and rural development. Slope cultivation is a major cause of soil and water erosion.
87. Benefited from increased government investment in the past decades, including implementation of the Plan on Poverty Alleviation, local major public infrastructure systems have been largely improved in recent years, especially county and township level drinking water supply systems, and rural roads connecting administrative villages and townships with external networks. However, development of village level public infrastructure systems is still lagging behind, especially, the lack of irrigation engineering.
88. 31%-95% of the cultivated lands in the project counties are segmented slope lands, some even steeper than 25 degree, which hampered mechanization, caused soil and water erosion, and affected enhancement of water use efficiency. Average about 68% of village are in lack of connecting roads to production bases. Some villages are still in lack of roads connecting with townships and other villages. And about 112,093 village farmers and 264,640 animals are lack of access to safe drinking water or not reach to standard. There is an urgent need to enhance soil and water conservation, improve rural roads, and complete water supply systems in these areas in order to meet the demands of agricultural production, poverty reduction and livelihood improvement.
89. Local agricultural production requires both supplementary irrigation, especially for cash crops and economic trees. Surface water diverted from nature streams or water ponds or

pumped from valleys is the major source for irrigation. Due to underinvestment in the past decades, water storage and delivery systems are limited. Only 22% to 67% of the cultivated lands are irrigated, which is much lower than the provincial and national average. The limited existing irrigation systems are mainly developed several decades ago, facing some common issues in degraded water storage capacity, deteriorated water delivery and control systems, and low system performance. Associated drainage systems are either incomplete or deteriorated. These impose an urgent need in completing and improving irrigation and drainage systems in order to better meet the requirements of agricultural production and agribusiness development.

90. Climate change is future compounding the situation. From 1961 to 2010, mean temperature in the project area increased at a rate of 0.16° C per 10 year. Temperature increase is more obvious in winter and spring seasons. Precipitation decreased in spring and autumn, and increased in summer. Frequency and intensity of extreme weather events increased, which caused more serious seasonal droughts, floods and soil erosion.
91. Since the 21st century, the drought has changed from once in 1~3 years to 1~2 years. It is projected that by 2050, mean temperature will further increase by about 2° C; total annual precipitation is likely to increase, while seasonal variation will also increase. These will result in more frequent and intensified extreme weather events, seasonal drought and floods, and soils erosion. In order to enhance climate resilience to effectively respond to these risks, development and improvement of climate-resilient infrastructure system in the project area is crucial to enable road access, improve water security, and prevent soil erosion.

Table 2. Status of Public Infrastructure System in the Project Counties

County (District)	Famland	Rural Roads		Irrigation Area		Water Supply	
	Percentage of slope land (%)	Village lack of connecting road to production base (%)	Village lack of connecting road (%)	Total cultivated land area (ha)	Functional irrigation areas (%)	Number of population lack of access to safe drinking water (not reach to standard) persons	Number of animal lack of access to safe drinking water (heads)
<b>Dali Prefecture</b>							
Yonglong county	83.3	80	30	36900	41.1	8100	7500
Yongping county	74.4	70	40	14246	67.5	5000	5000
<b>Sub-total (or average)</b>	<b>78.8</b>	<b>75</b>	<b>35</b>	<b>51146</b>	<b>54.3</b>	<b>13100</b>	<b>12500</b>
<b>Nujiang Prefecture</b>							
Lanping county	72.8	88	48	29526	22.8	1070	0
<b>Sub-total (or average)</b>	<b>72.8</b>	<b>88</b>	<b>48</b>	<b>29526</b>	<b>22.8</b>	<b>1070</b>	<b>0</b>
<b>Zhaotong City</b>							
Zhengxiong county	90	85	90	139818	32	70114	16000
Suijiang county	80	83	86	13590	23.6	17676	31560
<b>Sub-total (or average)</b>	<b>85</b>	<b>84</b>	<b>88</b>	<b>153408</b>	<b>27.8</b>	<b>87790</b>	<b>47560</b>
<b>Lijiang Prefecture</b>							
Yongsheng county	60	0	2	33000	62	4351	122380
Huaping county	38	50	41	9733	65	0	2200
<b>Sub-total (or average)</b>	<b>49</b>	<b>25</b>	<b>22</b>	<b>42733</b>	<b>64</b>	<b>4351</b>	<b>124580</b>
<b>Total (or average)</b>	<b>71.4</b>	<b>68.6</b>	<b>48.2</b>	<b>276813</b>	<b>42.1</b>	<b>106311</b>	<b>184640</b>

92. Through Component B, the project also aims at improving infrastructure systems in the targeted project area through a combination of physical improvement, institutional strengthening and technical assistance in order to promote sustainable and climate resilient agricultural production. This Component would support to following activities:

- a)* Improvement and development of climate proofed smart irrigation systems, including water source structures (construction of water pools, water ponds) and pump station and delivery systems, which would provide irrigation water to both agribusiness entities and village farmers, and development of piloting climate proofed smart irrigation in the field, including sprinkler and drip irrigation systems. The infrastructure will be linked to the needs of the cooperatives supported in component A and cannot be precisely defined at this stage. An estimation of the structures to be supported include rehabilitation and development of 220 km canals, 765 km pressure pipelines, 15 set system, 12 pumping stations, 15-30 water pond, 150 water cellar, 300 water pool, and 1,330 km water pipeline. These interventions would contribute to enhancement of agricultural productivity, agriculture diversification, climate resilience and farmers' income generation.
- b)* Development and improvement of village roads and production roads, which will serve both the agribusiness entities and village farmers. The project would support development of an estimated 190 km of village roads, 161 km production roads, 216 km earth roads.
- c)* Improvement and development of safe drinking water supply systems. The project would support development of and estimated 37 km of drinking water pipeline.
- d)* Land improvement and preparation. The project would support land levelling in order to enable safe and productive farming, soils and water conservation. This activity would support development of an estimated 500 ha land levelling.
- e)* Support to infrastructure O&M. The project would support (i) establishment an strengthening of infrastructure O&M organizations, including water users' association and other infrastructure management groups, through construction of office buildings, procurement of furniture and office equipment, provision of technical assistance, and organization of workshops and meetings and training to O&M organizations and beneficiary farmers on O&M of infrastructure systems, systems; and (ii) implementation of normative O&M of infrastructure systems improved and developed under the programme during the programme life time through provision of financial support.

Table 3.Expected Sub-component B Outputs

County (District)	Farmland area terraced and leveled (ha)	Irrigation area developed and improved (ha)	No. of beneficiaries from drinking water supply systems		Length of electricity lines extended and improved (km)	Length of rural roads developed and improved (KM)	O&M of Public Infrastructure	
			Popu- lation	Animal			No. of O&M groups established	No. of people trained
<b>Dali Prefecture</b>								
Yonglong county		1200	5210	4850		50	39	78
Yongping county		1673			10	137.5	2	100
<b>Sub-total</b>		<b>2873</b>	<b>5210</b>	<b>4850</b>	<b>10</b>	<b>187.5</b>	<b>41</b>	<b>178</b>
<b>Nujiang Prefecture</b>								
Lanping county*	500	300				18	8	100
<b>Sub-total</b>	<b>500</b>	<b>300</b>				<b>18</b>	<b>8</b>	<b>100</b>
<b>Zhaotong City</b>								
Zhengxiong county*		40				207	3	60
Suijiang county		133				190	5	240
<b>Sub-total</b>		<b>173</b>				<b>397</b>	<b>8</b>	<b>300</b>
<b>Lijiang Prefecture</b>								
Yongsheng county		2666				36.8	2	113
Huaping county		1000				41	15	2800
<b>Sub-total</b>		<b>3666</b>				<b>77.8</b>	<b>17</b>	<b>2913</b>
<b>Total</b>	<b>500</b>	<b>7012</b>	<b>5210</b>	<b>4850</b>	<b>10</b>	<b>680.3</b>	<b>74</b>	<b>3491</b>

93. The project is expected to enhance crop productivity in a way that enhances natural resource management and reduce erosion through soil and water conservation. The project would invest in technologies for development of high efficiency irrigation, farmland levelling, etc.
94. The project would not involve any large infrastructure schemes, land acquisitions, resettlements, or conversion of forest or other environmentally sensitive lands. It will not involve any involuntary taking or restriction on the use of land that may result in physical or economic displacement. Not damaging or destroy any physical resources of historic, religious or cultural significance.
95. The proposed projects are spread over seven counties and:
- (i) would not impact on any sensitive areas or result in loss natural habit and biodiversity, all of the agricultural development would be located on existing cultivated lands;
  - (ii) some part of the project areas might be located in areas at high risk of geophysical hazards, notably earthquakes, however the risks to agriculture and small-scale infrastructure are considered to be minimal;
  - (iii) the project design is directed at environmentally sound and sustainable agriculture, the project will invest in rehabilitation and some new irrigation development with a high emphasis on sustainable water use efficiency and strong water management. Some increased use of pesticides is envisaged however these be supported by guidance and training in the safe and environmentally sound practices for pesticide use, waste from agriculture and processing will be small scale and will include measures to ensure safe disposal, and where viable include recycling;
  - (iii) infrastructure will be small scale irrigation schemes less than 100 ha including rehabilitation and new schemes, dams for water pond would be small (less than 5m);
  - (iv) the projects would require only limited land acquisition mainly for farm roads, land requirements would small and dispersed and would require only a small percentage (less than 10%) of individual owner and; and (v) the project design is aimed at ensuring vulnerable and socially disadvantaged groups are actively engaged in the project activities.

## **2.2 Climate change and adaptation**

96. There would be apparent impacts of climate change on achieving the project objectives. First, it is expected that there would be more climate extreme events with global warming, which would play a significant impact on the vulnerable population, such as women, children, elders, disadvantaged, poverty and so on. For example, drought risk would increase in most areas of 7 counties under RCP 4.5 and RCP 8.5 scenarios, which would lead to yield loss of different crops, such as maize, rice, fruits and cash crops. The rural livelihoods of target counties most depends on agriculture, which provides food and economic income. If drought hazards occur frequently in the future, it would impact the livelihoods of poverty-stricken families and general income families.
97. Second, it would require some changes in farming and processing in local regions, such as relocation or spatial optimization of agricultural production, infrastructure construction adjustment, planting structure adjustment, and adjustment of agriculture management



measures. Third, it would have an impact on the environment and ecosystem, such as increased pest and disease, soil degradation, and water shortage.

98. From the perspectives of poverty-stricken population, the treat of climate extreme events is bigger compared to general families; due to the poor source of income and poor survival and resilience capacities. The poor families have limited skills or resources to cope with the shock of climate extreme events. Therefore it is important to promote the adaptation and resilience capacities of poverty-stricken population (GongYazhen, et al). For example, many countermeasures are helpful to increase the resilience of poor families, such as the training on cultivation technologies of cash crops, the construction and improvement of farmland infrastructures, the resistant varieties application.

### **3. Environmental and social category**

99. The project is classified as Category B, as far as environmental and social risks are concerned. The Project may to some extent have some adverse environmental and/or social impacts on human populations or environmentally significant areas. However, the possible impacts are site-specific and none has been identified as irreversible in nature, and can be readily remedied by appropriate preventive actions and/or mitigation measures.
100. Water infrastructures are smaller water harvesting ponds (15-100m<sup>3</sup> serving 5-40 ha each), upgrading and rehabilitation of reservoirs (max. 130 000m<sup>3</sup>) and some pumping stations. The water sources are rainwater and mountain streams and the Jin Sha Jiang river which has a dry season streamflow of 400m<sup>3</sup>/second against which the water volume intake will be insignificant. Road works are all below the threshold for requiring an environmental assessment and the counties have experience in soil erosion control and proper drainage in mountain road construction.
101. The infrastructure will entail some conversion of farmland, where all farmers impacted will lose less than 10% of the land they have user rights to through voluntary agreements. The increased production, can potentially increase pollution from pesticides and increase pressure on land resources against which farmers will be trained in IPM and soil fertility management. All these possible impacts are reversible in nature, and can be readily remedied by appropriate preventive actions and/or mitigation measures as outlined in the ESMP (PIM chapter 9). The farmer-cooperative-enterprise models for rural transformation has risks of elite capture and limited economic inclusion and benefits generated for poor and vulnerable households, women and youth. It is at the core of the design to support a pro-poor and inclusive development and implementation of these models and monitor the results (ref. component A).
102. Some of the activities that have been preliminarily identified in the project that may have some impact on environment include construction or rehabilitation of rural roads in “non-sensitive areas”, small-scale irrigation works, agricultural intensification and expansion of cropping area in “non-sensitive areas”, livestock development, water conservation measures. The project would adopt beyond the "cause no harm" safeguard principles, but expected to bring positive impacts social and environmental. The Project design mission confirmed that no infrastructure would trigger IFAD's "category A" classification.
103. Similar to preliminary assessment during the Inception Mission, the Design Mission confirmed proposed activities does not see any resettlements required. According to IFAD policies, any economic or physical displacement caused by the project require additional assessments and application of specialized tools to mitigate potential adverse social

impacts such as a Resettlement Action Plan (RAP) agreed through participatory processes and applying the principle of Free, Prior and Informed Consent (FPIC).

#### 4. Climate risk category

104. **Climate risk classification.** The potential climate risk of this project is classified as "moderate". The three key climate trends that may have a potential impact in the project area are: (i) Changes in rainfalls quantity and intensity: Decrease in rainfalls may affect the viability of rain-fed agriculture in the absence of irrigation or water harvesting technologies; shorter but more intense rainy seasons may increase flood risks and landslides; (ii) Changes in rainfall patterns: Changes in the seasonality of the rainy seasons, particularly delays in the onset of the rainy season, may increase the risks of droughts and have detrimental consequences for the agricultural production; (iii) Increases in temperatures: Higher temperatures in the dry season may increase the magnitude of dry spells and droughts.
105. The project will finance a series of hard and soft investments (i.e. climate-proofed infrastructures, institutional strengthening, and technical assistance) aimed at reducing the risks and the negative impacts associated to the changing of weather and climate conditions, and promote climate-resilient production (e.g. Improving climate-risk assessment, planning and decision-making, and Piloting climate-smart irrigation investments - Ref. Component B). To further reduce the potential negative impacts of climate change on the project investments, the project would adopt adaptation measures, e.g. (i) the project will refrain from investments in headworks (i.e. intake weirs), which are prone to flood damage; (ii) all physical infrastructures, and particularly on-farm irrigation works and rural roads, will be climate-proofed.
106. As most of the infrastructures financed by the project will be relatively small infrastructures, climate-proofing will be largely achieved by the implementation of good management, operation, and maintenance practices. Potential climate risks related to the project investments are mostly linked to changing rainfall patterns and rising temperature, which in turn may lead to (i) landslides on steep hillsides, (ii) flash floods and water logging in lowlands, and (iii) droughts and extreme hot spells.
107. In this report, the climate risk is classified into 3 levels, including higher level, moderate level and lower level considering the vulnerability and resilience level of the community. For higher level of climate risk, it is defined that the county is very likely to be attacked in most frequent and intense by climate extreme events with the possibility of biggest economic loss. For moderate level of climate risk, it is defined that the scale and frequency of climate extreme events faced by the county are in the middle level. For lower level of climate risk, it is defined that climate extreme events faced by the county are less and smaller, which lead to the least possibility of loss among the counties.
108. The distributions of climate risks under RCP scenarios from 2021 to 2050 in Yunnan shows that the future challenges faced under climate change are the drought and rainstorm disasters. Comparing the risks under RCP scenarios, the higher risk area is concentrated on several regions, including Zhenxiong, Lanping and Yongsheng. Besides, Yunlong, Yongping and Suijiang are under moderate risk; the climate risk is lower in Huaping county.

109. In the next 30 years, Zhenxiong would be faced with moderate hazard of rainstorm and low hazard of drought; otherwise, the exposure and sensitivity in Zhenxiong are the highest, but the adaptation capacity is the lowest, so the vulnerability of Zhenxiong county is the biggest among the 7 counties; therefore, the integrated climate risk in Zhenxiong would be the highest.
110. Lanping would be threatened by moderate hazard of rainstorm and drought in the future; the exposure in Lanping is moderate, the sensitivity is high, and the adaptation capacity is in the moderate level; so, the vulnerability of Lanping country is big; the integrated climate risk in Lanping would be in the higher level.
111. Yongsheng would be faced with higher hazard of drought and moderate hazard of rainstorm; the exposure, sensitivity and adaptation capacity in Yongsheng are in moderate level, so the vulnerability of Yongsheng country is in moderate level; finally, the integrated climate risk in Yongsheng would be in higher level.
112. Yunlong would be faced with moderate hazard of rainstorm and drought; the exposure in Yunlong is low, the sensitivity and the adaptation capacity are in the moderate level; so, the vulnerability of Yunlong country is in lower level; the integrated climate risk in Yunlong would be in moderate level.
113. Yongping would be threatened by moderate hazard of rainstorm and drought in the future; the exposure in Yongping is lower, the sensitivity the adaptation capacity are in higher level; so, the vulnerability of Yongping country is in lower level; the integrated climate risk in Yongping would be in moderate level.
114. Suijiang would be faced with low hazard of drought and high hazard of rainstorm; the exposure in Suijiang is low, the sensitivity the adaptation capacity are in higher level; so, the vulnerability of Suijiang country is in lower level; therefore, the integrated climate risk in Suijiang would be in moderate level.
115. Huaping would be faced with high hazard of drought and rainstorm; the exposure and sensitivity in Huaping are low, the adaptation capacity is in higher level; so the vulnerability of Huaping country is the lowest among the 7 counties; therefore, the integrated climate risk in Huaping would be the lowest.
116. In this report, climate risks in different counties are involved in many factors, such as drought, rainstorm, exposure indicators, sensitivity indicators, and adaptation capacity indicators.

## **5. Recommended features of project design and implementation**

### **Introduction**

117. SECAP Project Assessments is conducted at project proposal development stage to assess the effect of a proposed development on the environment and socio-economic conditions and assess the vulnerability/sensitivity of the proposed development to climate risks. The assessment is directly related to the Project development and should enable the identification of project-specific impacts and/or measures to manage climate risks. It has a well-defined beginning and end and focuses on informing a specific decision at a

particular point in time is focused on the minimization of negative impacts and the enhancement of positive impacts.

118. The SECAP Project Assessment should have a narrow perspective and includes a high level of detail. Changes or introduction of new measures to the design have been made to eliminate or reduce potential adverse environmental, health and social impacts, or make better use of opportunities and synergies and complementarities between relevant national frameworks and key actors.
119. The overall goal of the proposed project is to sustainably maintain the poor and vulnerable households in the project area out of poverty, while its development objective is to enhance the income generating opportunities for the poor and vulnerable households in the project area, and the inclusiveness of the benefit-sharing mechanisms from agro-industries. The project will support strengthening and supporting cooperatives, stimulating additional and more diversified income opportunities, and addressing some of the major gaps in the current infrastructure system such as the development of land and water infrastructure, rural road, drinking water supply, and extending power supply system.
120. The project is categorized as Category B and an Environmental and Social Management Plan (ESMP) has been prepared. The ESMP sets out the measures to be taken during the implementation and operation of the project/ to eliminate or offset adverse environmental and social impacts, or to reduce them to acceptable levels; and (ii) the actions needed (monitoring/supervision/reporting requirements), implementation arrangements, institutional responsibilities, time schedule and costs to implement the measures. The ESMP requirements are described below and the ESMP is presented in Attachment 2.

### **5.1 Environment and social mitigation measures**

121. **Social mitigation:** The risk of project implementation includes gender issues and all forms of gender based discrimination and exclusion from project benefits and leadership roles, where women, youth and vulnerable households are not benefiting from the project interventions. Continuous assessment of the participation of all beneficiaries need to be fully assessed during project implementation. Should significant populations of target groups be found to be excluded or cannot access the project benefits, the PMO should start to make any necessary corrective actions to address the issues.
122. **Environment mitigation measures.** The activities under the project may have potential risks to the environment. The increased production with inadequate practices may increase soil erosion, pollution from agrochemicals and waste from processing activities. Improvement or new development of irrigation schemes may impact on water ecological systems from overuse of the water source to the downstream areas. Furthermore the project, if not carefully managed, may trigger conversion of forest land to reservoirs and pumping stations. Therefore proper planning and mapping of infrastructure development are very essential. Moreover the project should closely monitor the potential environment impacts of the project during the implementation.
123. Major risks to infrastructure improvement activities under the project include inappropriate O&M of infrastructure systems resulted from inadequate institutional capacity; damage of infrastructure systems due to floods, landslides or soil erosion; and inefficient use of irrigation water due to inappropriate irrigation practices. The project designed activities on: incorporating climate change considerations into infrastructure improvement to enhance the resilience to nature disasters and climate change impacts;

identification/establishment and strengthening of infrastructure management organizations to enhance institutional capacity in infrastructure O&M; and technical training to disseminate water-saving irrigation technologies. Possible risks and measures for mitigation are summarised in Table below.

Table 4. Risks and Mitigation Measures

<b>Risks</b>	<b>Risk level</b>	<b>Risk mitigation measures</b>	<b>Residual risk level</b>
Inappropriate O&M of infrastructure systems resulted from inadequate institutional capacity	Medium	County PMO, supported by TA, will advise and assist the identification/establishment and strengthening of IMGs for sustainable O&M.	Low to medium
Damage of infrastructure systems due to floods, landslides or soil erosion	Medium	IMGs, supported by County PMO, will conduct disaster risk management following government strategies.	Low
Inefficient use of irrigation water due to inappropriate irrigation practices	Medium	County PMO, supported by TA, will organize trainings to WUA staff and farmers on productive and efficient water use.	Low

## 5.2 Climate change adaptation and mitigation

124. As climate variability likely affect agricultural productivity (crops/livestock), it is necessary to take actions to increase climate resilience and decrease the negative impacts in climate vulnerable areas. Mainstreaming climate change and future uncertainty into agricultural and rural development planning is a pressing challenge, as the process is laying the foundation future events there is very limited information how to successfully operationalize adaptation pathways or how to evaluate the processes.
125. The project has been designed provide a strong foundation to climate change adaptation through; (i) incorporating climate change adaptation as an integral part of the project including through improving climate-risk assessment, planning and decision-making as well as improving infrastructures' climate resilience; (ii) the climate change adaptation will be participative capacity building on the existing small-scale farmers adaptation mechanisms together with the information from the science; (iii) building the skills and capacities of the farmer, cooperatives, government institutions to proactively meet the needs of climate change adaptation; (iv) to develop linkages and partnerships with private sector; and (v) provide a base to upscale the project initiatives to wider areas.
126. The climate risk analysis will refer to any existing broader agricultural risk management analysis as well as project-level risk analysis to ensure the right prioritization and consistency with other sources of risk. Based on this analysis practical risk management and adaptation measures can be defined that can be integrated into the project design.

127. Developing initiatives to provide improved productivity and financial returns in parallel with strengthening the institutional base and laying foundations for climate change adaptation is critical; experience that many programs for climate change adaptation has been less successful as farmers are reluctant to change or invest in measures that may not be immediately apparent or may not occur. An in-depth climate risk analysis has been conducted as part the SECAP review. The climate adaptation plan has also been incorporated in the project design that includes
- (a) The establishment of good agricultural practices and initiatives to strengthen the existing and future climate resilience. The adaptation program will incorporate actions for the project interventions with the objectives of ensuring improved returns within a framework of long-term sustainability.
  - (b) Developing the skills and capacities of the farmers, cooperatives, government institutions and private sector to proactively act as a cadre of leaders, facilitators, brokers and entrepreneurs for change including priming and piloting adaptation initiatives and supporting policies.
  - (c) Strengthen the knowledge base on climate resistant infrastructure and agriculture including dissemination of climate change information, strengthening of the county level climate information systems, information on climate resilient technologies including climate resilient seed varieties, adjusted and diversified cropping patterns and agricultural practices, and improved weather forecasting including La Nina and El Niño events.
  - (d) Developing a high level of farmer engagement and participation to integrate the existing and traditional farmer climate skills together with the outputs of climate science. Establishment of participatory monitoring and evaluation.
  - (e) Ensuring infrastructure is built to climate resilient criteria incorporating relevant government standards and codes.
  - (f) Provide a strong base to upscale the project's production and climate change initiatives to wider areas.
128. The project also sees digital agriculture is an alternative adaptation measure that can effectively integrate climate resilience measures without extensive additional costs. Digital agriculture is a comprehensive product of modern technology and multi-disciplinary integration. With the knowledge background of geography, agronomy, ecology, plant physiology, soil science and other basic disciplines, it serves for agricultural production. High and new technologies such as remote sensing, geographic information system, global positioning system, computer technology, communication and network technology and automation technology are adopted to provide precise services for agricultural production.
129. Digital agriculture can realize real-time monitoring of crops and soil from macro to micro in the process of agricultural production. At the same time, it can acquire the regular information of crop growth, development, diseases and pests, water and fertilizer, and the corresponding environment, and generate the dynamic spatial information system.

Through the simulation of the phenomena and processes in agricultural production, we can make rational use of agricultural resources, reduce production costs, improve the ecological environment, and improve the quality of agricultural products.

130. The purpose of improving the ecological environment and the quality of crop products. Using digital agriculture, irrigation, fertilization and breeding of crop varieties can be efficiently managed according to the real-time forecast of meteorological disasters. Under the condition of ensuring the healthy growth of crops, the use of inputs such as energy, fertilizer and water resources can be reduced, and the adaptability of crops to climate change can be improved and effectively reduce the adverse impacts of climate change. Digital agriculture has the synergistic effect of adaptation and mitigation.

### **5.3 Multi-benefit approaches**

131. The project offers some opportunities to promote green growth and multiple-benefit approaches for production, poverty reduction and the environment, including maintaining ecosystem services and biodiversity, reducing emissions, improving health, and building climate resilience.
132. For digital agriculture, it will not only decrease the use of inputs that has the synergistic effect of adaptation and mitigation. Digital agriculture is an approach which can promote green growth with multiple-benefits. Digital agriculture is a low-carbon and green integrated agricultural technology system, which can not only reduce inputs but also increase crop yields through numerical intelligent technology.
133. Moreover, conservation tillage is a sustainable agricultural technology that can reduce soil erosion, protect farmland ecological environment and achieve coordinated development of ecological benefits, economic benefits and social benefits by means of comprehensive supporting measures such as less tillage, no-tillage, surface micro-topography transformation technology and surface cover, rational planting, etc. In the application process of digital agriculture, the utilization efficiency of inputs can be improved and the production cost can be reduced.
134. Optimized agricultural management measures, such as scientific fertilization and irrigation, can not only significantly improve agricultural production, but also reduce the excessive use of chemical fertilizers and pesticides and reduce environmental pollution. The application and development of digital agriculture will contribute to the production of more healthy agricultural products, so as to further improve the price of agricultural products, increase the income of farmers, and contribute to agricultural development and poverty alleviation.

### **5.4 Incentives for good practices**

135. Premium organic agriculture products can be an incentive to promote good agriculture practices that is sustainable and environmental friendly. Farmers will not necessarily pursuing the highest agriculture productivity that may create negative impacts to the environment, but aims to get the highest additional values and profits out of it.

136. Allowance and price insurance are two incentive measures as tangible benefits for relinquishing unsustainable practices (farming, processing, etc.), reducing risk, and helping smallholders adopt adaptation and mitigation measure. Allowance is a direct incentive for smallholders to change their behaviours and take measures to tackle climate change issues, such as protecting ecological environment, reducing chemical fertilizer and pesticides, applying renewable energy in farming or processing.
137. Price insurance is an indirect incentive for smallholders. If price insurance of agricultural products is spread, the benefit of smallholders would be guaranteed, which could avoid the loss due to the fluctuation of market. Price insurance could be provided by local government for free. But if smallholders accept price insurance, they should also achieve the standards made by local government, such as relinquishing unsustainable practices, adopting adaptation and mitigation measures.

### 5.5 Participatory processes

138. **Community Mobilization Process.** A strong and well-defined social mobilization process will facilitate the delivery of the project activities in an inclusive and effective manner. It will ensure that the project is able to target and include its intended beneficiaries and that the target group fully understand the opportunities presented by the project as well as the obligations and responsibilities for those who chose to join the project. It will enable project activities to be fine-tuned to respond to the ground realities and priorities of the households.
139. Suitable participatory approaches and tools to enhance stakeholder engagement and draw on local understanding of problems and potential solutions are very essential elements in project implementation. The aim of participatory process is to involve community and beneficiaries in a multi-stakeholder risk analysis, planning, implementation and monitoring and evaluation of the project. It also helps staff members and partner organisations to engage with communities. The nature of the participatory process supports men and women to act as agents of their own development who, with the right resources and support, can solve their own problems. It promotes the participation of community, and women in particular, in risk analysis and decision-making process when it comes to prioritising what a community need to do to improve their livelihood and reduce its disaster risk.
140. Carry out a participatory capacity building and vulnerability assessment should be regarded as an investment that needs to be repeated regularly to help community to achieve progresses and enable them to make any necessary changes to strengthen the impacts of the project. Those activities include:
  - a) to integrate disaster risk reduction (DRR) into an existing programme;
  - b) to inform the design of a new programme using a DRR approach;
  - c) to monitor and evaluate the impact of actions taken to reduce risk, and to plan new activities;
  - d) to guide advocacy strategies for DRR.



## **6. Analysis of alternatives**

141. The project design will focus to enhance the income generating opportunities for the poor and vulnerable households in the project area, and the inclusiveness of the benefit-sharing mechanisms from agro-industries. It may involve a number of commodities farmers will grow seasonally.
142. Alternatives analysis should include environmental objectives and reasons for choosing the best option. Provide where relevant a comparison of alternatives based on environmental and social impacts, climate change vulnerability, technical feasibility and cost. Over time there maybe requirements to consider crop diversification to reduce risk and also adapt to climate and market changes.
143. Commodity prices are now internationally led and although the project is designed to improve efficiency and market competitiveness farmers will be vulnerable to sudden changes in demand. Similarly, increased temperatures and more variable rainfall may affect viabilities of growing certain crops. The increase in temperature may impact on the lowland areas and open new opportunities in the upland areas.
144. The objects of the project are also to reduce the adverse impacts of environment and climate change and increase the farmer's income. Through knowledge sharing, such as farmers' schools and trainings, can improve farmers' awareness of the environment and climate change, and increase their initiative consciousness of disaster prevention and mitigation, and obtain advanced agricultural development model. In high climate risk counties such as Zhenxiong, Lanping and Yongsheng, it is suggested to do case study on Climate Risk Assessment and Digital Climate smart Agriculture Development.

## **7. Institutional analysis**

### **7.1 Institutional framework**

145. Analysis on the environmental policies and decision-making chain of command to also include other sectors (e.g. health, gender ministries) that are key actors in environmental and social management has been conducted. It helps to identify needs for a gap analysis in case of SECAP requirements against co-financiers, as necessary. The project design also assessed borrower capacity to build resilience to climate change as well as identify roles and who would be responsible for the various activities.
146. At the national level, the National Development and Reform Committee (NDRC), the Ministries of Water Resources (MOWR), the Ministry of Transport (MOT) and the State Council Leading Group Office of Poverty Alleviation and Development (SCLGOPAD) is responsible for overall social-economic development planning, irrigation and water resources management, rural roads and poverty reduction respectively. They provide respective policy advice, technical guidance and programme supports to provincial and local governments and relevant institutions.

147. At the provincial level, the Provincial Development and Reform Committee (PDRC), Department of Water Resources (DOWR), Department of Agricultural and Rural, the Department of Transport (DOT) and the Provincial Government Lead Group Office of Poverty Alleviation and Development (PGLGOPAD) are the line agencies respectively. They issue provincial sector development strategies, policies, plans and technical guidelines; formulate and implement work and budget plans for provincial government funded programmes and projects.
148. At the prefecture and county levels, the counterpart agencies are the Bureau of Development and Reform (BODR), the Bureau of Water Resources (BOWR), the Bureau of Transport (BOT) and the County Government Leading Group Office of Poverty Alleviation and Development (CGLGOPAD) respectively. They formulate and implement prefecture and county level sector development plans and projects, review and approve system planning and project designs for relevant investment activities, supervise their implementation, and advice system operation and management.
149. Various research, education and consultancy institutions at different levels in the area of irrigation, water resources management, agriculture, as well as transport are responsible for providing relevant technical services and capacity building. Water Management Stations and Agricultural Extensions Stations at township level are responsible for water and agriculture services and technical extension at field level. Public and private contractors are contracted for infrastructure construction and technical services following government procurement guidelines. Township Authorities and Village Committees are involved in project identification and planning, mobilization of beneficiary contributions. Village committees, water users' associations, and farmers' cooperatives are responsible for operation and maintenance of village level public infrastructure systems.

## **7.2 Capacity- building**

150. The Project would have a strong focus on building of capacity for the implementation at county and community levels. Capacity building/training would be provided to all key institutional participants and the principal stakeholders in order that the project is properly understood and the different parties are able to implement their assigned responsibilities. Key information and outreach materials would be produced according to the specific audience being addressed (e.g., government, cooperatives/private sector, community, smallholders).
151. The project would identify community and other stakeholder capacity-building needs, supported by effective information, education and communication activities. This include the needs for specific trainings such as natural resource management and/or climate-related issues, supervision and reporting needs, including measures (i.e. environmental approvals, local permits, compliance with specific international guidelines and standards, compensation, grievance mechanisms, etc.).

## **7.3 Additional funding**

152. During the implementation, the project may also explore the opportunities for linking the investment with multilateral or bilateral environmental and climate financing sources

(i.e. Global Environment Facility, Green Climate Fund, Adaptation for Smallholder Agriculture Programme) for enhanced results and impact. Other complementary investment projects may also become potential co-financiers to increase the multiplier effects of the project impacts to the beneficiaries in the long run.

## **8. Monitoring and evaluation (M&E)**

153. M&E plan should be developed as per the project logical framework. The log frame will be used to chart progress against activities, outputs and outcomes, using SMART key performance indicators. Establishment of baselines from which to measure progress will be undertaken in the period of project initiation. The nominated Project Officer and Research Council contact, as an invited representative on the Group, will be party to M&E plans/activities and discussions relating to project progress.
154. The log frame would set out the indicators and their means of verification for outputs and impacts. They could combine traditional process indicators and approaches to measuring research capacity, with indicators derived from the capacity development assessment tool. Impact indicators – these will be measured in terms of changes in planning within project study area and the ability of the project team and its scientific work to influence these decisions, and will be more fully developed during the inception period.
155. The outcomes of project relate to different aspects of developed capacity, and evaluation of their achievement will be supported by the capacity development assessment tool (CDAT). The use of this score-card based tool will involve measuring the baseline (start-of-project) and end-of-project capacity at the scales of individuals, organizations and networks, scoring against a set of elements under each of three capacity spheres: competencies, resources and enabling environment. The baseline assessment will help with the prioritization of capacity building needs.
156. Monitoring and evaluation for the Social Environmental and Social activities would be integrated with the overall project M&E described in the main report, and included in the Project Implementation Manual (PIM). The broad details of the monitoring and evaluation are described below
  - (a) Participatory monitoring through the informal and formal farmer groups who will be given training in monitoring and reporting project activities,
  - (b) Gender, youth and disadvantaged would have M&E data disaggregated with the focus on the specific gender, youth and disadvantaged programs.
  - (c) Specific monitoring and evaluation of the Environmental, Social and Environmental Management Plan (ESMP) described in Attachment 2.

## **9. Budgetary resources and schedule**

### **9.1. Meteorological Dynamic Monitoring System**

157. **Technical Implementation Scheme.** In view of the dominant agricultural industry in selected counties, the scheme of agrometeorological dynamic monitoring system is customized and designed; monitoring points are selected in representative areas of agricultural production, Agrometeorological monitoring equipment is deployed and installed, and the platform of agrometeorological monitoring Internet of things and monitoring management system is constructed; and long-term positioning and dynamic observation of Agrometeorological environment is implemented. To establish and form a meteorological data monitoring database with the characteristics of industrial development to provide data support for crop precision management and disaster monitoring and early warning.
158. Budget requirement to conduct such activities include:
- a) Meteorological dynamic monitoring system: mainly used for equipment acquisition, integration and deployment of construction costs, plans to select two representative monitoring points with industrial development characteristics, deploy and install two sets of Agrometeorological monitoring equipment, each of which integrates soil temperature and humidity, air temperature and humidity, solar radiation, rainfall, wind speed and direction, and images. And video and other sensors to form an agricultural meteorological monitoring system with real-time data transmission function; US\$ 20,000.
  - b) Agrometeorological Monitoring Internet of Things and Monitoring Management System Platform: Mainly used for software customization design and development expenditure, according to the characteristics of industrial development, in Yongsheng, Yunnan Province, to build the Agrometeorological Monitoring Internet of Things and Monitoring Management System Platform. US \$40,000.

## **9.2. Early-warning system for climate related disasters on agriculture**

159. **Technical Implementation Scheme.** The project needs to develop early-warning system for climate related disasters on agriculture that is based on the meteorological dynamic monitoring data, weather forecast data of meteorological departments and extreme climate data, through applying the large data analysis method of multi-source data fusion, the characteristics of climate disasters would be analyzed, including spatial and temporal distribution law; the agricultural impacts and losses of dominant agricultural products would be evaluated, which are planted in seven counties of Yunnan Province under the influence of climate change. The diagnostic index and model of main meteorological disasters in agriculture of Yunnan Province could be established; the disaster monitoring and early warning service system would be constructed in representative agricultural production areas of Yunnan Province; it would provide disaster early warning, disaster prevention and mitigation information service for local agricultural management departments, agricultural management collectives and farmers in combination with the main agricultural industries in the region.

160. The required budget for developing early-warning system for climate related disasters on agriculture are

- a) expenditure on data acquisition costs: \$20,000;
- b) Expenditure on development of disaster index and model: \$20,000; and
- c) Expenditure on the design and development of early warning service system: \$30,000

### **9.3. Digital crop management (crop-soil-climate)**

161. **Technical implementation plan.** The development of digital crop management consist of the following activities:

- a) Identification and management of high quality crop meteorological suitable area. In the vicinity of the demonstration cooperative, spatial analysis of high quality meteorological conditions of crops is carried out to identify meteorological suitable areas with high accuracy;
- b) Establishment of high-precision three-dimensional space database in cooperative scale. To build a three-dimensional spatial database of farmland, crops and environment with high temporal and spatial resolution in cooperative scale, which lays a foundation for the construction of "digital farm";
- c) Construction of a management platform for efficient utilization of high-quality agricultural climate resources. Based on GIS technology and UVA data sources, the inter-regional high frequency and high precision data collection and management of yield and quality of multiple planting parks in demonstration areas were established, which will support the IFAD to manage the production and quality of agricultural products in the project.

162. The proposed Budget to develop the digital crop management system are

- a) the construction of high-precision three-dimensional spatial database: \$20,000;
- b) the construction of a management platform for efficient utilization of high-quality;
- c) agricultural climate resources. \$30,000.

### **9.4. Application of Production Management Technology (Output, Quality, Market)**

163. **Technical implementation plan.** The application of production management technology include the following activities:

- a) Construct the Relation between Crop Yield and Quality and Key Climate Factors; that is based on accumulated temperature, precipitation, extreme events, soil and other factors, combined with crop yield and quality data, construct the quantitative relationship model between key meteorological factors and crop quality;
- b) Develop a digital and Intelligent Farmland Management Technology Management System, that is based on the real-time forecast data provided by the agricultural disaster early warning system and the monitoring results of soil and air temperature and humidity provided by the meteorological dynamic monitoring

system, put forward the suggestions of farmland irrigation and fertilization, and develop the digital and intelligent field management technology management system.

- c) Dynamic Prediction of Crop Yield and Quality, that is based on the quantitative relationship between crop yield and quality and key climatic factors, a nested DSSAT/APSIM model will be used to dynamically predict the changes of crop yield and quality in different climatic years combined with intelligent farmland management techniques.
- d) Crop Planting, Harvesting and Sales Strategy, that is based on the collection and analysis of regional crop yield and price information with big data, and according to the trend of crop yield and quality, forecast the future crop supply and demand and their price changes, and provide suggestions on planting, harvesting and marketing strategies for demonstration area.

164. The budget to conduct such activities are:

- a) Construct the Relation between Crop Yield and Quality and Key Climate Factors, \$20,000
- b) Develop a digital and Intelligent Farmland Management Technology Management System \$30,000
- c) Dynamic Prediction of Crop Yield and Quality \$30,000
- d) Crop Planting, Harvesting and Sales Strategy \$30,000

## References

- Gong Yazhen, Chen Zhan, Guan Baozhu, He Guanying, Yang Xiaojing. Behaviors and affecting factors in farmers adaptation to climate change in poor regions of China. *Journal of Beijing Forestry University (Social Sciences)*, 2016, 15(3): 42-49.
- Hempel, S., Frieler, K., Warszawski, L., Schewe, J., &Piontek, F. (2013a). Bias corrected GCM input data for ISIMIP Fast Track. GFZ Data Services. doi:10.5880/PIK.2016.001
- Hempel, S., Frieler, K., Warszawski, L., Schewe, J., &Piontek, F. (2013b). A trend-preserving bias correction – the ISI-MIP approach. *Earth System Dynamics*, 4(2), 219–236.
- Riahi K, Rao S, Krey V, Cho C, Chirkov V, Fischer G, Kindermann G, Nakicenovic N, Rafaj P. (2011). RCP8.5: a scenario of comparatively high greenhouse gas emissions. *Climatic Change*, 109: 33-57
- vanVuuren D P, Edmonds J A, Kainuma M, Riahi K, Weyant J. (2011a). A special issue on the RCPs. *Climatic Change*, 109: 1-4
- van Vuuren D P, Edmonds J A, Kainuma M, Riahi K, Thomson A, Hibbard K, Hurtt G C, Kram T, Krey V, Lamarque J-F, Masui T, Meinshausen M, Nakicenovic N, Smith S T, Rose S K. (2011b). The representative concentration pathways: an overview. *Climatic Change*, 109: 5-31
- Wu J, Gao XJ, (2013). A gridded daily observation dataset over China region and comparison with the other datasets. *Chinese Journal of Geophysics*, 56(4): 1102-1111
- Xu Y, Gao XJ, Shen Y, Xu CH, Shi Y, Giorgi F, (2009). A daily temperature dataset over China and its application in validating a RCM simulation. *Advances in Atmospheric Sciences*, 26(4), 763–772.

## Attachment 1:

### Check List and Preliminary Screening for Environmental and Social Categories and Climate Change

IFAD classifies all projects into one of three environmental and social categories (A, B or C) and one of three climate risk classifications (high, moderate and low). Where IFAD is jointly financing a project with other agencies, IFAD will cooperate with the partner agency and agree on a common approach for the assessment and the categorization of the project.

Determination of the category and classification will also depend on the national requirements and the existing national capacity to promote and implement environmental and social mitigation measures. The determination is informed by existing assessments of national frameworks and capacities.

A positive response to any question between 1 and 23 will categorize the project as A. Similarly, a positive response to question 24 to 40 will categorize the project as B. In case all answers are negative, the project will be categorized as C.

This list of questions can be used at different stages of the project design and should be used in conjunction with the respective guidance statements.

The checklists for environmental and social and climate risks will:

1. initially be filled in during concept development to help guide in the identification of opportunities and possible risks and activities that will need to be considered in the project design;
2. be attached to the SECAP review note; and
3. be reviewed during project design phases and updated as required.

Project title:	Yunnan Rural Revitalization Demonstration Project (Y2RRDP)		
IFAD project no.:		Version of checklist:	Version 1
Country:	China	Date of this version:	04/01/2020
Checklist prepared by (name, title and institution)	CAAS - IFAD Consultant		

In completing the checklist both short- and long-term impacts should be considered. This list of questions can be used at different stages of the project cycle and should be used in conjunction with the respective guidance statements. Capitalize on information based on reports and field visits during design. The details of the elaboration on issues that arise as a result of screening should be clearly articulated in the SECAP review note.



Guiding questions for environment and social screening		Yes/no	Comments/explanation
<b>Category A – the following may have significant and often irreversible or not readily remedied adverse environmental and/or social implications.</b>			
<b>Project location</b>			
1. Would the project develop any wetlands?	NO		
2. Would the project cause significant adverse impacts to habitats and/or ecosystems and their services (e.g. conversion of more than 50 hectares of natural forest, loss of habitat, erosion/other form of land degradation, fragmentation and hydrological changes)?	NO		
3. Does the proposed project target area include ecologically sensitive areas <sup>12</sup> , areas of global/national significance for biodiversity conservation, and/or biodiversity-rich areas and habitats depended on by endangered	NO		
4. Is the project location subjected to major destruction as a result of geophysical hazards (tsunamis, landslides, earthquakes, volcanic eruptions)?	NO		
<b>Natural resources</b>			
5. Would the project lead to unsustainable natural resource management practices (fisheries, forestry, livestock) and/or result in exceeding carrying capacity. For example, is the development happening in areas where little up-to-date information exists on sustainable yield/carrying capacity?	NO		
6. Would the project develop large-scale <sup>13</sup> aquaculture or mariculture projects, or where their development involves significant alteration of ecologically sensitive areas?	NO		
7. Would the project result in significant use of agrochemicals which may lead to life-threatening illness and long-term public health and safety concerns?	NO		
8. Does the project rely on water-based (groundwater and/or surface water) development where there is reason to believe that significant depletion and/or reduced flow has occurred from the effects of climate change or from overutilization?	NO		

<sup>12</sup> "Sensitive areas" include: protected areas (national parks, wildlife/nature reserves, biosphere reserves) and their buffer zones; areas of global significance for biodiversity conservation; habitats depended on by endangered species; natural forests; lands highly susceptible to landslides, erosion

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and other forms of land degradation, areas that include physical cultural resources (of historical, religious, archaeological or other cultural significance), and areas with high social vulnerability.

9. Does the project pose a risk of introducing potentially invasive species or genetically modified organisms which might alter genetic traits of indigenous species or have an adverse effect on local biodiversity?	NO	
10. Does the project make use of wastewater (e.g. industrial, mining, sewage effluent)?	NO	
<b>Infrastructure development</b>		
11. Does the project include the construction/rehabilitation/upgrade of dam(s) and/or reservoir(s) meeting at least one of the following criteria? - more than 15 metre high wall; - more than 500 metre long crest; - more than 3 million m <sup>3</sup> reservoir capacity; or - incoming flood of more than 2,000 m <sup>3</sup> /s	NO	
12. Does the project involve large-scale irrigation schemes rehabilitation and/or development (more than 100 hectares per scheme)?	NO	
13. Does the project include construction/rehabilitation/upgrade of roads that entail a total area being cleared above 10 km long, or any farmer with more than 10 per cent of his or her private land taken?	NO	
14. Does the project include drainage or correction of natural waterbodies (e.g. river training)?	NO	
15. Does the project involve significant extraction/diversion/containment of surface water, leaving the river flow below 20 per cent environmental flow plus downstream user requirements?	NO	
<b>Social</b>		
16. Would the project result in economic displacement <sup>64</sup> or physical resettlement of more than 20 people, or impacting more than 10 per cent of an individual household's	NO	
17. Would the project result in conversion and/or loss of physical cultural resources?	NO	
18. Would the project generate significant social adverse impacts to local communities (including disadvantaged and vulnerable groups and indigenous people) or other	NO	
<b>Other</b>		

19. Does the project include the manufacture and transportation of hazardous and toxic materials which may affect the environment?	NO	
20. Does the project include the construction of a large or medium-scale industrial plant?	NO	
21. Does the project include the development of large-scale production forestry?	NO	
<b>Rural finance</b>		
22. Does the project support any of the above (Question 1 to Question 21) through the provision of a line of credit to financial service providers?	NO	

**Category B – the following may have some adverse environmental and/or social implications which can be readily remedied.**

**Location**

23. Does the project involve agricultural intensification and/or expansion of cropping area in non-sensitive areas that may have adverse impacts on habitats, ecosystems and/or livelihoods?	NO	
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**Natural resource management**

24. Do the project activities include rangeland and livestock development?	Yes	China's environmental regulations for livestock farms including permits and periodic control visits will apply and Yunnan's policy for recycling animal waste will be supported
25. Does the project involve fisheries where there is information on stocks, fishing effort and sustainable yield? Is there any risk of overfishing, habitat damage and knowledge of fishing zones and seasons?	NO	
26. Would the project activities include aquaculture and/or agriculture in newly introduced or intensively practiced areas? Do project activities include conversion of wetlands and clearing of coastal vegetation, change in hydrology or introduction of	NO	
27. Do the project activities include natural resource-based value chain	NO	
28. Do the project activities include watershed	NO	
29. Does the project include large-scale soil and	NO	

**Infrastructure**

30. Does the project include small-scale irrigation and drainage, and small and medium dam subprojects (capacity < 3 million m <sup>3</sup> )?	Yes	China's environmental regulations will apply and the project will support integration of climate change trends' impact analysis on water availability and flows as part of the infrastructure design and operation
31. Does the project include small and microenterprise development subprojects?	Yes	

32. Does the project include the development of agroprocessing facilities?	Yes	China's environmental regulations will apply including obtaining permits when required and supervision visits for verifying the implementation of environmental protection measures
33. Would the construction or operation of the project cause an increase in traffic on	Yes	Moderate Increase
<b>Social</b>		
34. Would any of the project activities have minor adverse impacts on physical cultural resources?	No	The project was designed based on local products.
35. Would the project result in physical resettlement of 20 people or less, or impacting less than 10 per cent of an individual household's assets	No	There is not related activity in the project.
36. Would the project result in short-term public health and safety concerns?	No	Relevant issue was not found.
37. Would the project require a migrant workforce or seasonal workers (for construction, planting and/or harvesting)?	No	
<b>Rural finance</b>		
38. Does the project support any of the above (Question 23 to Question 37) through the provision of a line of credit to financial service providers?	Yes	Financing of Agribusinesses and marketing infrastructure

**Guidance for categorization:**

Environmental and Social Impact Assessment or an Environmental and Social Management Framework (full or specific) is required depending on availability of information.		
Also some specific questions would require the below specific actions:		
<b>"Yes" response to any questions between 1 and 22</b>	Environmental and social category is A	<ul style="list-style-type: none"><li>• Yes to Q16 – A Resettlement Action Plan or a Resettlement Action Framework is required depending on availability of information.</li></ul>
		<ul style="list-style-type: none"><li>• Yes to Q17 – A Physical Cultural Resources Management Plan is required that includes provisions for managing chance finds at implementation.</li></ul>
		<ul style="list-style-type: none"><li>• Yes to Q18 – Free, prior and informed consent should be obtained/Free, Prior and Informed Consent Implementation Plan is required depending on whether the affected communities are identifiable. In instances where indigenous peoples are affected an Indigenous Peoples Plan is required. A Social Impact Assessment is required.</li></ul>
		<ul style="list-style-type: none"><li>• Yes to Q8 and/or Q15 – A water resources management plan for the project is required.</li><li>• Yes to Q7, Q9 and/or Q19 – A Pest Management Plan is required.</li></ul>
"No" responses to all Q1-Q22 and "Yes" response to any questions between 23 and 38	Environmental and social category is B	An environmental and social analysis to develop an Environmental and Social Management Plan (ESMP) is required.
"No" response to all questions between 1 and 38	Environmental and social category is C	No further analysis is required.

In case projects fall under both Category A and B, the highest category will be taken as reference. The determination of the project category and classification will depend on the magnitude of impacts and would depend on the scale of such activities; a cautious approach to the concern of cumulative impacts is considered essential. In such cases, the necessary environmental and social analysis and associated budget should be incorporated into project design. Such projects may be considered for Category B.

Determining the environmental and social Category A, including the extent of assessments and studies to be conducted, will also take into account available information, i.e. recent studies and assessments, including other initiatives in the country, to the extent these are relevant to the proposed project.

Declassification (from A to B or from B to C) may also be possible in case negative externalities are being addressed by other projects or activities implemented by third parties.



### Guiding questions for climate risk screening

Guiding questions for climate risk screening	Yes	No	Additional explanation of “yes” response*
1. Is the project area subject to extreme climatic events, such as flooding, drought, tropical storms or heat waves?	Yes		Extreme weather events such as heavy rainfalls causing landslides and floods are occurring occasionally in the project counties as well as droughts. These events may increase in frequency in the future.
2. Do climate scenarios for the project area foresee changes in temperature, rainfall or extreme weather that will adversely affect the project impact, sustainability or cost over the project life span?	Yes		The above mentioned events may affect project impacts in extreme cases.
3. Would the project make investments in low-lying coastal areas/zones exposed to tropical storms?		No	
4. Would the project make investments in glacial areas and mountains zones?	Yes		The project will invest in mountain area not dependent on glacial water.
5. Would the project promote agricultural activity in marginal and/or highly degraded areas that have increased sensitivity to climatic events (such as on degraded lands)?		No	
6. Is the project located in areas where rural development projects have experienced significant weather-related losses and damages in the past?		No	
7. Would the project develop/install infrastructure in areas with a track record of extreme weather events?	Yes		The project will invest in construction/upscaling of processing infrastructure as well as rural roads, water and electricity. These might occasionally be impacted by heavy rainfalls which will be mitigated by incorporating adaptation measures in the project.
8. Is the project target group entirely dependent on natural resources (such as seasonal crops, rainfed agricultural plots, migratory fish stocks) that have been affected by in the last decade by climate change?		No	

Guiding questions for climate risk screening	Yes	No	Additional explanation of “yes” response*
9. Would climate variability likely affect agricultural productivity (crops/livestock/fisheries), access to markets and/or the associated incidence of pests and diseases for the project target groups?	Yes		Effects may be both negative (floods and increase in pest and diseases) as well as positive (increased growth in longer summers and milder winters)
10. Would weather-related risks or climatic extremes likely adversely impact upon key stages of identified value chains in the project (from production to markets)?	Yes		If harvests are negatively affected, the value chains would also be affected. Floods may temporarily cut off access to markets
11. Is the project investing in climate-sensitive livelihoods that are diversified?	Yes		The small holder rural families in Yunnan have diversified livelihoods including both farm (sensitive to climate events) and nonfarm activities. The fact that they are not solely dependent on agriculture makes them more resilience
12. Is the project investing in infrastructure that is exposed to infrequent extreme weather events?		No	
13. Is the project investing in institutional development and capacity-building for rural institutions (such as farmer groups, cooperatives) in climatically heterogeneous	Yes		Effective information sharing, education and specific training
14. Does the project have the potential to become more resilient through the adoption of green technologies at a reasonable cost?	Yes		E.g. the recycling of animal waste for manure and biogas energy will have a positive impact as well as positive impacts from climate resilient water and soil conservation infrastructure contributing to disaster risk reduction and adaptatio
15. Does the project intervention have opportunities to strengthen indigenous climate risk management capacities?	Yes		Indigenous measure will be included in activities strengthening beneficiary families resilience capacities

Guiding questions for climate risk screening	Yes	No	Additional explanation of “yes” response*
16. Does the project have opportunities to integrate climate resilience aspects through policy dialogue to improve agricultural		No	
17. Does the project have potential to integrate climate resilience measures without extensive additional costs (e.g. improved building codes, capacity- building, or including climate risk issues in policy processes)?	Yes		The project will support the development of adaptation guidelines for the design of infrastructure projects linked to key agricultural industries involving smallholders (water, roads, soil conservation, electricity, etc.
18. Based on the information available would the project benefit from a more thorough climate risk and vulnerability analysis to identify the most vulnerable rural population, improve targeting and identify additional complementary investment actions to		No	Except in the case of bamboo plantations, which may benefit from GHG emission accounting to access the carbon market.

## **Attachment 2:**

### **Draft Environment and Social Management Plan**

#### **Objective**

The objective of the Environmental and Social Management Plan (ESMP) is to make sure that all environmental, social and climate change risks related to the project's activities and investments are properly identified, managed and mitigated. For more details on the risks related to the project, see the full analysis in the SECAP main document. The below table outlines the projects interventions and related risks and mitigation measures, how their effectiveness will be monitored and who will be responsible, and the related budget. This framework shall be finalized as part of the Project Implementation Manual (PIM) at project start up and updated and adjusted as need be during project implementation.

#### **Grievance and Redress Mechanism (GRM)**

The project will follow IFAD's Complaints Procedure which ensures that appropriate mechanisms are in place to allow individuals and communities to contact IFAD directly and file a complaint if they believe they are or might be adversely affected by an IFAD-funded project/programme not complying with IFAD's Social and Environmental Policies and mandatory aspects of SECAP.

IFAD's Grievance and Redress Mechanism shall be fully explained to stakeholders during the programme's start-up workshop and to beneficiaries during the programme's activities. The complainants should first bring the matter to the attention of the County Project Management Offices (PMOs) of the County Agriculture and Rural Development Agencies (CARAs) or the Provincial Project management Office (PPMO) of the Provincial Agriculture and Rural Development Agency (DARA). If the PMOs or PPMO do not adequately respond, the matter may be brought to the attention of IFAD. The issue may also be brought straight to IFAD if the complainants feel they might be subject to retaliation if they bring it first to the PMOs or the PPMO.

Grievances shall be addressed at the field level by the project team which will be the first layer of redressal mechanism. If the grievance is not resolved at the field level, it will be escalated to the PPMO and then to IFAD who will be responsible for addressing grievances related to violations of the Programme's SECAP reflecting IFAD's social and environmental policies and standards.

All grievances received and action taken to address them will be reported to the relevant PMO, PPMO and the Steering committee. The PMOs and the PPMO shall ensure that all complaints received and actions taken are included in the progress reports to IFAD.

Interventions	Social, Environmental & Climate Risks	Mitigating Measure	Monitoring	Responsible Institution	Cost
<i>All interventions</i>	Risks not mitigated causing adverse impacts on people and livelihoods in the project area	<ul style="list-style-type: none"> <li>• Make sure the Grievance Redress Mechanism (GRM) is strictly applied.</li> <li>• Ensure dissemination of the GRM to local communities prior to starting project activities.</li> <li>• Maintain solid documentation for the received complaints during the operation of the project and track the level of responsiveness (provision of feedback). [SEP]</li> </ul>	<ul style="list-style-type: none"> <li>• Quarterly review of the number of complaints received.</li> <li>• Quarterly review of the number of complaints addressed, the mechanisms used and the time it took to address them.</li> </ul>	<ul style="list-style-type: none"> <li>• PMOs and PPMO. If not solved then IFAD.</li> </ul>	<ul style="list-style-type: none"> <li>• \$2,000 (PPMO admin budget)</li> </ul>
<i>All interventions</i>	<u>Social:</u> Beneficiary Dissatisfaction and Discrimination	<ul style="list-style-type: none"> <li>• Collect feedback on project performance and beneficiary satisfaction from women and men of various ethnic and age groups, with special representation of vulnerable households, through focus group discussions.</li> </ul>	<ul style="list-style-type: none"> <li>• Annual surveys. [SEP]</li> </ul>	<ul style="list-style-type: none"> <li>• PMOs and PPMO</li> </ul>	<ul style="list-style-type: none"> <li>• \$3,000 (M&amp;E budget)</li> </ul>
<i>All interventions</i>	<u>Social:</u> Gender issues and all forms of Gender Based discrimination and exclusion from	<ul style="list-style-type: none"> <li>• PMOs and PPMO to have gender and social inclusion experts and gender balance among their staff. All staff to have minimum gender training.</li> <li>• Achievement of gender quotas for beneficiaries of the various activities (on average at least 50%</li> </ul>	<ul style="list-style-type: none"> <li>• Quarterly collecting gender disaggregated monitoring and</li> </ul>	<ul style="list-style-type: none"> <li>• PMOs and PPMO M&amp;E responsible</li> </ul>	<ul style="list-style-type: none"> <li>• Included in M&amp;E budget and \$5,000 (Capacity</li> </ul>

	project benefits and leadership roles.	<p>women), as established in the Logframe and PIM, to be closely monitored. Corrective actions to be promptly taken if falling behind in achieving the targets.</p> <ul style="list-style-type: none"> <li>Gender training for men and women raising awareness on gender based discrimination and leadership training for women to be given to members of cooperatives, Water Users Associations (or their likes), and start-ups entrepreneur groups.</li> </ul>	evaluation data to track the extent to which women have been able to participate and benefit from project activities and take leading roles and positions.		building budget)
<b>Component A: Supporting Inclusive Rural Development</b>					
<b>Activity A.1.1: Upgrading Cooperatives to Meet Operational Standards</b> <b>Activity A.1.2: Matching Grant Support for Certified Pro-Poor Farmer Professional Cooperatives</b>	<u>Social:</u> <ul style="list-style-type: none"> <li>Women, Youth and vulnerable households are not benefiting from the improved business of the cooperatives</li> </ul>	<u>Social: (PIM chapter 3 attachment 1)</u> <ul style="list-style-type: none"> <li>The operational standards include criteria for inclusion of poor households, youth and women among the members and inclusion of women in the board</li> <li>The operational standards include criteria for fair benefit sharing of profits.</li> <li>Compliance with the standards will be verified by an independent third party</li> <li>Business plan proposals to include an assessment of all social exclusion and adverse impact risks and proper mitigation measures including measure to ensure inclusion and benefits to women youth and poor and vulnerable households</li> </ul> <u>Environmental: (PIM chapter 3 attachment 2)</u>	<ul style="list-style-type: none"> <li>Initial verification and annual follow up verification of compliance with social inclusion standards</li> </ul>	<ul style="list-style-type: none"> <li>Independent third party and PMOs and PPMO</li> </ul>	<ul style="list-style-type: none"> <li><b>\$5,000</b> (M&amp;E budget)</li> </ul>

	<p><u>Environmental:</u></p> <ul style="list-style-type: none"> <li>Increased production with inadequate practices may increase soil erosion, pollution from agrochemicals and waste from processing activities</li> </ul>	<ul style="list-style-type: none"> <li>Business plan proposals to include: 1) an assessment of all environmental risks and mitigation measures related to the agricultural production and eventual processing activities; and 2) documentation of how the investments in production and processing activities will comply with local environmental standards and required certificates</li> <li>TAG and CARA to review the environmental risk assessment of the business plans and compliance with IFAD and the governments environmental standards before the approval of the business plan and matching rant</li> <li>Key environmental and social risk mitigation measures to be included in the Financing Agreement between the Cooperative and the county PMO</li> <li>Training and technical assistance provided as needed to the cooperative farmers, livestock keepers and to operators and employees of related processing plants in: improved soil and water management practices; IPM; other practices increasing production sustainability and climate change adaptation and resilience; good manufacturing practices (waste management and resources use efficiency); and operation of renewable energy technologies.</li> </ul>	<ul style="list-style-type: none"> <li>Annually monitoring of cooperative's compliance with environmental and social safeguards including all mitigation measures included in the business plans and financing agreements</li> </ul>	<ul style="list-style-type: none"> <li>County PMOs with periodic checks by the PPMO</li> </ul>	
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<b>Activity A.1.3: Cooperative Co-investor support</b> <b>Activity A.1.4: Company-cooperative/household models</b> <b>Activity A.1.5: Other Innovative Models</b>	<b>Social:</b> <ul style="list-style-type: none"> <li>• Women, Youth and vulnerable households are not benefiting from the various models</li> <li>• Elite capture</li> </ul>	<b>Social: (PIM chapter 3 attachment 3)</b> <ul style="list-style-type: none"> <li>• Joint investment proposal and financing plan prepared and investment agreement signed between cooperatives, enterprise and the PPMO</li> <li>• The funding proposal and business plan must have a clear identification and socio-economic profile of beneficiary households (location, number, poverty, ethnic minority, gender and age of main participant/beneficiary, farm size, etc.)</li> <li>• Project funds can only be used to finance the cooperative or household investments including joint infrastructure and training and capacity building (no enterprise assets can be funded)</li> <li>• No funding will be provided directly to enterprises, but will be channelled through the cooperatives or directly to farmers</li> <li>• The investment agreement to include agreement to third-party monitoring of the social safeguard and inclusion measures</li> </ul>	<ul style="list-style-type: none"> <li>• Initial verification and annual follow up verification of compliance with social safeguards and inclusion standards</li> </ul>	<ul style="list-style-type: none"> <li>• Independent third party and PMOs and PPMO</li> </ul>	<ul style="list-style-type: none"> <li>• \$5,000 (Capacity building budget)</li> </ul>
	<b>Environmental:</b> <ul style="list-style-type: none"> <li>• Increased production with inadequate practices may increase soil erosion, pollution</li> </ul>	<b>Environmental: (PIM chapter 3 attachment 2)</b> <ul style="list-style-type: none"> <li>• Investment proposal and business plan to include:               <ol style="list-style-type: none"> <li>1) an assessment of all environmental risks and mitigation measures related to the agricultural production and eventual processing activities; and</li> <li>2) documentation of how the investments in production and processing activities will comply</li> </ol> </li> </ul>			



	from agrochemicals and waste from processing activities	<p>with local environmental standards and required certificates</p> <ul style="list-style-type: none"> <li>• TAG and CARA to review the environmental risk assessment of the business plans and compliance with IFAD and the governments environmental standards before the approval of the business plan and matching rant</li> <li>• Key environmental and social risk mitigation measures to be included in the Financing Agreement between the Cooperative and the county PMO</li> <li>• Training and technical assistance provided as needed to the cooperative farmers, livestock keepers and to operators and employees of related processing plants in: improved soil and water management practices; IPM; other practices increasing production sustainability and climate change adaptation and resilience; good manufacturing practices (waste management and resources use efficiency); and operation of renewable energy technologies.</li> </ul>	<ul style="list-style-type: none"> <li>• Annually monitoring of cooperative's compliance with environmental and social safeguards including all mitigation measures included in the business plans and financing agreements</li> </ul>	<ul style="list-style-type: none"> <li>• County PMOs with periodic checks by the PPMO</li> </ul>	
<b>Activity A.1.6: Establishment of County Traceability System</b> <b>Activity A.1.7: Improving</b>	<ul style="list-style-type: none"> <li>• No adverse environmental and social risks foreseen from these two activities</li> </ul>				

Climate Information and Adaptation Advice.					
<b>Activity A.2.1: Business Incubation/Service Centres</b> <b>Activity A.2.2: Investment Support for Start-ups</b>	<u>Social:</u> <ul style="list-style-type: none"> <li>Not achieving to include 50% women among the youth supported by star-up investment grants</li> </ul> <u>Environmental:</u> <ul style="list-style-type: none"> <li>Pollution from improper management of waste from the start-up activity and inefficiency in use of water and energy resources</li> </ul>	<u>Social:</u> <ul style="list-style-type: none"> <li>Application of concrete targeting strategies to attract young women to the Business Incubation Service Centers (BISC) in collaboration with the All-China-Women-Federation.</li> <li>Monitor closely the participation of women among the beneficiaries, and take action if below 50%.</li> </ul> <u>Environmental:</u> <ul style="list-style-type: none"> <li>Business plan proposal for matching grants to include: 1) an assessment of all environmental risks and mitigation measures related to the start-up activity; 2) documentation of how the activity will comply with local environmental standards and eventual required certificates; and 3) when relevant priority shall be given to renewable energy sources and water and waste recycling.</li> <li>Evaluation committee of matching grants to review the assessment of environmental and social risks of the business plans and the adequacy of proposed mitigation measures.</li> </ul>	<ul style="list-style-type: none"> <li>Quarterly collecting gender disaggregated monitoring and evaluation data to track the extent to which young women are benefitting from the matching grants.</li> <li>Annually monitoring of Start-up activities and their compliance with environmental and social risk</li> </ul>	<ul style="list-style-type: none"> <li>County PMOs periodically checked by the PPMO</li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>

		<ul style="list-style-type: none"> <li>• Key environmental and social risk mitigation measures to be included in the Financing Agreement for the matching grant as needed</li> <li>• Training and technical assistance provided as needed by the BISCs to the start-up entrepreneurs in: environmental and climate risk assessment and mitigation measures; proper management of solid waste and wastewater including recycling; resources use efficiency; and operation of renewable energy technologies.</li> </ul>	mitigation measures		
<b>3.1.3 Sub-component A.3: Improving access to finance</b>	<u>Environmental:</u> <ul style="list-style-type: none"> <li>• Credit finance supports an increase in agricultural production with inadequate practices increasing soil erosion, pollution from agrochemicals and waste from processing activities</li> <li>• Credit finance supports an increase in non-</li> </ul>	<u>Environmental:</u> <ul style="list-style-type: none"> <li>• Training in environmental and social risk assessment to be included in the training of finance institutions</li> <li>• Environmental and social risks assessments to be included in the tools used by finance institutions to evaluate credit worthiness of credit applications</li> </ul>	<ul style="list-style-type: none"> <li>• Annual monitoring of the application of the assessment tool by supported finance institutions</li> </ul>	<ul style="list-style-type: none"> <li>• County PMOs periodically checked by the PPMO</li> </ul>	<ul style="list-style-type: none"> <li>•</li> </ul>

	agricultural activities causing pollution from improper management of waste and inefficiency in use of water and energy resources				
<b>Component B: Climate Proofed Public Infrastructure Planning &amp; Development</b>					
<b>Activity B.1.1: Climate proofed irrigation planning, design &amp; decision making</b> <b>Activity B.1.2: Climate proofed Smart irrigation</b> <b>Activity B.2.2: Improvement and development</b>	<u>Social:</u> <ul style="list-style-type: none"> <li>Economic displacement by conversion of farmland to water ponds and pools. Will only affect very small areas (25m<sup>2</sup> -100m<sup>2</sup>) and no farmer affected will lose more than 10% of his/her land</li> <li>Ad hoc organisation of O&amp;M of irrigation systems and infrastructure may</li> </ul>	<u>Social (PIM activity B.1.2 description)</u> <ul style="list-style-type: none"> <li>Transparent, informed and documented discussion with all farmers benefitting from the planned irrigation system to reach voluntary signed consent with land user rights holders for placing water ponds or pools on their land. Farmers may decide compensating affected farmers by transferring user rights to land from non-affected farmers.</li> <li>Establishment of water users associations (WUA) or other O&amp;M associations/groups at the irrigation infrastructure planning phase and involve them in the design of the irrigation system and the development of an O&amp;M plan, including roles and responsibilities, budget and cost recovery mechanism.</li> <li>Training of WUA or other O&amp;M group in irrigation water management using rainfall</li> </ul>	<ul style="list-style-type: none"> <li>Six-monthly monitoring of application of environmental and social risk management measures</li> </ul>	<ul style="list-style-type: none"> <li>County PMO backed up by the County Water Bureaus as needed</li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>

<p><b>of safe drinking water supply</b></p>	<p>affect sustainability</p> <p><u>Environmental:</u></p> <ul style="list-style-type: none"> <li>• Downstream impacts on water ecological systems from overuse of the water source</li> <li>• Conversion of forest land to reservoirs and pumping stations</li> <li>• Drainage water polluted with agrochemicals</li> <li>• Low efficiency in usage of irrigation water _</li> </ul>	<p>forecasts and operation and maintenance of water infrastructure</p> <p><u>Environmental:</u></p> <ul style="list-style-type: none"> <li>• Surface water resources are in general plentiful in the rainy mountainous province (700-1100 mm/year with moderate evapotranspiration with a mean temperature between 15-23 degrees). The water source for the irrigation system investments will in most cases be water harvested and stored from mountain streams. In some cases, it will pumped water from the Jin Sha Jiang river which has a dry season streamflow of 400m<sup>3</sup>/second. The water volume intake will in all cases be far below the 2m<sup>3</sup>/second limit above which approval is needed from the Municipal Water Bureau<sup>14</sup>. There will be no pumping in the peak of the dry season where irrigation water will come from the stored water in ponds and reservoirs. It is planned the water pumping will be based on solar energy. There will be no pumping of ground water financed by the project. On the contrary, the provision of irrigation based on surface water will facilitate that irregular and unsustainable groundwater wells currently used by farmers can be closed</li> </ul>			
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<sup>14</sup> Measures for the administration of water intake permit and water resource fee collection in Yunnan province (2009)

		<ul style="list-style-type: none"> <li>• The water harvesting and irrigation infrastructures financed by the project are small scale and low risks with ponds from 15-100m<sup>3</sup> serving 80-200mu each<sup>15</sup> and reservoirs of up to 130 000m<sup>3</sup> which are all already existing but a few will be upgraded by the project. They will need approval from the County Water Bureaus<sup>16</sup></li> <li>• Only limited land areas will be used for reservoirs and pumping stations. Most of this land is currently village collectively owned barren land. The biggest case will be the solar driven pumping stations, which will cover less than 30 mu (2 hectares). No forest with any protection grade status will be affected.</li> <li>• In most cases drip and sprinkler irrigation will be used and only in few cases surface/flood irrigation will be used for paddy fields, where proper drainage will be designed.</li> <li>• Farmers to be trained in IPM in line with the government's action plan for capacity building and introduction of practices for reduction in the use of agrochemical, which has already led to a 30% reduction in pilot examples in some of the project counties. An important part of the production in the project areas are organic or green</li> </ul>			
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<sup>15</sup> 1 hectares equals 15 Chinese mu

<sup>16</sup> Regulations on the Management of Water Conservancy Projects in Yunnan Province (March 2018)

		<p>production certified meaning limited use of agrochemicals.</p> <ul style="list-style-type: none"> <li>WUAs or other O&amp;M associations/ group in areas of water scarcity will be trained in adaptive water management for water use efficiency under different climate conditions using digital water monitoring of water productivity and use efficiency</li> </ul>			
<p><b>Activity B.2.1: Improvement and development of road systems.</b></p>	<p><u>Social:</u></p> <ul style="list-style-type: none"> <li>Economic displacement by conversion of farmland to roads. Will affect limited areas and no farmer affected will lose more than 10% of his/her land</li> <li>Ad hoc organisation of O&amp;M of rural roads may affect their sustainability</li> </ul> <p><u>Environmental:</u></p> <ul style="list-style-type: none"> <li>Soil erosion and increased risks of</li> </ul>	<p><u>Social (PIM activity B.1.2 description)</u></p> <ul style="list-style-type: none"> <li>Transparent, informed and documented discussion with all farmers benefitting from the road and affected by its routing to reach voluntary signed consent with land user rights holders of farmland proposed for conversion to the road. Farmers may decide compensating affected farmers by transferring user rights to land from non-affected farmers. Monetary compensation may also be used.</li> <li>Before the investment in any road infrastructure an operation and maintenance (O&amp;M) plan for each section of the roads must be prepared, including roles and responsibilities, budget and sources of funding</li> </ul> <p><u>Environmental:</u></p>	<ul style="list-style-type: none"> <li>Six-monthly monitoring of application of environmental and social risk management measures</li> </ul>	<ul style="list-style-type: none"> <li>County PMO backed up by CARAs as needed</li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>

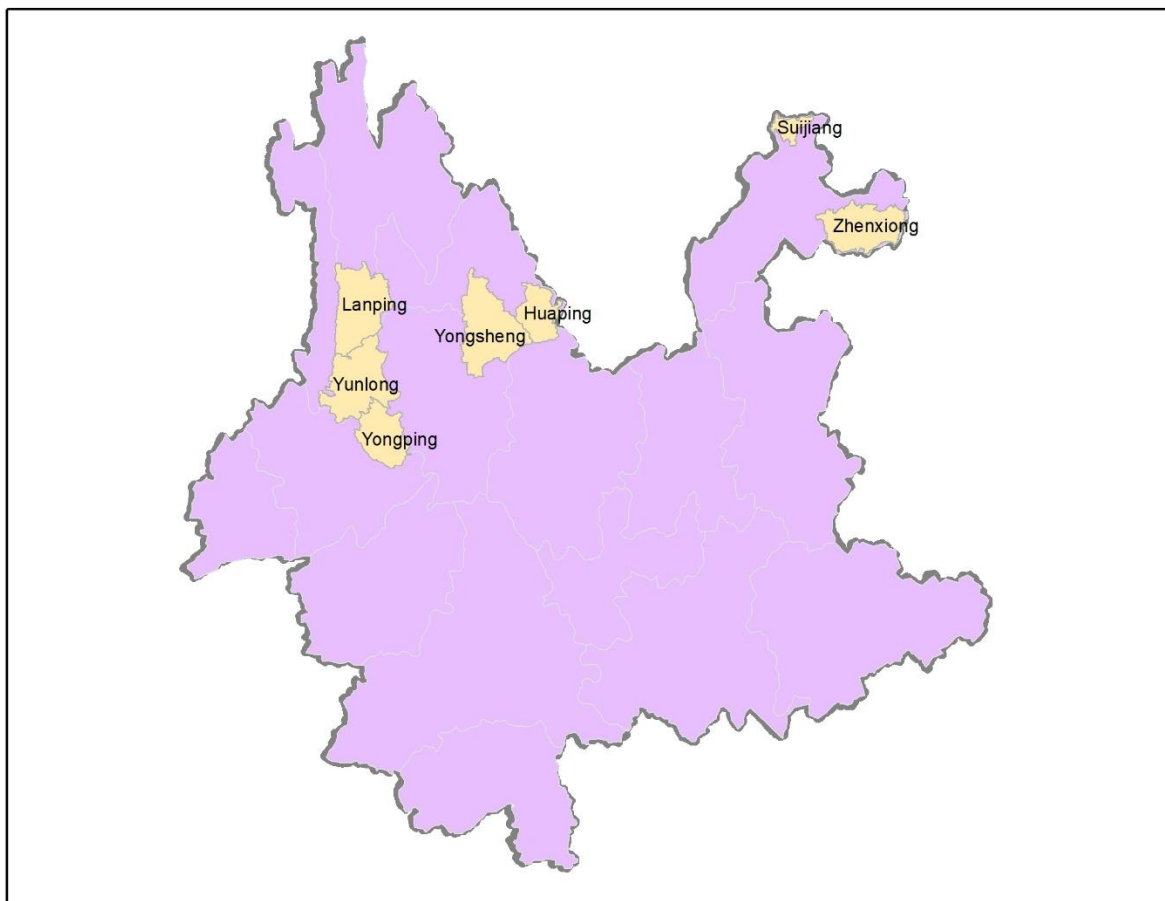
	<p>landslides from improper drainage and interventions on slopes and mountain sides removing vegetation</p> <ul style="list-style-type: none"> <li>• Conversion of forest land to roads _</li> </ul>	<ul style="list-style-type: none"> <li>• There will be a mixture of upgrading of existing roads and construction of new roads. Most of the roads are too small to require an environmental assessment. The responsibility for rural roads has been transferred to the CARA, who will oversee that proper erosion control and drainage measures are built into the bidding process, contracts, and the engineering design before they give the final permission for the road construction.</li> <li>• Township governments working with the County PMO will manage the contracting process. In addition to the constructing company, a supervision company will be contracted to oversee the works and its acceptance. A warranty is included in the construction contract, which makes the constructing company responsible for fixing any failures in the works, including the failure to apply proper soil erosion control and drainage measures, within the 1<sup>st</sup> year after the end of the project.</li> <li>• Most of the roads will go through current agriculture land and collectively owned barren land. In a few cases forestland will be impacted, which will require the assessment of impacts and approval from the forest Bureau. Forest land with any protection category should be avoided.</li> </ul>			
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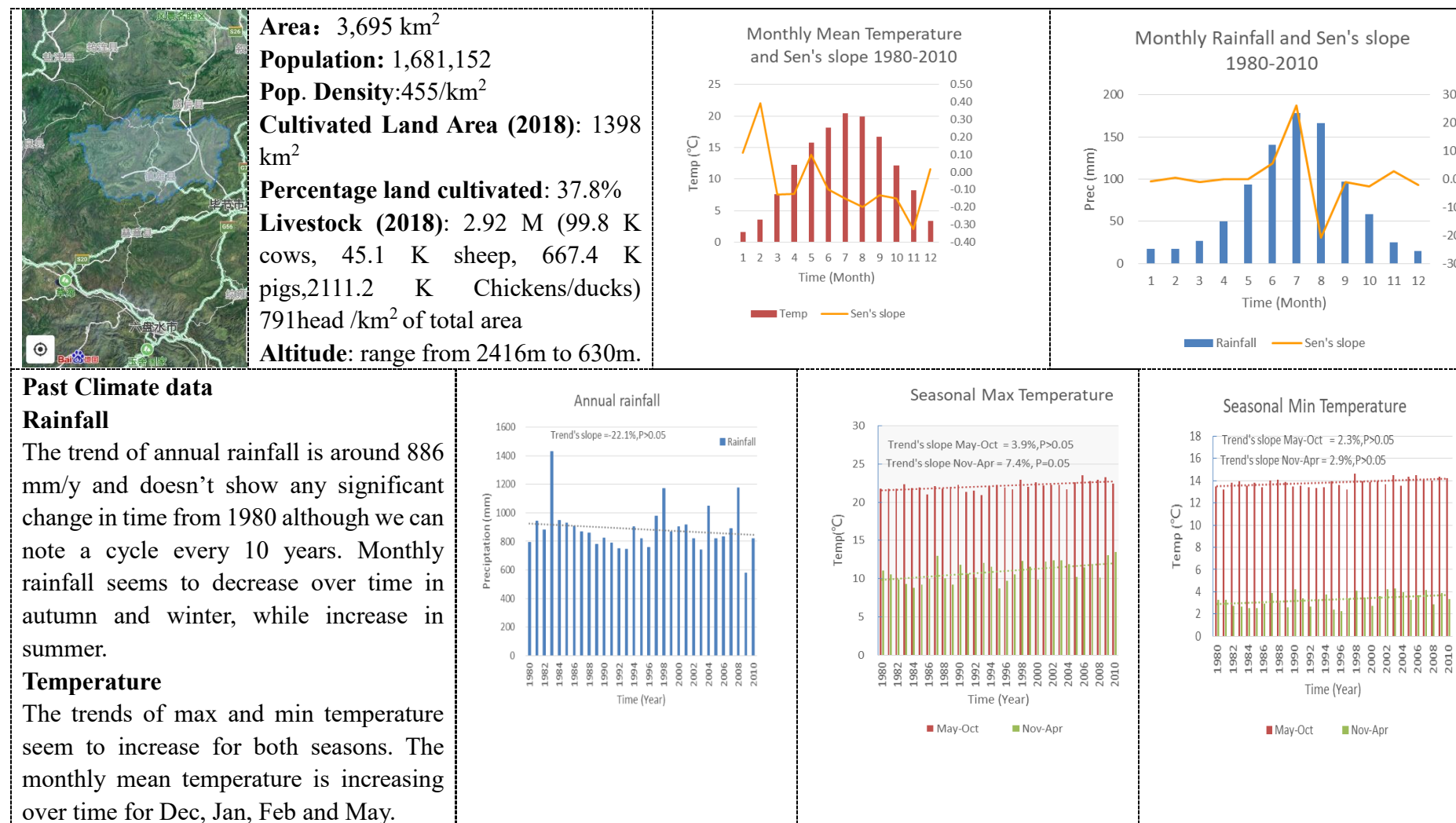
<b>Activity B.2.4</b> <b>Land improvement and preparation</b>	<u>Environmental</u> <ul style="list-style-type: none"> <li>• Loss of topsoil when levelling land and constructing terraces.</li> </ul>	<u>Environmental:</u> <ul style="list-style-type: none"> <li>• Addition of organic to the soil after the levelling should be applied as part of the land improvement approach.</li> </ul>	<ul style="list-style-type: none"> <li>• Verification in the field</li> </ul>	<ul style="list-style-type: none"> <li>• County PMOs and CARAs</li> </ul>	<ul style="list-style-type: none"> <li>• </li> </ul>
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### **Attachment 3: Climate Risk Analysis**

#### **Analysis of Climate Trends in 7 counties of Yunnan Province for the IFAD project**



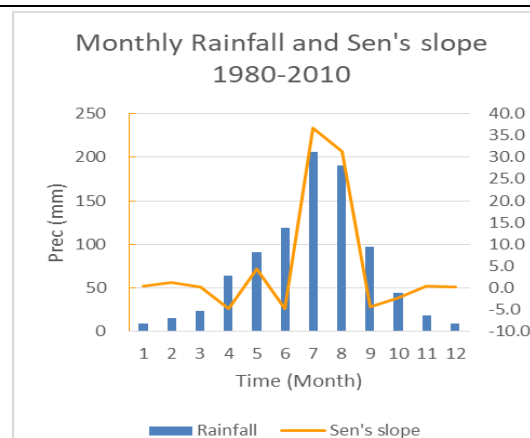
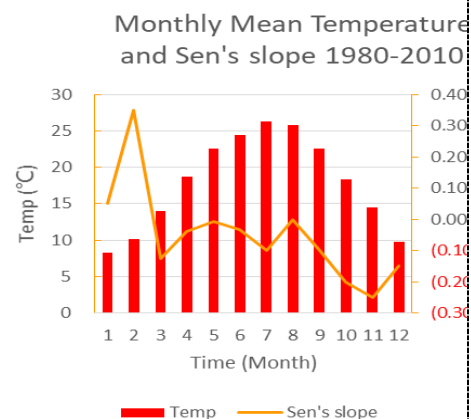
**Zhenxiong County, Yunnan**



**Suijiang County, Yunnan**



**Area:** 761 km<sup>2</sup>  
**Population:** 160100  
**Pop. Density:** 210/km<sup>2</sup>  
**Cultivated Land Area (2018):** 135.90 km<sup>2</sup>  
**Percentage land cultivated:** 17.9%  
**Livestock (2018):** 277.2K heads (5.1K cows, 9.9K sheep, 64.7K pigs, 187.4K chickens/ducks) 364 heads/km<sup>2</sup> of total area



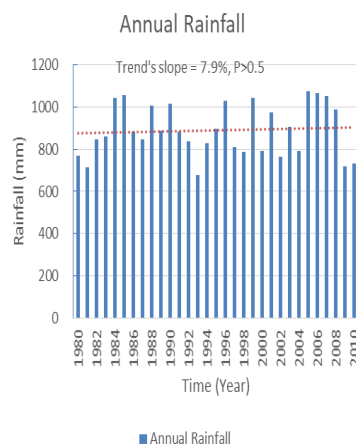
## Past Climate data

### Rainfall

The trend of annual rainfall is around 888 mm/y and doesn't show any significant change in time from 1980 although we can note a cycle every 10 years. Monthly rainfall seems to decrease over time in autumn, winter and spring, while increase in summer.

### Temperature

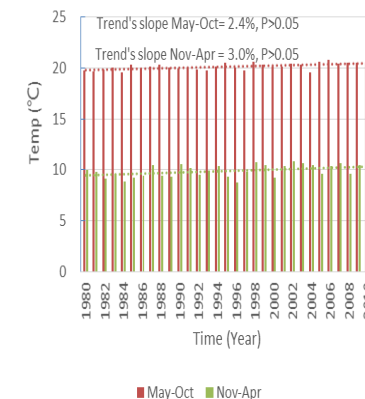
The trends of max and min temperature seem to increase for both seasons. The monthly mean temperature is increasing over time for Jan, Feb, while it showed a decrease trend in the other months.



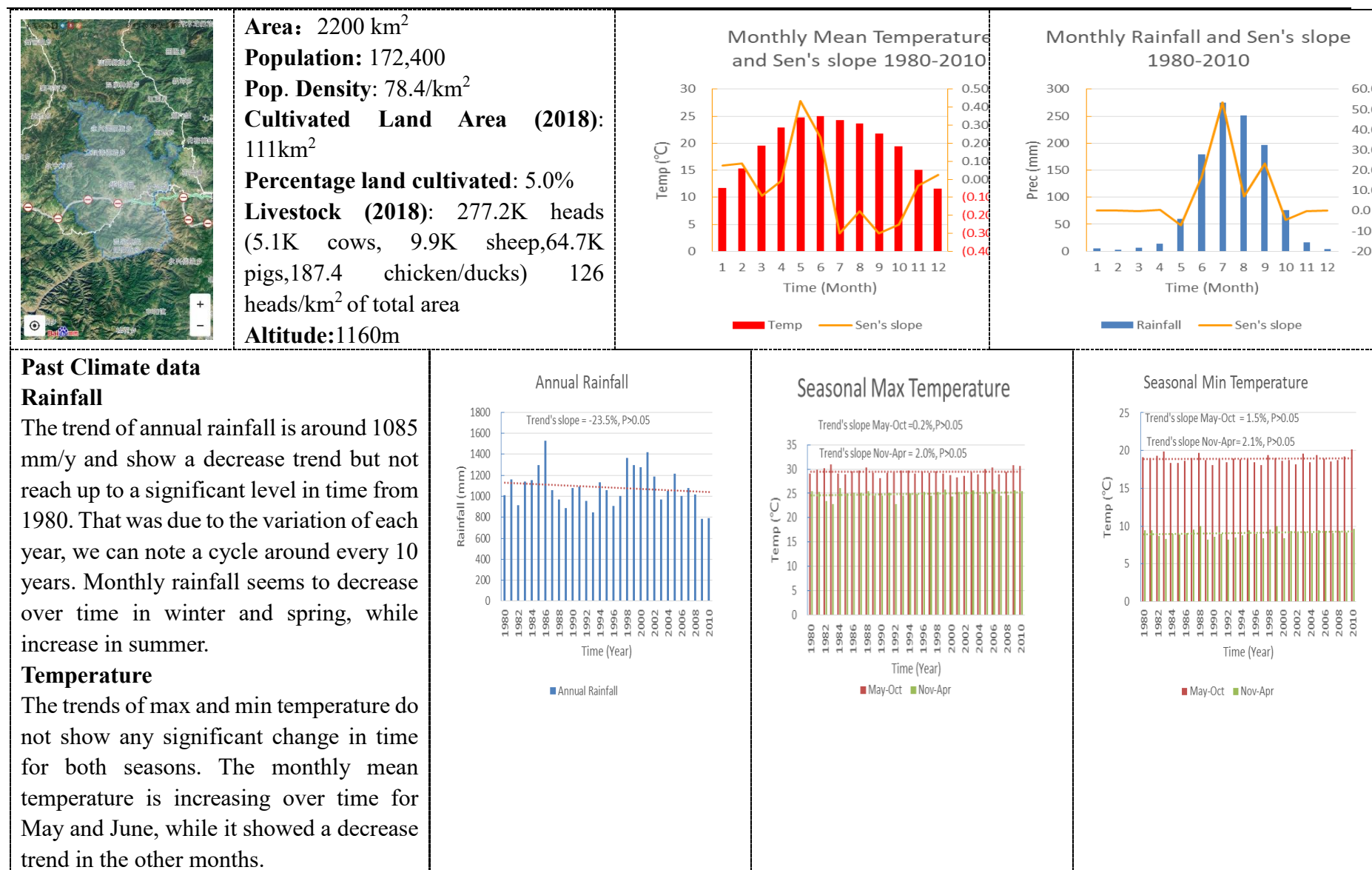
### Seasonal Max Temperature



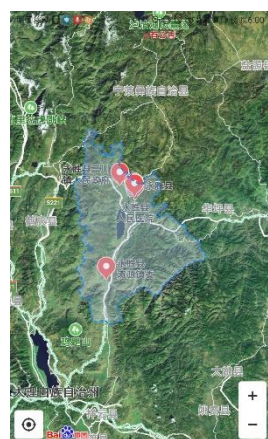
### Seasonal Min Temperature



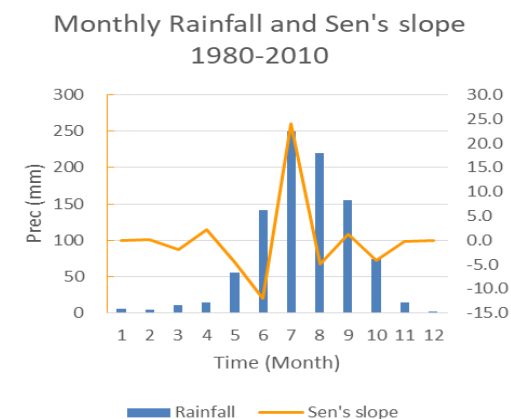
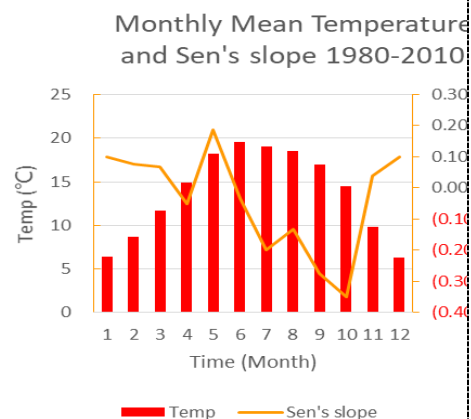
## Huaping County, Yunnan



## Yongsheng County, Yunnan



**Area:** 4950 km<sup>2</sup>  
**Population:** 406,256  
**Pop. Density:** 82/km<sup>2</sup>  
**Cultivated Land Area (2018):** 330 km<sup>2</sup>  
**Percentage land cultivated:** 6.7%  
**Livestock (2018):** 919.9K heads( 377.1K pigs, 286K sheep)



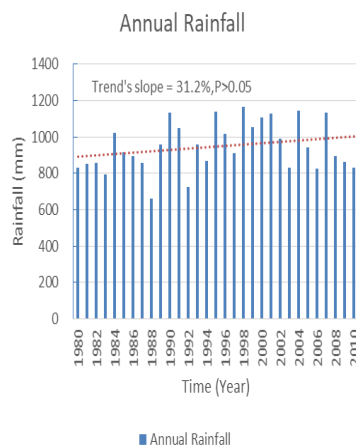
### Past Climate data

#### Rainfall

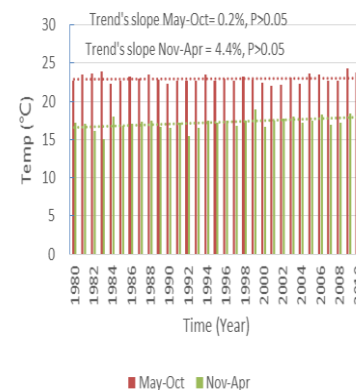
The trend of annual rainfall is around 947 mm/y and show an increase trend but not reach up to a significant level in time from 1980. That was due to the variation of each year, we can note a cycle around every 8 years. Monthly rainfall seems to decrease over time in the mostly months, while increase in July.

#### Temperature

The trends of max and min temperature do not show any significant change in time for both seasons. The monthly mean temperature is increasing over time for winter and spring, while it showed a



#### Seasonal Max Temperature



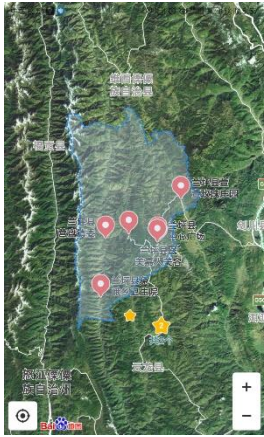
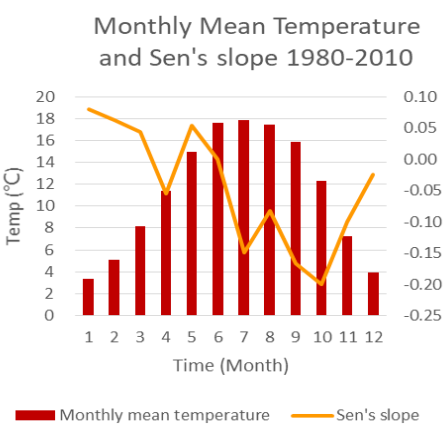
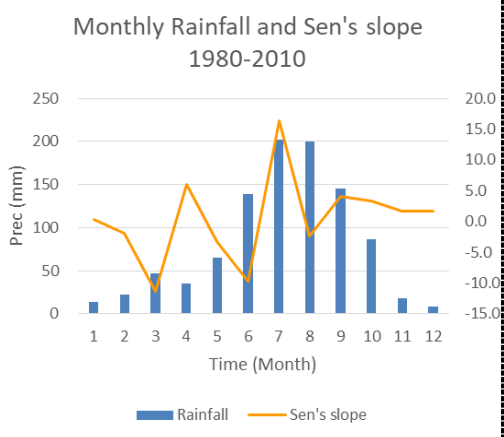
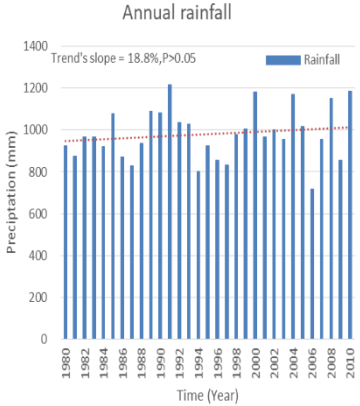
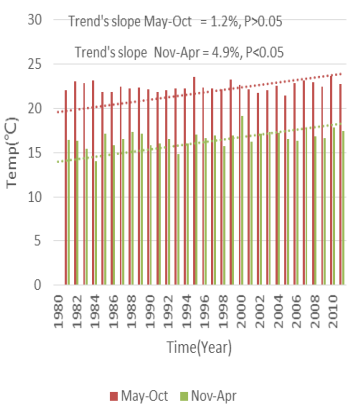
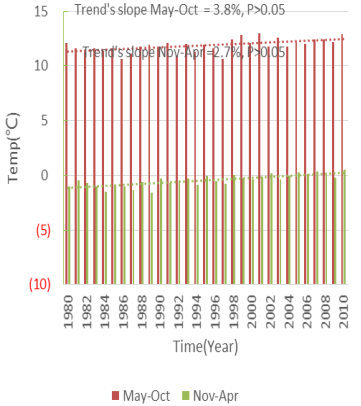
#### Seasonal Min Temperature






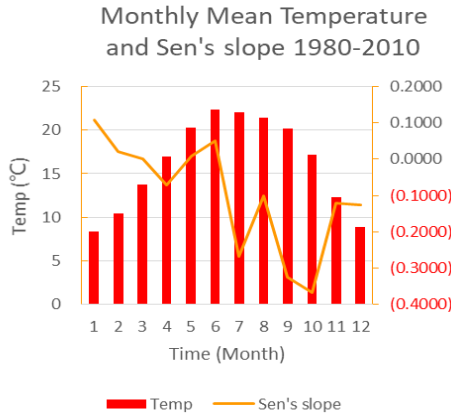
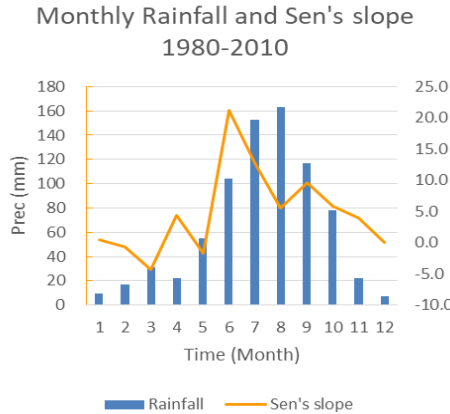
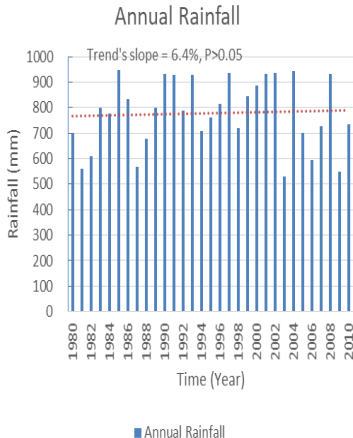
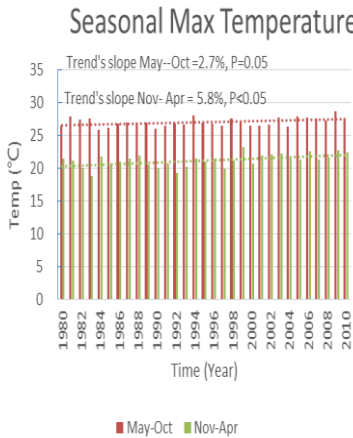
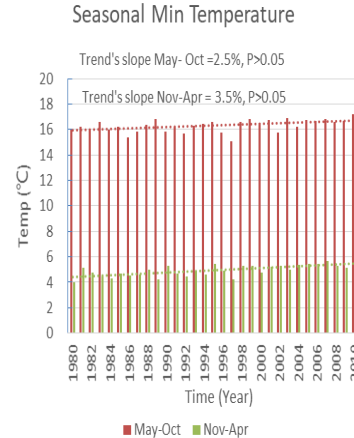
decrease trend in the summer and autumn.		
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Lanping County, Yunnan

	<p><b>Area:</b> 4372km<sup>2</sup> <b>Population:</b> 218340 <b>Pop. Density:</b>49/km<sup>2</sup> <b>Cultivated Land Area (2018):</b> 414.9 km<sup>2</sup> <b>Percentage land cultivated:</b> 9.5% <b>Livestock (2018):</b> 705K heads(55K cows, 188K sheep, 154K pigs)</p>	<p>Monthly Mean Temperature and Sen's slope 1980-2010</p> 	<p>Monthly Rainfall and Sen's slope 1980-2010</p> 
<p><b>Past Climate data</b></p> <p><b>Rainfall</b></p> <p>The trend of annual rainfall is around 979 mm/y and show an increase trend but not reach up to a significant level in time from 1980. That was due to the variation of each year, we can note a cycle around every 6-8 years. Monthly rainfall seems to decrease over time in the spring, while increase in summer.</p> <p><b>Temperature</b></p> <p>The trends of max and min temperature do not show any significant change in time for both seasons. The monthly mean temperature is increasing over time for</p>	<p>Annual rainfall</p> 	<p>Seasonal Max Temperature</p> 	<p>Seasonal Min Temperature</p> 

winter and spring, while it showed a decrease trend in the summer and autumn.			
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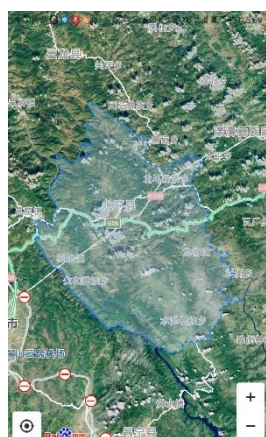
Yunlong County, Yunnan

	<p><b>Area:</b> 4400 km<sup>2</sup> <b>Population:</b> 208900 <b>Pop. Density:</b> 47/km<sup>2</sup> <b>Cultivated Land Area (2018):</b> 369km<sup>2</sup> <b>Percentage land cultivated:</b> 16.8% <b>Livestock (2018):</b> 1.45M heads (158.5K cows, 298.7K sheep, 310.7 pigs)</p>	<p>Monthly Mean Temperature and Sen's slope 1980-2010</p> 	<p>Monthly Rainfall and Sen's slope 1980-2010</p> 
<p><b>Past Climate data</b></p> <p><b>Rainfall</b></p> <p>The trend of annual rainfall is around 777 mm/y and doesn't show any significant change in time from 1980 although we can note a cycle around every 6-8 years. Monthly rainfall seems to decrease over time in the winter and spring, while increase in summer.</p> <p><b>Temperature</b></p> <p>The trends of max and min temperature seem to increase for both seasons and is significant for the max temperature in both seasons. Indeed, we can see that monthly</p>	<p>Annual Rainfall</p> 	<p>Seasonal Max Temperature</p> 	<p>Seasonal Min Temperature</p> 



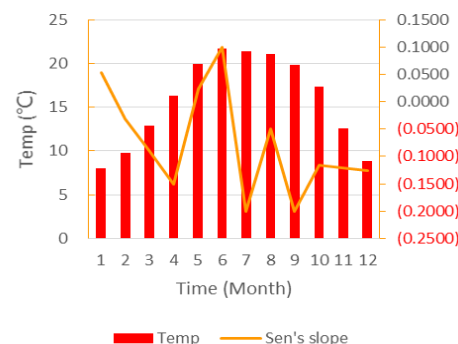
mean temperature is increasing over time for winter, while it showed a decrease trend in the summer and autumn.

## Yongping County, Yunnan

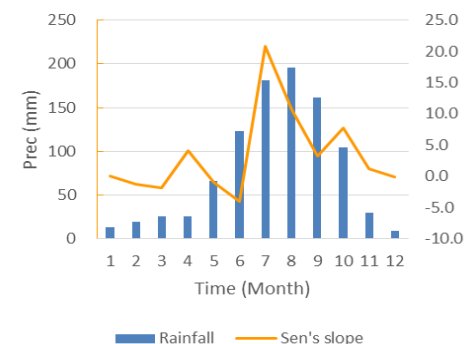


**Area:** 2884km<sup>2</sup>  
**Population:** 185000  
**Pop. Density:** 64/km<sup>2</sup>  
**Cultivated Land Area (2018):** 211km<sup>2</sup>  
**Percentage land cultivated:** 7.3%  
**Livestock (2018):** 1.98M (115k cows, 160K sheep, 305K pigs)  
**Altitude:** 1620 m

Monthly Mean Temperature and Sen's slope 1980-2010



Monthly Rainfall and Sen's slope 1980-2010



## Past Climate data

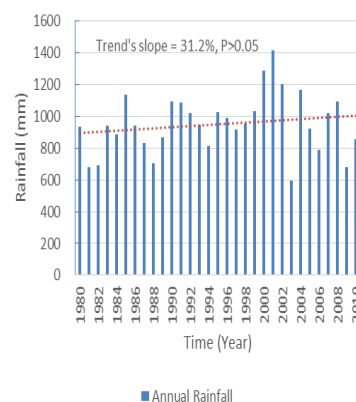
### Rainfall

The trend of annual rainfall is around 951 mm/y and show an increase trend but not reach up a significant level in time from 1980. This was due to the variation of each year, we can note a cycle around every 6-8 years. Monthly rainfall seems to decrease over time in the winter and spring, while increase in summer.

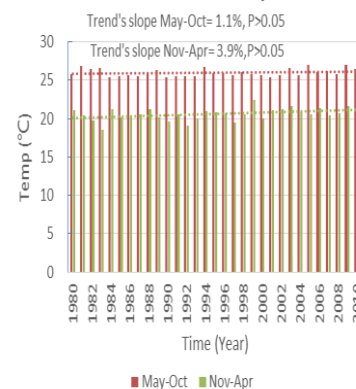
### Temperature

The trends of max and min temperature do not show any significant change in time from

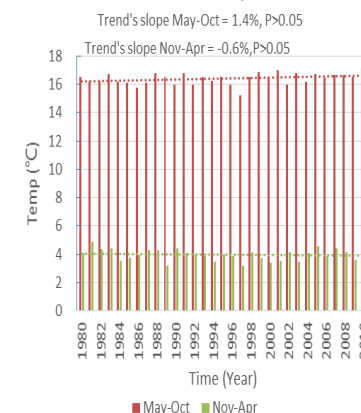
Annual Rainfall



Seasonal Max Temperature



Seasonal Min Temperature



1980. The monthly mean temperature is increasing over time for June, while it showed a decrease trend in the spring and autumn.			
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## **China**

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### **Yunnan Rural Revitalization Demonstration Project Project Design Report**

#### **Annex 6: First Annual Work Plan and Budget (AWPB)**

Mission Dates: 16 to 25 September 2019  
Document Date: 27/02/2020  
Project No. 2000002358  
Report No. 5310-CN

Asia and the Pacific Division  
Programme Management Department



Table: 1 First Annual Work Plan and Budget (AWPB- 202-21)

表Table 1: 国际农发基金贷款云南乡村振兴示范项目 Y2RDP 2020-21AWPB by Component 项目实施与投资费用计划汇总表（按建设内容）																
报告单位：云南省项目办 By Provincial PMO			报告日期：2020 年1 M 月1 D日			Unit 单位：千美元 '000 USD										
序号	项目活动 Project Activities	单位 Unit	项目目标 Project Total Budget						2020-2021 Plan 年度计划							
			规模 Number	投资费用 Financier					规模 Number	投资费用 Budget & Financier					占目标%	
				IFAD	Gov	Ben	Ope	Total		IFAD	Gov	Ben	Ope	Total		
				农发	政府	受益人	经营主体	合计		农发	政府	受益人	经营主体	合计		
A、Improving Chanyefupin Model 改进产业扶贫模式																
A. 1	A1.1 Upgrading cooperative meeting 合作社标准化改造															
	1. Payment to cooperative meeting 改造费用支付	份		1,204.7	133.9	-	-	1,338.5		120.5	13.4	-	-	133.9	10%	
	2. Verification expenses 论证费用			84.7	9.4	-	-	94.2		28.8	3.2	-	-	32.0	34%	
	3. Investment on pro-poor cooperatives 合格合作社的投资			7,339.9	-	-	4,893.2	12,233.1		367.0	-	-	244.7	611.7	5%	
	A1.2. Cooperative co-investment 一般合作社投资模式			13,312.7	2,935.9	-	13,312.7	29,561.4		1,996.9	440.4	-	1,996.9	4,434.2	15%	
	A1.3 Company-cooperative-households models 企业合作社农户模式			16,019.8	10,679.9	-	16,019.8	42,719.4		2,403.0	1,602.0	-	2,403.0	6,407.9	15%	
	A1.4 Other innovative models 其它创新模式			5,339.9	5,339.9	-	5,339.9	16,019.8		801.0	801.0	-	801.0	2,403.0	15%	
	A1.5. Product traceability system 产品追溯体系			179.6	20.0	-	-	199.6		71.9	8.0	-	-	79.8	40%	
	A1.6 Improving climate information and adoption advice 天气智慧生产服务			1,416.7	157.4	-	-	1,574.2		283.3	31.5	-	-	314.8	20%	
	小 计 Subtotal			44,898.1	19,276.4	-	39,565.7	103,740.1		6,072.3	2,899.4	-	5,445.5	14,417.3	14%	
A. 2	Stimulating entrepreneurship and Business Services 创业孵化与服务															
	A2.1. Business incubation / Service centres 孵化中心			226.9	25.2	-	-	252.1		45.4	5.0	-	-	50.4	20%	
	A2.2. Technical assistance to the service centre 技术援助			3,117.7	346.4	-	-	3,464.1		311.8	34.6	-	-	346.4	10%	
	A. 2.3 Start up Investment 创业启动投资			2,120.0	-	-	2,120.0	4,240.0		106.0	-	-	106.0	212.0	5%	
	A2.4 Operation cost 运行费用			958.3	526.4	-	-	1,484.7		191.7	105.3	-	-	296.9	20%	
	小 计 Subtotal			6,422.9	898.0	-	2,120.0	9,440.9		654.82	144.96	-	106.00	905.78	10%	
A. 3	Improving access to finance 金融服务															
	A3.1 Strengthening financial capacity 能力建设			242.9	27.0	-	-	269.9		48.59	5.40	-	-	53.99	20%	
	A3.2 Improving financial advisory services 改进咨询服务			215.9	24.0	-	-	239.9		43.19	4.80	-	-	47.99	20%	
	小 计 Subtotal			458.9	51.0	-	-	509.9		91.78	10.20	-	-	101.97	20%	
Total Component A				51,779.9	20,225.3	-	41,685.7	113,690.9		6,818.9	3,054.6	-	5,551.5	15,425.0	14%	

表Table 1:

国际农发基金贷款云南乡村振兴示范项目 Y2RDP  
2020-21AWPB by Component 项目实施与投资费用计划汇总表（按建设内容）

报告单位：云南省项目办 By Provincial PMO			报告日期：2020 年1 M 月1 D日			Unit 单位：千美元 '000 USD									
序号	项目活动 Project Activities	单位 Unit	项目目标 Project Total Budget						2020-2021 Plan 年度计划						
			规模 Number	投资费用 Financier					规模 Number	投资费用 Budget & Financier					占目标%
				IFAD	Gov	Ben	Ope	Total		IFAD	Gov	Ben	Ope	Total	
				农发	政府	受益人	经营主体	合计		农发	政府	受益人	经营主体	合计	
B、公共基础设施和服务Improving infrastructure climate resilience															
B.1	气候智能基础设施发展Climate Smart Irrigation Infrastructure														
	B1.1 Design and Planning 气候智能基设规划与设计			347.1	38.6	-	-	385.7		104.1	11.6	-	-	115.7	30%
	B1.2 Infrastructures 设施建设														
	池塘 Pond	个 set	513	1,170.7	130.1	-	-	1,300.7		351.2	39.0	-	-	390.2	30%
	蓄水池 Storages	个 set	404	370.9	41.2	-	-	412.1		111.3	12.4	-	-	123.6	30%
	灌溉系统 Irrigation system	目 mu	8,010	2,248.5	249.8	-	-	2,498.3		674.6	75.0	-	-	749.5	30%
	管道 Pipeline	公里 km	2,304	9,118.2	1013.1	-	-	10,131.3		2,735.5	303.9	-	-	3,039.4	30%
	泵站 Pumping stations	座 set	28	2,175.6	241.7	-	-	2,417.3		652.7	72.5	-	-	725.2	30%
	灌溉渠道 Canal	公里 km	113	1,272.6	141.4	-	-	1,414.0		381.8	42.4	-	-	424.2	30%
	人畜饮水 Domestic water	套 set	16	654.8	72.8	-	-	727.6		196.5	21.8	-	-	218.3	30%
	用水者协会 Support to WUA	个 each		17.2	1.9	-	-	19.1		5.2	0.6	-	-	5.7	30%
	渠配路 修复 Rural road, rehabilitation	公里 km	331	2,385.8	265.1	-	-	2,650.9		715.7	79.5	-	-	795.3	30%
	设施管护 O&M			0.0	0.0	687.0	-	687.0		-	-	137.4	-	137.4	20%
	小计 Subtotal			19,414.4	2,157.2	687.0	0.0	22,258.5		5,928.4	658.7	137.4	-	6,724.6	30%
B.2	Public Rural infrastructure 公共基础设施														
	B2.1设计监测费用 Infrastructure design and supervision			-	8,689.4	-	-	8,689.4			2,606.82	-	-	2,606.82	30%
	B2.2基础设施建设 Infrastructure investment														
	农田道路 Rural/Farm road			-	37,928.6	-	-	37,928.6			15,171.5	-	-	15,171	40%
	水源和水池 Water source and storages			-	10,226.0	-	-	10,226.0			4,090.4	-	-	4,090.4	40%
	渠道管道等 Canals and pipelines			-	18,544.7	-	-	18,544.7			7,417.9	-	-	7,417.9	40%
	其它公共设施 Other infrastructures			-	10,922.3	-	-	10,922.3			4,368.9	-	-	4,368.9	40%
	小计 Subtotal				77,621.7			77,621.7		-	33,655.5	-	-	33,655.5	43%
	Total Component B			19,414.36	79,778.80	686.98	-	99,880.13		5,928.4	34,314.2	137.4	-	40,380.0	40%

表Table 1: 国际农发基金贷款云南乡村振兴示范项目 Y2RDP 2020-21AWPB by Component 项目实施与投资费用计划汇总表（按建设内容）															
报告单位: 云南省项目办 By Provincial PMO				报告日期: 2020 年1 M 月1 D日				Unit 单位: 千美元 '000 USD							
序号	项目活动 Project Activities	单位 Unit	项目目标 Project Total Budget					2020-2021 Plan 年度计划							
			规模 Number	投资费用 Financier				规模 Number	投资费用 Budget & Financier					占目标%	
				IFAD	Gov	Ben	Ope		Total	IFAD	Gov	Ben	Ope		Total
				农发	政府	受益人	经营主体		合计	农发	政府	受益人	经营主体		合计
3、项目管理与能力建设 Project Management															
	3.1 项目办设备 PMO equipment			140.7	145.3	0.0	0.0	286.0		70.3	72.7	-	-	143.0	50%
	3.2 项目培训研讨能力建设等 Training, workshop etc.			1710.3	522.6	0.0	0.0	2232.9		342.1	104.5	-	-	446.6	20%
	3.3 项目监测与评估 M&E and KM related			1180.9	553.9	0.0	0.0	1734.8		236.2	110.8	-	-	347.0	20%
	3.4 项目办运行 Office operation			0.0	2961.7	0.0	0.0	2961.7		-	592.3	-	-	592.3	20%
	3.5 办公室人员 Office staff			0.0	2341.0	0.0	0.0	2341.0		-	468.2	-	-	468.2	20%
	小 计 Subtotal			3031.9	6524.5	0.0	0.0	9556.4		648.6	1,348.5	-	-	1,997.1	21%
Total component C				3,031.91	6,524.49	-	-	9,556.40		648.6	1,348.5	-	-	1,997.1	21%
Total合计				74,226.2	106,528.6	687.0	41,685.7	223,127.5		13,396.0	38,717.3	137.4	5,551.5	57,802.2	26%

## **China**

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### **Yunnan Rural Revitalization Demonstration Project Project Design Report**

#### **Annex 7: Procurement Plan for first 18 months**

Mission Dates: 16 to 25 September 2019  
Document Date: 27/02/2020  
Project No. 2000002358  
Report No. 5310-CN

Asia and the Pacific Division  
Programme Management Department





## Annex: 7 Procurement Plan for First 18 Months

1. A detailed procurement plan covering a period of 18 months is prepared and attached as table 1 (for Civil Works) and table 2 ( for Services).
2. The main items of goods to be procured for project are office and technical equipment and furniture. Other goods and materials will be procured following the local shopping (LS) as appropriate. Civil works will involve the improvement of rural infrastructure, including irrigation and drinking water supply facilities and village roads. They will be procured by using NBF and LCB or LS, depending on the nature of expenditure and the estimated value of the related contract. Technical services, training, workshops and studies for the project will be procured by using Direct Contracting or NBF method. .
3. The following Table presents a summary of the procurement methods. Figures in parenthesis are the respective amounts financed by IFAD.

China			Procurement Method				
Y2RDP PDR							
Procurement Arrangements			Local	Local	Direct		
(US\$ '000)			Competitive	Shopping	Contracting	N.B.F.	Total
			Bidding				
A. Civil work			-	-	-	86,311.1	86,311.1
B. Smart civil work			20,482.9	-	-	-	20,482.9
			(18,434.6)				(18,434.6)
C. Equipment and material			-	156.3	-	129.7	286.0
				(140.7)			(140.7)
D. Training, workshop, capacity building			-	-	8,781.2	490.0	9,271.2
					(7,903.1)		(7,903.1)
E. Goods, services and inputs			-	3,338.0	-	265.2	3,603.3
				(3,004.2)			(3,004.2)
F. Grants and subsidy			-	-	85,818.0	18,955.7	104,773.7
					(44,132.3)		(44,132.3)
G. Salary and allowances			-	-	-	2,986.0	2,986.0
						(580.5)	(580.5)
H. Operating costs			-	-	-	3,801.5	3,801.5
						(377.9)	(377.9)
I. Operations and maintenance			-	-	-	2,769.0	2,769.0
Total			20,482.9	3,494.4	94,599.2	115,708.1	234,284.6
			(18,434.6)	(3,144.9)	(52,035.4)	(958.3)	(74,573.3)
Note: Figures in parenthesis are the respective amounts financed by IFAD							

3. Procurement of goods, works and services financed by the project will be carried out in accordance with the Procurement Law of the People's Republic of China (2002) and its amendments to the extent that they are consistent with the provisions of IFAD's Project Procurement Guidelines and Handbook (2010) and its amendments. The procurement methods to be applied, prior review arrangements, and the thresholds for different procurement methods will depend on the expenditure and the estimated value of the contract and will be detailed in the letter to the borrower.

**Table 1: Procurement Plan for first 18 Months (Civil Works)**

国际农发基金贷款云南乡村振兴示范项目 Y2RDP 2020-21 年度项目采购计划汇总表（工程类）18 month Procurement Plan (Civil Works)									
表2 Table 2									
合同编号Contract number	合同内容Contract contents	单位 Unit	估计数量 Amount Estimated	预算成本（人民币千元）Budget (CNY' 000)	预算成本（美元千元）Budget (US\$' 000)	采购方式 Procure methods	是否前审（Y/N）prior review	预计执行期限 Expected execution period	采购组织单位 organization
合计Total									
土建类合计Civil works				65,757.75	9,300.95				
AB-W-20-XXX	池塘 Pond	个 set	154	4,138.30	585.33	NCB	N	2020.8 - 2021.12	
AB-W-20-XXX	蓄水池 Storages	个 set	121	1,311.18	185.46	NCB	N	2020.8 - 2021.12	
AB-W-20-XXX	灌溉系统 Irrigation system	目 mu	2,403	7,948.49	1,124.26	NCB	Y	2020.8 - 2021.12	
AB-W-20-XXX	管道 Pipeline	公里 km	691	32,232.88	4,559.11	NCB	Y	2020.8 - 2021.12	
AB-W-20-XXX	泵站 Pumping stations	座 set	8	7,690.67	1,087.79	NCB	N	2020.8 - 2021.12	
AB-W-20-XXX	灌溉渠道 Canal	公里 km	34	4,498.78	636.32	NCB	Y	2020.8 - 2021.12	
AB-W-20-XXX	人畜饮水 Domestic water	套 set	5	2,314.87	327.42	NCB	N	2020.8 - 2021.12	
AB-W-20-XXX	渠配路 修复 Rural road, rehabilitation	公里 km	99	5,622.58	795.3	NCB	Y	2020.8 - 2021.12	
货物合计 Goods Total									
AB-G-20-XXX	县项目办办公设备 Office equipments and supplies of counties	Lot	7	746.03	105.5	LS	N	2020.8 - 2021.12	
AB-G-20-XXX	县孵化中心设备货物 Goods equipment for county incubation centers	Lot	7	802.45	113.5	LS	N	2020.8 - 2021.12	
货物合计Total goods				1,548.47	219.02				
备注：1、土建类合同编码为：AB县-W-年份+序号(序号为001开始，依此类推)，例如镇雄土建第一合同编码为ZX-W-20-001 Note for numbering									
2、货物类合同编码为：AB县-G-年份+序号(序号为001开始，依此类推)，例如镇雄货物第一合同编码为ZX-G-20-001									

国际农发基金贷款云南乡村振兴示范项目 Y2RDP 2020-21 年度项目采购计划汇总表（咨询服务类） 18 month Procurement Plan (Services)							
附表3							
合同编号 Contract No.	任务描述 Activities	预算成本（人民币千元） Budget (CNY' 00	预算成本（美元千元） Budget (US\$' 000)	选择方式 Method	Prior Review 是否前审（Y/N）	合同预期 Executing Period 执行期	组织采购单位 Organizing party
咨询类 Consultancy		6140. 78	868. 57				
AB-C-20-XXX	合作社达标论证 Coop certification	325. 22	46. 00	CQS	Y	2020. 8 - 2021. 12	
AB-C-20-XXX	孵化中心技术支持 TA for incubation centers	3673. 64	519. 61	CQS	N	2020. 4 - 2021. 10	
AB-C-20-XXX	金融服务咨询 Rural Finance TA	1081. 42	152. 96	CQS	N	2020. 8 - 2021. 12	
AB-C-20-XXX	项目办技术咨询 TA for PMOs	1060. 50	150. 00	CQS	N	2020. 4 - 2021. 10	
服务类 Service		6419. 18	907. 95				
AB-S-20-XXX	项目基线调查 Baseline Survey	473. 69	67. 00	QCBS	Y	2020. 4 - 2021. 10	
AB-S-20-XXX	监测评价服务 M&E service	1604. 89	227. 00	LC	N	2020. 8 - 2021. 12	
AB-S-20-XXX	管理信息系统开发MIS Development	713. 05	100. 86	CQS	Y	2020. 4 - 2021. 10	
AB-S-20-XXX	地方工作人员培训 Local staff training	2828. 00	400. 00	LC	N	2020. 4 - 2021. 10	
AB-S-20-XXX	国内培训 Domestic training	799. 55	113. 09	LC	N	2020. 4 - 2021. 10	
合计Total		12, 559. 96	1, 776. 51				
备注：1、咨询类合同编码为：AB县-C-年份+序号 (序号为001开始，依此类推)，例如镇雄土建第一合同编码为ZX-C-20-001Note for numbering							
2、服务类合同编码为：AB县-S-年份+序号 (序号为001开始，依此类推)，例如镇雄土建第一合同编码为ZX-S-20-001							



## **China**

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### **Yunnan Rural Revitalization Demonstration Project Project Design Report**

#### **Annex 8: Project Implementation Manual (PIM)**

Mission Dates: 16 to 25 September 2019  
Document Date: 27/02/2020  
Project No. 2000002358  
Report No. 5310-CN

Asia and the Pacific Division  
Programme Management Department



# DRAFT\_PIM

Yunnan Rural Revitalization Demonstration  
Project (Y2RRDP), China



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PIM Y2RRDP

## **Currency Equivalents**

## **Weights and Measures**

**Abbreviations and acronyms**

AC	Agriculture Cooperative
ABC	Agriculture Bank of China
ADB	Asian Development Bank
AII	Agricultural Information Institute
AM	Accounting Manual
AWPB	Annual Work Program and Budget
CAAS	China Academy of Agricultural Science
CFI	Corporate Financial Institutions
COSOP	Country Strategic Opportunity Programme
CPMO	County Project Management Office
CYFP	<i>Chanye Fupin (poverty reduction through industry)</i>
CYL	Communist Youth League
DARA	Department of Agriculture and Rural Affairs
DLI	Disbursement-linked indicator
EFA	Economic and Financial Analysis
EIRR	Economic Internal Rate of Return
IPAS	Public Sector Accounting Standard
IRF	Integrated Risk Framework
JIMAAPP	Jiangxi Mountainous Areas Agribusiness Promotion Project
KM	Knowledge Management
MARA	Ministry of Agriculture and Rural Affairs

MOF	Ministry of Finance
M&E	Monitoring & Evaluation
MRV	Measuring, Reporting and Verification System
NDRC	National Development and Reform Commission
O&M	Operation & Maintenance
PforR	Program for Results
PMO	Project Management Office
PPMO	Provincial Project Management Office
RBL	Result-based lending
SDG	Sustainable Development Goal
SME	Small and medium enterprises
SSADEP	Shiyan Smallholder Agribusiness Development Project
UNDAF	United Nations Development Assistance Framework
UNSDCF	United Nations Sustainable Development Country Framework
WB	World Bank
Y2RDP	Yunnan Rural Revitalization Demonstration Project

### Project area map

## Chapter 1: Introduction and Background

### 1.1 Country Context:

1. **40 Years of politico-economic reforms and Opening up:** December 2018 marked the 40 years since Deng Xiaoping initiated China's reforms and opening up with his famous speech: "Emancipate the mind, seeking truth from fact, and unite as one to face the future." That triggered four decades of reforms that would bring China where it is now: the second largest economy in the world, more than **800 million people escaped poverty**. China's share in the world economy rose from **1.5 percent** in 1978 to **15 percent** today, and per capita income increased **25-fold** from **300 dollars** in 1978 to **7,300 dollars** in 2017. China is one of the few countries that will soon have made the journey from low income country to high income country. China continued strong GDP growth now accounts for one-third of global growth and country has achieved upper middle-income status<sup>1</sup>.
2. China under President Xi Jinping entered a new era of development, a needed transition to a more balanced and sustainable growth. Identifying poverty reduction as one of the three critical battles and pledging to eradicating poverty by 2020, President Xi has embarked on economic reforms designed to rebalance from its early focus on domestic infrastructure investment and exports-led economy towards a supply-side structural adjustment and innovation-based model with more domestic consumption and public expenditure in health, education and poverty reduction programs aiming at reducing urban-rural disparities, and rural revitalization.
3. **Nevertheless, inequality and disparities remain a challenge, despite China's economic and social gains.** As of 2017, about 45 million Chinese still lived below the international poverty line of US\$1.90 a day. With reference to higher international poverty lines, a relatively large number of people continued to live in moderate poverty and were vulnerable to poverty shocks. There were 95.5 million people below the "lower middle income" poverty line of US\$3.20 a day (in terms of purchasing power parity) and 373.1 million people below the "upper middle income" line of US\$5.50 a day. Most important is the need to address inequality, which is relatively high, with a Gini coefficient of 0.46 in 2015.
4. **Geography explains much of the inequality in China.** Several studies indicate that disparities between urban and rural areas represent the largest share of total inequality. Unequal access to infrastructure and municipal services, which is associated with rural-urban disparity, is a significant contributor to overall inequality. Disparities between coastal and inland provinces are also high. Substantial state-led investments in the interior provinces have reduced the income gap in recent years but at the cost of capital

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<sup>1</sup> In February 2018, Chinese government released its 'No. 1 Central Document', traditionally indicator of policy priorities, entitled "Opinions on Implementing the Rural Revitalization Strategy", which draws a road map for rural revitalization, highlighting explicitly a policy statement featuring a strategy that aims to revitalize China's vast rural region.

misallocation, which is increasingly evident. The challenge to create sustainable income opportunities in the interior provinces thus remains.

5. **Demographic transition and aging population are also boding ill to China socio-economic sustainability.** The widening urban-rural population gap and ageing population are becoming new challenges for China to meet social security and keep agriculture labour force intact which are backbone of china food security depending on 250 million small farm holders. Today about 42 percent of the Chinese population are registered in rural areas, which is predicted to be down to 31% by 2030. Between 1950 and 2015, the total fertility rate per woman declined from 6.11 to 1.6. over the same time, the overall mortality rate also declined significantly resulting in a steady increase in life expectancy. In addition, due to large scale rural labor migration, China rural and agriculture feminization and aging became a common phenomenon
6. **The poverty context:** The government of China is planning to eradicate extreme rural poverty, measured against the prevailing national poverty standards (i.e. approximately US\$1.90/day), by 2020 - making China the first developing country to achieve SDG1, ten years ahead of the global target. However, sustaining this achievement, reducing inequalities (between costal and western provinces, urban and rural areas, and among population i.e. relative poverty), and avoiding that the people moved out of poverty fall back into poverty will remain priorities for the government in the years following 2020.
7. **The rural development context.** China is going through a fundamental transformation in rural areas. Over the past decades, China has experienced a massive migration of the active workforce from the rural to the urban areas due to the gap between the urban and rural salaries and the limited income-generating opportunities in the rural areas. Rural villages today are characterized by a population which mainly comprises elderly, some middle generation women taking care of the elderly parents (the so-called “left-behind women”, who represent about 60% of the labour force in rural areas), young children, and sick and/or people with disabilities. Rural families from poverty vulnerable households are often dependent on the remittances provided by migrant worker family members, complemented by some income from production and local labour.
8. In response to this situation, the government has recently coined a "rural revitalization" strategy (2017), a long-term, comprehensive strategy which aims at rebalancing the existing divide between urban and rural areas by accelerating the development of rural areas and making them attractive for living. Key strategies for pursuing and sustaining poverty reduction efforts and developing rural areas include: agricultural "industrialization" (i.e. the development of lead "industries" through the support of agro-enterprises and cooperatives), creation of employment opportunities, and comprehensive infrastructure development - among other strategies.

## 1.2 Situation analysis of China regarding IFAD's corporate mainstreaming priorities:

### 1.2.1 Gender and social inclusion

9. The propose project contributes to reduce the gender gap. As of end-2015, women comprised about half of the 56 million rural poor population in China.<sup>2</sup> According to State Statistic Bureau survey in the nationally designated poor counties, the degree of poverty was greater among women than among men. In 2010, women's poverty incidence was 9.8% while men's was 9.4%, and the incidence of low-income women was 0.6 percentage points higher than that of men. Rural women's average level of education in Midwestern China was 6.8 years, which was 0.8 years less than those in Eastern China.
10. The majority of labor force of female is engaged in agriculture, about 80.6%, mostly in primary industry as compared to 58.8% of male labor in 2017<sup>3</sup>. According to National Bureau of Statistics of China, the education level of female labor in poor area was far behind that of male labor (Table ).

Educatin level of Female/Male labor in poor area of China

Education level	Female labor (%)	Male labor (%)
No school	11.9	3.7
Primary school	39.4	29.0
Middle school	40.4	51.7
High school	5.9	11.5
College and above	2.4	4.1

Source: Poverty Monitoring Report of Rural China 2018.

11. The project will have special focus on prospective all poor households, women entrepreneurs and participation in farmer/specialized cooperatives.

### 1.2.2 Ethnic Minority and Poverty

12. There are fifty-five ethnic minorities in China and one third of the ethnic minority population live in the Yunnan province. The main provinces home to ethnic minorities

<sup>2</sup> X.L. Wang and R. Gao. Poverty Reduction of Rural Women: Objective, Challenge and Policy Option. Collection of Women's Studies, No. 6 Ser. No. 138, Nov. 2016. Pages 5-8.

<sup>3</sup> Department of Household Surveys, National Bureau of Statistics of China. Poverty Mornitoring Report of Rural China (2018). China Statistic Press, Dec. 2018.

are eight western provinces including Inner Mongolia, Guangxi, Guizhou, Yunnan, Tibet, Qinghai, Ningxia and Xinjiang named Eight Minority Province/Autonomous Region (*Minzu Bashengqu*). According to National Ethnic Affairs Commission, there were 421 minority autonomous counties among 832 nationally designated poor county, accounting 51%. Similarly eleven of fourteen contiguous poverty blocks (*Sanqu Sanzhou*) are located in the key minority area. The poverty incidence of key minority area has been remained higher than the national average, and the share of key minority area in country poor population increased 3.5 percentage point between 2010 to 2017<sup>4</sup>.

**Table 4: Poverty Situation of Key Minority Area (2010-2017)**

Year	Country poverty incidence	Poverty incidence of eight minority provinces	% of minority in poor population
2010	17.2%	34.5%	30.4%
2011	12.7%	26.5%	32.0%
2012	10.2%	21.1%	31.5%
2013	8.5%	17.1%	31.1%
2014	7.2%	14.7%	31.4%
2015	5.7%	12.1%	32.5%
2016	4.5%	9.3%	32.5%
2017	3.1%	6.9%	33.9%

13. Source: National Bureau of Statistics

14.

### 1.2.3 Rural Youth

15. Presently, China doesn't have an explicitly written, unified national youth policy or official executive mechanism for carrying out and monitoring national or regional youth affairs. Youth policy is regarded as a component of the overall policy of the CPC which is ideologically oriented and politically dominated. Communist Youth League (CYL), the sole national organisation managing youth affairs in China, focuses its efforts on young people between 14 and 28 years. The literacy rate among youth is

<sup>4</sup> National Ethnic Affairs Commission. Poverty Monitoring Result of Minority Area (2017).

<http://www.gov.cn/xinwen/2018-08/15/5313944/files/a0182850dccb49998471b5b3d584c279.pdf>



99% in both sexes. Over last three decades the youth unemployment remained average of 9 to 10%.

16. Since 1980s when China economic reform started, rural labor has been being migrated to urban on a large scale majorly due to the income gap between rural and urban. According to NBS, there was 179.69 million rural labor migrated to urban by 2017<sup>5</sup>. The rural labor under 40 years old was the majority of the labor migration, and 66% of them migrated to eastern China<sup>6</sup>. With such big scale rural labor migration, China rural and agriculture feminization and aging became a common phenomenon.
17. In September 2018, central government issued “Strategy Planning for Rural Revitalization (2018-2022)”, to promote rural revitalization of industry, human resource, culture, ecology and organization. Obviously, rural youth is the key human resource for rural revitalization, and achievement of rural revitalization will create opportunity to pull youth back to rural.
18. The proposed project would focus on fostering local youth, facilitating migrated youth back to rural by giving them business startup ideas and opportunities. In addition, the project would also support the Chinese government ‘Mass Rural Youth Volunteer Program’, which would facilitate sending over ten million of young volunteers from large cities to rural areas<sup>7</sup>.

#### 1.2.4 Nutrition Situation Analysis

19. China has made significant progress in recent decades in improving malnutrition. Overall situation is improving drastically. China reduced the level of undernourishment in the country from 23.9 percent in 1990-92 to 9.3 percent in 2014-16. Rates of child malnutrition are also dropping. From 1990 to 2010, the number of underweight children under 5 fell by 74 percent and rates of stunting dropped by 70 percent. Current levels are lower than most other developing countries.
20. Similarly the nutrition status of children and adolescent aged 5-19 has improved remarkably over the last 15 years as shown in graph below where the underweight reduced to 17% in year 2015 from 27% in 1999. However the overweight and obesity has greatly worsened over the same period for same population group.  
Source: WHO World Health Report, 2017

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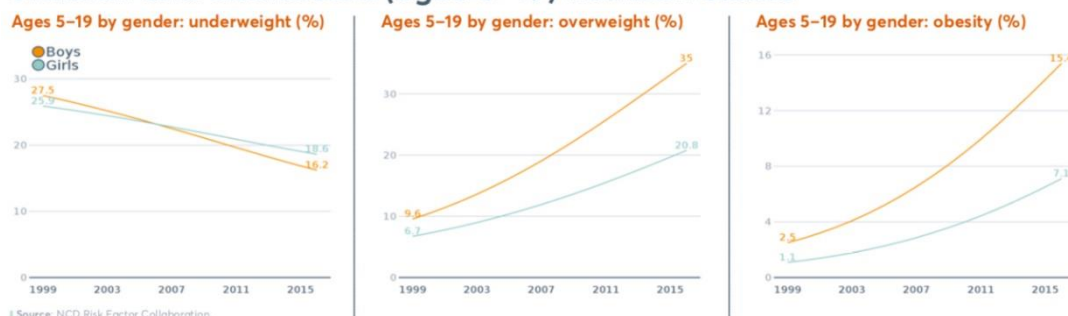
<sup>5</sup> National Bureau of Statistics.

<http://data.stats.gov.cn/search.htm?s=2017%20%E5%85%A8%E5%9B%BD%20%E5%A4%96%E5%87%BA%E5%8A%A1%E5%B7%A5%E5%8A%B3%E5%8A%A8%E5%8A%9B>

<sup>6</sup> Xu Xiaohua, et al. The Trend Forecast and Management of the Chinese Agricultural Surplus Labor Transfer During 2014 —2030. Management Review, Vol. 30, No. 1, Jan. 2018. 221-229

<sup>7</sup> Update on Key Developments in China, April 2019.

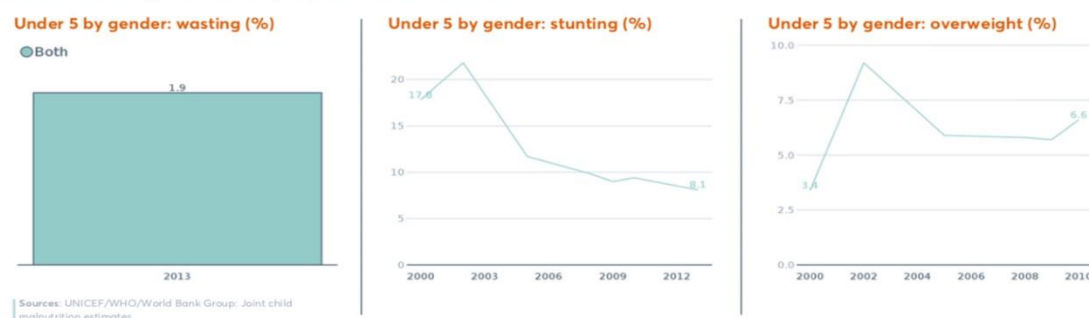
## Children and adolescent (aged 5–19) nutrition status



Source: WHO World Health Report, 2017

21. According to WHO World Health Report 2017, (having data from 2013) the prevalence of stunting, underweight and wasting among children under 5 were 8.1%, 2.4%, and 1.9% in the overall China showing great achievement in nutrition.

## Children (under 5) nutrition status



Source: WHO World Health Report, 2017

22. , better nutrition has significantly improved the health and quality of life of Chinese children. Mortality in under 5s due to malnutrition dropped from 22 to 13 percent between 2000 and 2010. Meanwhile The food supply has also improved remarkably, and undernourishment of population reduced from 16% in 2000 to 9% in 2016. But overweight and obesity are becoming prominent in cities, and gradually appearing in rural areas: 23 percent of boys and 14 percent of girls under 20 were now found to be overweight or obese. The health and nutrition improvement in china population is also resulted from improved drinking water coverage and improved sanitation coverage. China's value in the Global Hunger Index fell from 25.1 in 1990 (serious hunger level), to 7.6 in 2018 (low hunger level).

## 1.3 Provincial Context (Yunnan)

23. **Province of Yunnan** has consistently been a priority area of the Chinese government's poverty reduction program given it hosts the largest share of poor people in the country (11% of the national poor in 2018). Located in southwest China, Yunnan is characterized by difficult terrain of overlapping mountains, ethnic minorities and nationally designated poor counties. With more than 94% mountainous territory and more than 4,000 km border line with Myanmar, Laos and Vietnam, there are 16

prefectures in Yunnan, under them, there are 129 districts / cities / counties. In 2018, 88 out of 129 counties (mostly in the Western and North-East parts of the province) were still classified as nationally-designated poor counties. Although absolute poverty will be eradicated in these counties by 2020, many rural households will remain vulnerable and with limited income opportunities.

**Table : Poor Population of Yunnan in China (2012-2018)**

Year	Number of Rural Poor in Yunnan (million)	Poverty incidence %	% of Yunnan rural poor in China
2012	8.04	21.70%	8.12%
2013	7.00	18.79%	8.49%
2014	5.74	17.09%	8.18%
2015	4.71	14.03%	8.45%
2016	4.48	13.33%	10.33%
2017	3.32	9.89%	10.90%
2018	1.81	5.39%	10.90%

Source: Yunnan Poverty Alleviation Office.

## **1.4 Situation Analysis of Project Area regarding IFAD's corporate mainstreaming priorities**

### **1.4.1 Gender Analysis of Project Area**

Women accounts for 48.11% making 23.24 million women in Yunnan Province (2018). Among them, 1.42 million women are living in the project counties and about 0.20 million in the targeted project area.

24. **Decision making in household and community.** Mostly the patrilineal system is practiced in the project area. In general, the overall socio-economic status of women is poor than men in terms of education, health and access to technical and information services. Most women still cultivate the land under their husbands' name due to the practice of traditional marriage pattern where men are registered as family head. Therefore, women with formal household head title accounts only 6.14% in project counties and 17.53% in project area, number increased due to male outmigration.
25. Following the common practice of official and uniform administration system in China, most affairs at the community level are officially managed by villagers' committees in administrative villages with village committee head where men are the major decision makers at all levels. The women village leadership in the project counties accounts only 9.90% while 17.14% in project area.
26. **Labour Division:** Men generally play the key role in transactions and heavy manual work, while women take care of daily farming activities that require less manual labour but are more constant and time consuming. Often women end up the main labour for

farming activities due to migration of men. The overall women labour force in project counties are about 40% whereas almost 70% accounts in village agriculture labour force.

**27. Women's Access to Technology.** Yunnan Agro-Technical Extension Stations at county and township levels are the main technical service providers in province. According to the limited data from five project counties, only 17.67% rural labors were trained by the government extension system in 2018. However, 50.61% trainees were women, and 30.51% were ethnic minorities. As evidenced from the field visits, there is a serious shortage of human resources for such extension services in the project counties and project area. Each technician is covering hundreds of households on average. Furthermore, women do not represent an appropriate share of the technical extension system staff accounting less than 30%.

**28. Women's access to credit.** Government of China has recently initiated small business credit program (*Daimian Fubu*) managed by County Employment Bureau where borrower can get low interest credit up to CNY150,000 for three years only after if they are duly recommended by Women's Federation (WF), Communist Youth League (CYL), Education Bureau, Labor Union, and Association of Industry and Commerce, etc. Interestingly borrowers from WF's recommendation took more than half in the program in some project counties, more than 70% of them are rural women.

**29. Women's participation in Farmers' Cooperative.** There are about 4,871 cooperatives in seven project counties mostly led by men and dominated by male members despite the fact that key labor force in the project area is dominated by women. Besides cultural reason, membership of women who is not registered as household head, would cause the difficulty to the cooperative when dealing with different agencies for cooperative establishment and operation, as the agencies require the membership consistent with household head. Nevertheless, field visit of the mission found that women are keen to play significant role in the cooperative.

**Table : Cooperative situation in project area and project counties (2018)**

County	% of Coop. Membership among rural HH		% of women-led Coop. Among all		% of women's membership in Coop.	
	Project county	Project area	Project county	Project area	Project county	Project area
Suijiang	82.29%	NA	0.71%	0.64%	54.75%	NA
Zhenxiong	NA	NA	NA	NA	NA	NA
Yunlong	5.73%	6.70%	16.63%	NA	30.23%	NA
Yongping	27.23%	14.23%	6.77%	25.81%	7.60%	23.70%
Yongsheng	NA	NA	40.50%	NA	NA	NA

Huaping	NA	NA	NA	NA	NA	NA
Lanping	14.42%	NA	2.82%	NA	NA	NA

Data source: CPMOs.

30. **Women's organization.** Yunnan Women's Federation (YWF) is the dominant women's organization in the Province and playing important role in gender mainstreaming and empowerment in project area. Established in 1950, YWF is catering for all ethnic with aim to create a bridge between women and government while making important decisions for safeguarding women's rights, and promoting gender equality. YWF has offices and representatives at the provincial, prefecture and county levels, and has very strong linkages down to the grassroots levels with representatives in townships and administrative villages. Since 2016, under the reform arrangement of ACWF, YWF has expanded its organization structure from a representative to the federation with elected members of 25 at township level and 15 at village level. Consequently, YWF has stronger linkages with grass root women, and women's mobility in the project area is ensured.
31. Corresponding to the government poverty alleviation policies, YWF promoted poverty alleviation for rural women through following approaches, (a) Disseminating the government policies and experience of good practice; (b) Providing training on production and business skills; (c) Facilitating application of credit and business operation; (d) Promoting development of women's handicraft based on minority tradition; (e) Establishing platform for employment opportunity; (f) Mobilizing resources for women and children's healthcare. In May 2018, YWF issued "Working Plan on Women's Action in Rural Revitalization", besides the works mentioned above, the working plan also includes organizing rural women to participate rural governance and social improvement.

#### 1.4.2 Youth in the Project Area

32. Like other parts of country, Yunnan Communist Youth League (CYL) is the most extensive youth organization in the province and at the county level that positioned itself as the sole organization systematically serving for youth development widely on youth ideology and morality, youth education, youth health, youth career-orientation and employment, youth social inclusion and participation and youth social security
33. About 55% of the workforce in the project area is engaged in migrant labour; more than half of the migrant workers are represented by youth between 15 to 34 years old of age. To revert this trend, a central pillar of the new rural revitalization strategy

focuses on creating new employment opportunities in the rural areas to retain or attract back the active population to the rural areas [1], particularly young people. The project will contribute to this objective by (i) providing incentives and support to entrepreneurs and investors (particularly young and - considering women represent the majority of the workforce in the rural areas - women) to start their own business in the project area (Ref. Sub-component A.2); and (ii) facilitating women participation in supported cooperatives, including leading roles (Ref. Sub-component A.1).

34. Following the Central Committee of the Communist Young League, Yunnan CYL issued “Action Plan of Youth Contribution to Rural Revitalization (2019-2022)”. The relevant detail objectives include,

- (a) To facilitate 20,000 youth migrant labors employed annually;
- (b) To facilitate 10,000 college graduates from poor households employed;
- (c) To facilitate 10,000 rural youth to start up business on agriculture through government support credit;
- (d) To establish at least one financial service station for youth in each county;
- (e) To establish 500 training bases of rural youth employment and entrepreneur;
- (f) To establish youth entrepreneur alliance, and provide liaison service to at least 10,000 rural youth;
- (g) To help at least 5,000 youth employed or starting business on agriculture through e-commerce, and train at least 2 e-business pioneers in each township;
- (h) To foster at least one outstanding youth under 45 years old who positively mobilizing farmers on employment or agro-business in each village;
- (i) To foster 10,000 agricultural agent, artisan, and other capable youth;
- (j) To support 30,000 rural youth mastering agricultural policies and skills;
- (k) To provide support and service to at least 5,000 college graduates and migrant labors back to agriculture; and
- (l) To provide at least one volunteer to the village without college-graduate village official and each township CYL.

#### **1.4.3 Ethnic Minorities in Project Area**

35. Yunnan is widely known for its cultural diversity in China having one third of its population as ethnic minorities. The province has 25 native ethnic groups (46%) out of 55 ethnic minority groups of the country. Five of the seven project counties are located in the so-called "cultural diversity area" of Yunnan. Dali and Nujiang are classified "minority autonomous prefectures". In Lijiang prefecture, 60% of the population belong to ethnic minority groups. Overall, about 29% of the population in the project

area belong to ethnic minority groups. Main ethnic minority groups in the project area are: Hui, Bai, Yi, Miao, Lisu, Naxi, Lahu, Pumi, Dai and Nu people. These minority are now without traditional institutions and are in general well integrated in the existing socio-economic context. They have livelihood strategies similar to those of the other rural populations, are not excluded from existing economic opportunities, are not discriminated, and have no distinct needs from the rest of the population. They are vulnerable not because belonging to an ethnic minority group, but because they live in poor and not well developed areas. Government policies targeting rural poor and vulnerable households in Yunnan province do not differentiate based on ethnicity, but target based on poverty indicators. The project engagement approach with pro-poor cooperatives and agro-businesses will be based on informed consultations to ensure that particular livelihood strategies of the different ethnic groups are taken into account, where existing. Even though an FPIC agreement will not be signed, since there are no traditional institutions and authorities to provide for a such signature, FPIC principles will as such be followed in the planning and formulation of project interventions.

#### **1.4.4 Nutrition in Project Area**

36. As said earlier, with high economic growth complementing with enormous progress in poverty reduction over the past forty years, China has made significant progress in improving the food security and nutritional status of its people. Similarly Yunnan has given high importance to reducing child malnutrition in its ‘Yunnan Child Development Plan (2011-2020)’, and clear targets, in terms of prevalence of severe malnutrition, prevalence of moderate to severe anemia, and anemia prevalence of primary and secondary students, are set for the province.
37. Based on the data of National Children Nutrition and Health Monitoring Program, from 2012 to 2018, the prevalence of anemia and stunting among children under 5 in rural Yunnan have decreased from 50.28% to 21.98% and from 17.84% to 3.69% respectively; and the prevalence of underweight and wasting among children under 5 have also decreased to 1.16% and 0.68% respectively in 2018. Though the figures are still significantly higher than those of urban area, yet such great improvement is driven by the national programs of health management for children under 6 and publicity of breastfeeding and reasonable complementary foods since 2009, and children nutrition improvement project in poor rural area in recent years.

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<sup>8</sup> X. Zhu, et al. Analysis of Nutrition and Health Condition Monitoring of Children under 5 Years Old in Urban and Rural Areas of Yunnan Province from 2012 – 2018. Chinese Journal of Children Health Care, Vol. 27, No. 5. May 2019. P571–573.

38. Limited data from the three project counties visited during design (i.e. Suijiang, Yunlong, and Yongping) showed that some of the targets (e.g. prevalence of moderate to severe anemia of children under 5 maintained under 12%) have already been achieved, suggesting the overall situation in the project area is not alarming and in line with the objectives of the provincial development plan.

## 1.5 Climate Change:

39. The average atmospheric temperature in China has increased by 0.91°C in the past 100 years. It is predicted that, with the continued intensification of climate change, the occurrence of extreme weather events and natural disasters will continue to increase. As poverty areas often coincide with climate and ecologically vulnerable areas, the effects of climate change will have a higher impact on rural, marginalized and natural resource-dependent households, who have higher exposure and lower adaptive capacity - increasing their overall vulnerability. The project area is moderately vulnerable to the effects of climate change. From 1961 to 2010, mean temperature in the project area has increased at a rate of 0.16°C per 10 years. Precipitations decreased in spring and autumn, and increased in summer. Frequency and intensity of extreme weather events increased, causing more seasonal droughts and floods, with an adverse impact on soil erosion.
40. Future projections forecast that mean temperatures would further increase, total annual precipitation would increase, and seasonal variation would increase. This would result in more frequent and intensified extreme weather events. The project will contribute to reduce the risks and impacts associated to the changing of weather and climate conditions, in particular increase in variability and unpredictability, by strengthening the capacity of the government and beneficiaries to assess climate risks (including through better access to climate information and weather forecasts), and plan and decide accordingly, and improving the climate-resilience of the infrastructure system (Ref. Activity A.1.6 and Component B).

## Chapter 2: Project Summary

### 2.1: Goals and Objectives

41. **Project goal and development objective:** The project goal is to sustainably maintain the poor and vulnerable households in the project area out of poverty. The development objective is to enhance the income generating opportunities for the poor and vulnerable



households in the project area, and the inclusiveness of the benefit-sharing mechanisms from agro-industries.

42. This will be achieved by (i) strengthening and supporting cooperatives, committed to poverty alleviation in terms of inclusiveness of poor households among their members and fair shareholding and benefit sharing mechanisms, to become more competitive and generate more revenues (Ref. Sub-component A.1); (ii) stimulating additional and more diversified income opportunities in the project areas, by providing services and stimulating local entrepreneurship, and attracting new investors in agricultural or (rural/resource-based) non-agricultural activities (Ref. Sub-component A.2); (iii) improving access to finance (Ref. Sub-component A.3); and (iv) addressing some of the major gaps in the current infrastructure system in the project area which may limit or constrain the implementation of the proposed project activities (Ref. Component B). Climate change considerations will be mainstreamed throughout the project by strengthening the capacity of the government and beneficiaries to assess climate risks and identify adaptation options - and plan and decide accordingly, and improving the climate-resilience of the infrastructure system.
43. **Key indicators:** The impact of the project would be measured through the following key indicators: (i) Number of rural producers' organizations engaged in formal partnership/ agreements or contracts with public or private entities; (ii) Number of Pro-poor Farmer Professional Cooperatives meeting the operational standards; (iii) new jobs created; (iv) increase in cooperatives' profits; (iv) Percentage of supported rural enterprises reporting an increase in profit; (v) %age of people reporting adoption of environmentally sustainable and climate resilient tech and practices. Indicators will be disaggregated by gender, age, and ethnic group, when relevant.
44. **Expected outcomes:** Expected outcomes include: (i) Strengthening participation of poor and vulnerable population in rural economic growth; (ii) Up-grading/developing Pro-poor farmer cooperatives; (iii) economic opportunities for women and youth enhanced; (iv) resilience to the negative effects of climate change enhanced.
45. **Project duration:** The project will be implemented over a period of 5 years.

## 2.2: Project area and Geographical targeting

46. **Project area:** The project will be implemented in seven currently nationally-designated poor counties within the four municipalities/prefectures of Zhaotong, Dali, Lijiang and Nujiang in the North-East and Western part of Yunnan province (i.e. Zhenxiong and Suijiang counties in Zhaotong municipality; Yunlong and Yongping counties in Dali prefecture; Huaping and Yongsheng counties in Lijiang municipality; and Lanping county in Nujiang prefecture). Criteria for the selection of the counties included: poverty incidence (the county would need to be a nationally- or provincially-designated poor county), presence of industries with a market potential, and

commitment of the local government to the objectives and proposed approach of the project.

47. **Ethnic minorities in project area:** Yunnan has one-third of the 55 ethnic minority groups of the country. Five of the seven project counties are located in the so-called "cultural diversity area" of Yunnan. Dali and Nujiang are classified "minority autonomous prefectures". In Lijiang prefecture, 60% of the population belong to ethnic minority groups. Overall, about 29% of the population in the project area belong to ethnic minority groups. Main ethnic minority groups in the project area are: Hui, Bai, Yi, Miao, Lisu, Naxi, Lahu, Pumi, Dai and Nu people.

## 2.3: Target groups and Targeting strategy

48. **Targeting strategy:** The project will adopt the following targeting strategy:

1. ***Geographical targeting:*** the project will target current or former nationally-designated poor counties, or counties with high poverty incidence, and - within these counties - priority will be given to relative backward villages and communities, i.e. villages and communities with a relatively high concentration (higher than county average) of registered- or formerly registered-poor. Based on the above criteria, 172 villages in 29 townships have been pre-identified for project implementation, which represent about 22.5% of the villages in the project counties. The project would cover about 19% of the poor villages in the project counties. Poverty incidence in the project area is about 23%, about one-third higher than county average (17%) and four-time higher than provincial average (5%). Net income per capita in the project area is about 13% lower than provincial average and 8% lower than county average.
2. ***Poverty targeting:*** within the project area, focus will be given on relative poor (i.e. households who have been registered at least once in the National Poor Registration System since 2014). It is in fact expected that no more households will be in the NPRS after 2020.
3. ***Gender, youth and ethnic minorities targeting:*** among the project beneficiaries, specific focus will be given to vulnerable groups: (i) women; (ii) youth (i.e. people between 18-45 years of age)<sup>9</sup>; and (iii) ethnic minorities. Particularly, the project will actively favour women and youth participation to/benefit from project activities as follows:
  1. ***Women targeting strategy:*** (1) Women participation in supported cooperatives will be promoted as follows: (i) Women-led cooperatives

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<sup>9</sup> China Communist Youth League define Youth between age 18 to 45.

will be encouraged: the project will support at least two women-led cooperatives per county; (ii) Gender eligibility criteria will be applied to select other cooperatives to be supported by the project: percentage of women in the cooperative should be higher than the percentage of women in the local village; women should be included in the cooperative's board; at least 60% of the participants to trainings and capacity building activities should be women; (2) Women entrepreneurship will be favoured by awarding at least 25% of the start-up investment support to women.

2. *Youth targeting strategy*: (1) Youth participation in supported cooperatives will be promoted by supporting at least one youth-led cooperative per county; (2) Youth entrepreneurship will be favoured by awarding at least 50% of the start-up investment support to youth of which 50% will be for young women.
3. *Ethnic minorities targeting strategy*: Ethnic minorities in the project area are in general well integrated in the existing socio-economic context, have livelihood strategies similar to those of the other rural populations, are not excluded from existing economic opportunities, are not discriminated, and have no distinct needs from the rest of the population. They are vulnerable not because belonging to an ethnic minority group, but because they live in poor and not well developed areas. Government policies targeting rural poor and vulnerable households do not differentiate based on ethnicity, but target based on poverty indicators. The project engagement approach with pro-poor cooperatives and agro-businesses will be based on informed consultations to ensure that particular livelihood strategies of the different ethnic groups are taken into account, where existing. This will include discussions with subgroups (women, youth and ethnic minorities) to insure the aspirations, inclusion barriers and needs of these groups are considered in the cooperative and agro-business development strategies, activities and investment plans.

49. **Beneficiaries**: In all, the project is expected to directly benefit an estimated 91770 individuals, out of which about 25% are formerly registered poor, 50% women, 30% youth, and 60% belong to ethnic minorities (i.e. direct beneficiaries). The project is expected to indirectly benefit about 414540 people inside the project area with 88200 households (including direct beneficiaries).

### **Chapter 3: Project Components/Outcomes, Activities and Implementation Strategy.**

50. The Project is organized along two complementary components: (1) Supporting Inclusive Rural Development; and (2) Climate-proofed Public Infrastructures Planning and Development; supported by a third cross-cutting component (3) Project management, M&E, Knowledge Management, and Policy.

51. The outline of the components is the following:

#### **Component A: Supporting inclusive rural development**

Sub-component A.1: Improving Chanye fupin models; activities include:

A.1.1 upgrading cooperatives to meet operational standards

A.1.2 cooperative co-investor support

A.1.3 company-cooperative/household models

A.1.4 Innovative models (other)

A.1.5 establishment of county traceability systems

A.1.6 improving climate information and adaptation advise

Sub-component A.2: Stimulating entrepreneurship/attracting investors; activities include:

A.2.1 Business incubation/Service Centres

A.2.2 Investment support for start-ups

Sub-component A.3: Improving access to financing; activities include:

A.3.1 Financial capacity culturing

A.3.2 Financial services improvement

A.3.3 Establishing a financial advisory service center

#### **Component B: Climate-proofed Public Infrastructures Planning and Development**

Sub-component B1: Infrastructure for improved climate resilience; activities include:

B.1.1 Climate proofed irrigation planning, design & decision

B.1.2 Piloting climate proofed smart irrigation investments

Sub-component B.2: Rural infrastructure; activities include:

B.2.1 improvement and development of water source facility

B.2.2 improvement and development of rural roads

B.2.3 improvement and development of safe drinking water supply system

B.2.4 land preparation

### **Component C: Project management, M&E, Knowledge Management, and Policy**

These components and related sub-components are briefly presented below along with implementation strategy.

#### **3.1 Component A. Supporting Inclusive Rural Development:**

52. **Rational:** The rural areas in the project counties in Yunnan like in most parts of rural China are experiencing a fundamental transformation. The traditional farms are mostly too small to provide a family income, which is sufficiently high to stay above poverty levels. A significant part of the former agricultural workforce is working outside farming. Most families have at least one, often both middle generation family members outside for most of the year. The remaining population in the villages are elderly, some middle generation women taking care of elderly parents, young kids or sick and people with disabilities. For them maintaining traditional farming activities with low value addition and ad hoc market outlets often becomes a burden rather than an attractive livelihood opportunity considering the remittances the family is receiving. This offers opportunities for other part of the rural population to expand their agricultural business or even for new investors to come in. At the same time, there is a need to improve the inclusiveness of agricultural cooperatives and businesses of women, staying in the rural areas. Likewise, opportunities for economic inclusion need to be created for migrant worker returnees and youth who prefer to stay in rural areas to be with their families and as access to services and connectivity are improving in the villages. Within this context this component is: a) promoting improvements in the existing practices and models of rural development, which are implemented under the on-going poverty reduction through industrialization - Chanye Fupin (CYFP) strategy; b) supporting farmer organisations and production structures with high participation of smallholder households, and which are viable and competitive and give people choices suitable for their individual situation and risk perceptions such as a secure market outlet for their produce, leasing out their land, participating as shareholders in a cooperative or an enterprise, or earning labour income; and c) generating additional and more diversified income opportunities, by providing service and stimulating local

entrepreneurship and attracting new investors in agricultural or rural-resources-based non-agricultural activities (e.g. tourism, e-commerce, etc.).

### **Component A Implementation Strategy:**

53. **Responsibilities:** The overall responsibility for the implementation of this component will be with the Department of Agriculture and Rural Development at the Provincial (DARA), Prefecture (PARA) and County (CARA) levels. DARA/CARA will coordinate with other line departments/offices such as Finance, Development and Reform Commission, Water, Forestry, Roads, Women Federation, Ethnic Minority, Youth etc. to secure support and inputs for the project.
  
54. **Project implementation principles:** The implementation of the project will follow the following principles:
  - **Open and Transparent** for all every eligible applicant and for the general public (through public advertisement, invitation for proposals and public disclosure of support to cooperatives, investors and associated enterprises);
  - **Business and Client Driven** by cooperatives, investors and agro-enterprises (not by local Governments and County Development Plans)
  - **Economically Efficient, Financially Viable and Sustainable**, where all supported investments to private entities will be based on a satisfactory and convincing business plan;
  - **Environmentally sustainable**, where all supported production and processing activities do not cause soil erosion or depletion of soil nutrients, pollution from overuse of agrochemicals, pollution of land and water from inadequate management of solid and liquid waste, and conversion of habitats critical for the local biodiversity to farmland, water reservoirs or roads; and
  - **Focus on vulnerable groups;** the project will focus on ensuring that the benefits generated by the development of the project areas (through the support to lead "industries", the creation of new employment opportunities, and comprehensive infrastructure development) primarily benefit identified vulnerable groups, i.e. former archived poor and relative poor households, women, youth, and ethnic minorities.
  
55. **Preparatory and early stage implementation activities:** While each county has already proposed several detailed investment activities in support of one or several of their key industries (value chains), the project would take a step back and follow a sequence of preparatory and early stage implementation activities. Under the project the detailed investments activities will be defined or re-defined following a process of targeting, awareness building and informed consultations seeking consent from the villages and value chain stakeholders, cooperative capacity building, training, facilitation, and preparation of investment proposals by each of the supported investors, cooperatives or agri-enterprises. The following preparatory steps will be undertaken:

- **County Training & Awareness Workshops** will be conducted to make all county PMO staff and related line department staff aware of the project principles and familiar with the detailed implementation arrangements (project documents, manuals, safeguard requirements, logframe indicators and targets to be monitored and achieved, etc.). Funds for this activity are provided under the Management Component for each county.
- **Project Information Disseminations** providing full project information to the villages and stakeholders in the value chains; each county will ensure that project information is widely disseminated, and full project information is provided to all project villages, and to all stakeholders in the value chains including traders and processing companies in the counties.
- **Round Table Stakeholder Meetings** will be conducted (at least one for each value chain) in each county over the first 2-3 months. For these meetings all relevant private and public sector partners (processing companies, traders, existing cooperatives, lending institutions), research institutions, government line department representatives, etc., should be invited and informed about the project and discuss the development options for the value chains. The counties will keep records and provide documentation of the invited and participating stakeholders and the minutes of such meetings.
- **Focus group discussions with** smallholder farmers, women, youth and ethnic minorities from the villages concerned with the proposed value chains to provide information and discuss their aspirations, barriers, and needs for their inclusion in the different activities of the value chains. These meetings will also provide a platform for the participation of these groups in the development of the investment plans for the cooperatives and the agribusinesses. The counties will keep records and provide documentation of the participants and the minutes of such meetings.
- **Technical Advisory Groups (TAG);** as an outcome of the above stakeholder meetings each county will nominate and form a Technical Advisory Group (TAG), with at least one representative from each stakeholder group nominated or elected during the meetings. It is important that the TAG will not only include members from the Government line departments but include members from the private sector, farmers, businesses, rural finance institutions, etc. The role of the TAG will be to guide and advice project applicants in the preparation of business plans. Competence in general business development, management and in market development is an essential element for the TAGs. TAG members would not be hired but can be compensated for their work and services using project funds allocated under the Business Service Centre subcomponent.

**56. Formation, Registration and Training of Cooperatives;** Since the project will primarily focus on cooperatives as the main entry point for improving existing chanye fupin models (i.e. poverty reduction through agribusiness industry development), each county PMO will start to mobilize potentially interested farmer cooperatives in the project areas. They will be informed about the pro-poor objective and eligibility criteria of the project and how these criteria may be met. They will be provided training in

inclusive governance and management of the cooperative to enhance participation and benefits for women, youth and vulnerable households. They will also be provided training in business development planning, financial management and development of business plan proposals to be supported by the project.

### **3.1.1 Sub-component A.1: Improving chanye fupin models.**

57. **Rationale.** The concept of agricultural industrialization was introduced in the poverty reduction strategy in the previous 10-year strategy, when the Central Party Committee and the State Council issued the Outline of Rural Poverty Reduction (2011-2020). The concept of poverty reduction through industrialization - *Chanye Fupin* (CYFP) - literally, to use agricultural industrialization to alleviate poverty, was officially proposed, along with integrated development of village infrastructure and skills training, especially for migrant labor. The key principles in the CYFP approach are: i) agricultural enterprises and lead farmers/big households would join hands with poor households lagging the capacity to develop on their own; and ii) an integrated market oriented development approach taking into account the whole value chain for value addition instead of focusing on production of primary products. With the next stage rural development strategy of rural revitalisation, the CYFP has been re-enforced as a central element for generating rural incomes. While the project is building on principles of the CYFP, it is important to draw from the experiences and improve on shortcomings.
58. Farmer cooperatives are explicitly promoted and play an important role in the CYFP approach. They are critical to help organize producers, assist farmers to respond to consumer demand and apply standardized production methods. Such cooperatives can capture part or all benefits from value chains and become valuable partners for enterprises. They serve as nodes and entry points for technology extension and agricultural services and serve as stewards for food safety and product quality. The Government enacted the China Farmers' Professional Cooperative Law (FPCL) in 2007 and subsequently revised it in 2018, Farmer cooperatives have since then been mushrooming in all rural China and the Government has recently promulgated to have at least one cooperative in every village.
59. Low management capacity, weakness in organizational and financial management, limited business experience and business attitude, lead capture, and general non-compliance with the provisions of the Cooperative Law are the most common shortcomings in China's farmer cooperatives, which is also seen in Yunnan. Many cooperatives are inactive or never became really active (called empty shell cooperatives). Business oriented and profitable cooperatives often have a small number of individuals who have made largest investments usually control the



cooperative operations and their assets. Other cooperatives, attached or associated with existing enterprises, are generally controlled by such enterprises. In addition to the true farmer professional cooperatives register under the FPLC, many villages have responded to the Government's promotion of setting up cooperatives in every village and have set up cooperatives under the village administration as village collective economic entities. Such cooperatives mostly lack reasonable controls, and an independent business approach and financial transparency as required by the law. This makes such cooperatives unattractive for poor farmers as entities for encouraging self-development and empowerment and unable to deliver sustained poverty alleviation as intended under the CYFP approach. This sub-component is designed taking on the lessons from the current and on-going experiences with the CYFP and provides improvements in particular towards a more business oriented and inclusive development approach.

60. **Scope of work.** Major activities under this sub-component include: (i) Upgrading Cooperatives to Meet Operational Standards; (ii) Cooperative Co-investor support; (iii) Company-cooperative/household models; (iv) Other Innovative Models; (v) Establishment of County Traceability Systems; and (vi) Improving Climate Information and Adaptation Advise:

61. **Activity A.1.1: Upgrading Cooperatives to Meet Operational Standards.** The total number of registered professional farmer Cooperatives in the project area are about 60,000 to 70,000. The project will support the development of about five cooperatives in each county, which could be existing cooperatives with interest and basic conditions or newly set up cooperatives, as cooperatives with model standards. They would upgrade their operational level to serve as 'pro-poor standard operating cooperatives'. The minimum operational standards of such cooperatives including participation of poverty and vulnerable household, are defined by a set of indicators as shown in Attachment 1. The needed investment to meet these standards will mainly be for capacity building and training and could include investment in IT equipment and software (e.g. for accounting), validation of assets, managerial and technical services, etc.. This activity will be implemented piloting a Results Based Lending (RBL) disbursement approach. Cooperatives achieving the agreed standards as verified by an independent verification agency will be reimbursed on basis of actual cost/expenditures.

62. Regarding Result-based lending, it was acknowledged that the current IFAD policies prevent to implement the proposed activities to be disbursed piloting an RBL approach as initially conceived (i.e. adoption of an incentive-based pricing method to quantify the amount to be disbursed upon the achievement of agreed and independently verifiable targets for a cooperative meeting defined pro-poor operational standards). It is agreed to maintain a small RBL pilot, where the amount to be disbursed against the

achievement of the agreed target (i.e. cooperatives that would meet defined pro-poor operational standards) would be determined on the basis of the actual costing/expenditures of the activities needed to reach this target<sup>10</sup> evidenced by the documentation of the actual expenditures. Acknowledging that such method may not provide a sufficiently strong incentive to cooperatives to adopt the defined operational standards, it is agreed that – as an additional incentive – cooperatives that will meet the agreed operational standards would have a preferential access (e.g. amount, conditions, etc. – to be determined in the project implementation manual) to the resources allocated to finance business plan proposals under component A.1.2

**63. *Implementation Strategy for Upgrading Cooperatives to Meet Operational Standards.*** This activity will turn existing or develop new farmer professional cooperatives into *Pro-poor Farmer Professional Cooperatives*, which meet the standards and conditions needed to achieve the expected economic performance and poverty reduction impact. This will not only be of importance for the cooperatives themselves but would create centers of excellence and demonstration models for other cooperatives. In addition to improved business, governance and benefit sharing arrangements, these model cooperatives will also adopt climate adaptation and mitigation activities as defined and listed in Attachment 1.

64. The achievement of this outcome (*Pro-poor Farmer Professional Cooperatives*) is defined as a Disbursement Linked Indicator (DLI). Disbursements are scalable and will be made against the number of farmer cooperatives which meet the agreed standards based on the costs for achieving the upgrading of each cooperative.

65. The DLI baseline for cooperatives which meet defined operational standards is considered zero<sup>11</sup> and the target is 50 cooperatives by 2022. These cooperatives could come from the existing pool of registered and non-registered cooperatives in the 7 program counties or could include new farmer cooperatives, which could be potentially established in the targeted counties.

66. Verification protocol. The DLI is defined as number of pro-poor farmers professional cooperatives, registered in the Industry and Commercial Bureau under the Cooperative Law<sup>12</sup>, meeting defined operational standards, which means a set of standards related

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<sup>10</sup> \*Considered would be incremental management costs, e.g. hiring a professional manager, costs related to asset validation, registration/re-registration, expenses for lawyers, accounting systems (hardware, software, training) costs for accountants, management training, etc. Costs would be considered for a reporting period of maximum one year

<sup>11</sup> Field observation based on random checks and targeted checks of so-called demo cooperatives supported by the Government as cooperatives with the highest standards but failing to meet the standards of Pro-Poor Farmer Professional Cooperatives.

<sup>12</sup> This registration is important to provide the legal basis for the business activities, assets rights management and for protecting the members' rights. Currently many

to a ‘pro-poor farmer cooperative’ in line with the government’s policies for cooperative development and IFAD’s poverty, gender and youth targeting criteria. These include social inclusive and pro-poor standards for registration, membership, financial management, and decision-making arrangements (see *Attachment 1*). The pro-poor farmer professional cooperatives needs to be duly established under the laws of China and the DARA, registered in any of the 7 project counties, and at least 30 percent of its members should be registered poor households or 40 percent of all registered poor households in each of the covered administrative villages are members of the cooperative.

67. The sub-component will be complemented by the preparation and installation of the computerized Management Information System (MIS) for farmer cooperatives to be prepared by the Yunnan Provincial Department of Agriculture and Rural Development. The Agricultural Bureaus or the Economic and Management Bureaus of DARA at the county levels will record the cooperative information in the data base on a regular basis and be responsible for the accuracy of the information. Cooperatives meeting all the agreed eligibility requirements will be reported to the PPMO on a semi-annual basis.
68. An independent third-party Verification Agency (VA) will conduct a verification of all cooperatives deemed to meet the agreed operational standards in a given DLI disbursement period (e.g. quarterly). The cooperatives will report to the VA who after verification will report to the PPMO according to the agreed check list. Verification that a DLI target has been achieved would be through a letter of confirmation to IFAD as the basis for disbursement.
69. The Detailed implementation procedures would be as follows:

*DARA’s department for cooperatives will:*

- *Issue a guiding document* explaining the approach and guiding the counties on the implementation procedures;
- *Prepare a Recording Format* covering the verification criteria (see Attachment 1), plus eligible expenses to achieve the operational standards. Eligible expenses must have a relationship to the achievements of the operational standards as a pro-poor cooperative and could include incremental management costs (e.g. hiring a manager), costs related to asset validation, registration/re-registration, expenses for layers, accounting (hardware, software, training, costs for accountants), management training and hiring of facilitators to improve social inclusion (gender strategies, women’s participation and empowerment, youth strategies, and strategies for inclusion of vulnerable households and people with disabilities), etc. Costs would be considered for a reporting period of maximum one year.

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cooperatives are set up by the villages as ‘villages cooperatives’ not under the protection of the law.

- *Design of a computerized Management Information System (MIS) for cooperatives:* Based on the agreed recording format DARA will contract the design and rolling out of a computerized MIS. This MIS would capture the basic information of a cooperative, all verification criteria (Attachment 1) in the form of checkboxes, information about the eligible expenses to achieve the operational standards. The MIS will include provisions for the evidence documentation for each of the criteria (e.g. scans of documents related to registration, licenses, shareholding agreements, meeting minutes, etc.) and include space for providing evidence for the expenditures also with evidence provisions. The MIS design company will roll out the MIS to the counties and provide training and back-stopping to the users.
- *Contract a Verification agency.* The provincial PMO will recruit a third-party verification agency acceptable to IFAD, which would verify each of the cooperatives reported to have met the criteria.
- *Take reference to Guangxi;* the Yunnan DARA is encouraged to contact the Guizhou DARA related to the above tasks, as Guizhou is implementing a similar approach.

70. *The county PMOs:*

- *Awareness and invitation to register;* the county PMOs will raise awareness among cooperatives and encourage them to register their information in the MIS. The registration will be available for all existing and newly created farmer professional cooperatives in the program counties.
- *Recording Responsibilities;* the county PMOs will record or help the cooperatives to record the information in the MIS on a regular basis. County PMOs will be responsible for the accuracy of the information and conduct pre-verification in particular for cooperatives self-recording their information.
- *Closing Gaps in Meeting the Standards;* the county PMOs will use the MIS data to identify gaps in the operational standards and advice registered cooperatives on the required actions to close the operational performance gaps (e.g. attending training, improving, financial transparency, record keeping, etc.). Following the RBL approach such activities need to be pre-financed by the beneficiaries.
- *Reporting successful cooperatives;* the county PMOs will report cooperatives, which show that they achieved the required performance criteria to the PPMO, which in turn will inform the verification and request verification.

71. *Verification Agency:*

- *Field verification;* the verification agency will be periodically (e.g. quarterly) provided with the list of cooperatives reported to meet all criteria and conduct a field verification, which will include the verification of evidence for the documentation.

72. *IFAD Disbursement:*

- IFAD disbursement will be triggered by a *letter of confirmation* to be forwarded to IFAD on a quarterly basis and supported by the corresponding list of the cooperatives certified by the VA.

73. ***Activity A.1.2: Matching Grant Support for Certified Pro-Poor Farmer Professional Cooperatives.*** The cooperatives who have met the pro-poor standard will be eligible for a matching grant investment based on an agreed business plan up to RMB 1.5 million with a 60 to 40 percent matching arrangement (example: cooperative would contribute RMB 1 million and the project would finance RMB 1.5 million).

74. ***Implementation Strategy for Matching Grant support for Certified Pro-Poor Farmer Professional Cooperatives.*** Successfully certified pro-poor farmer professional cooperatives will be eligible to apply for a matching grant from the project. This funding will be provided based on an approved business plan (for contents and format see Attachment 2). The financing would be up to 60% (maximum RMB1.5 million for each eligible cooperative) from the project and at least 40% from the cooperative's own financial resources and/or from commercial loans. The financial plan (see Attachment 2, Appendix Table 2) would detail the investment items and contributions from different sources.

75. *IFAD funding* could be used for: (a) cooperative-level start-up or up-grading investments including investments in production systems (e.g. advanced breeding stock, improved seedlings, re-grafting, technical assistance in improved soil and water management practices, IPM and other practices increasing production sustainability and climate change adaptation and resilience, etc.); (b) pre-processing and processing technologies for agriculture and related products; (c) storage, drying, packaging, or other marketing facilities using renewable energy when possible; (d) market exploration and market development to provide access to new and higher-value markets (analysis, development of marketing strategies, etc.); (d) up-grading of quality standards, labelling and certification, branding, product tracing, logistics, food safety and others; and (e) general services and training. IFAD fund cannot be used for annual operating expenses (e.g. salaries, annual production inputs, fertilizer, farm labour, etc.) or working capital. The matching contribution from the cooperative should include new investments (already existing assets cannot be considered) and could also include working capital.

76. Steps to be taken:

- Notification of the eligibility by the county PMO;
- Preparation of business plan proposal (investment plan) by the cooperative;
- Involvement of the TAG in reviewing and quality improvement of the business plan organised by the county PMO;

- Review and approval of the business plan by the County Department of Agriculture and Rural Development;
- Preparation and signing of a *Financing Agreement* between the Cooperative and the county PMO;
- Notification of the PPMO about approved plan;
- Implementation by the cooperatives in close coordination with the county PMO.

**77. Activity A.1.3: Cooperative Co-investor support.** Many existing cooperatives lack entrepreneur skills, market access, and access to capital. At the same time the Government seeks to attract interested investors and entrepreneurs from a pool of interested migrant labor returnees and talented young entrepreneurs, which are expected to bring in skills, experience, linkages and understanding of consumer markets and financial capital. But these investors in turn lack access to production resources (e.g. land, and primary production outputs), which the cooperatives would offer. The project will facilitate a match between investors and cooperatives by encouraging interested pro-poor standard operating cooperatives (after up-grading under Activity 1) to advertise for potential co-investors (as shareholders). They will prepare a joint investment plan, which the project would co-finance at a 1:1 ratio. The project funds up to RMB 1.2 million per cooperative co-investment would be converted into shares of farmer members prioritising poverty and vulnerable households. The shares of the investors in a cooperative should not exceed a total of 40%. Co-investors can only be private individuals not enterprises or representatives of enterprises. Eligible items in the investment plan could include Technical assistance for improving production, cooperative assets, services, and working capital, while the proportion of working capital should not exceed 50% and should be financed from the co-investor.

**78. Implementation Strategy for Cooperative Co-investor support.** This activity will address two main concerns restricting the development of farmer cooperatives in rural areas: a) the skill capacity problem (management capacity, entrepreneur and marketing skills); and b) access to finance and lack of capital. At the same time, it should be avoided that farmer cooperatives are fully taken over and captured by outside investors. Eligible cooperatives would be existing registered cooperatives and newly created cooperatives. During the investment process such cooperative would be developed up to the standards defined as pro-poor farmer professional cooperatives (for the criteria see Attachment 1), while a minimum set of entry criteria will need to be met before IFAD funding can be provided. Such criteria would include No. 1 to including 11 of the list in Attachment 1). Eligible co-investors would be individuals (not enterprises or individuals acting on behalf of enterprises). Investors could be one or several per

cooperative if the investors total shares would not exceed 40% of the total shares in the cooperative.

79. The investment from the project will be established in an agreed investment plan as part of an approved business plan and a signed tri-partite *Financing Agreement*. The maximum investment per each cooperative would be RMB 1.2 million. The IFAD funds would need to be matched with the same or a higher amount from the investor(s). The IFAD funds would be used to generate additional cooperative assets (tangible or non-tangible, see below) and would be capitalized as shares of the cooperative farmer members by giving preference to poor household members in a ration 1.5 (poverty households) to 1 (ordinary farmer households). (Example: in a cooperative with 100 members, of which 50 are poverty households, each ordinary household would receive 0.8% shares, each poverty households would receive 1.2% shares).
  
80. The leading role in the implementation of this activity would initially be with the county PMO. As soon as the business incubation/service centres become operational, this function will be transferred to the centres. The approach would be as follows:
  - *Identification of interested/suitable cooperatives*; the county PMOs (later centres) together with the township governments will through the public awareness and information campaign (see above general preparatory steps) invite and identify interested cooperatives;
  - *Preparation of a brief cooperative profile*; the county PMOs (later centres) will prepare short profiles with the key features of each interested cooperatives and the potential areas for co-investments (social, age and gender constitution within the membership, assets, type of industry, production arrangements, business arrangements, etc.);
  - *Public invitation and first screening of potential investors*; based on a batch of cooperative profiles county PMOs (later centres) will publicly invite interested investors to submit a short expression of interest in engaging in a co-investment and their capacities and background to be brought to a such engagement. The invitation will in particular address young entrepreneurs, returnees, women investors with a suitable background and capacity. The county PMOs (later centres) will do a screening and pre-select suitable candidates before arranging for ‘match-making’ meetings cooperatives individually or in the form of roundtable meetings with several cooperatives (round-table stakeholder meetings, see above general preparatory steps);
  - *Signing of Intentional Agreement*; the cooperatives and investor(s) would sign an intentional agreement stating the principles including an agreement of both sides to work under the rules of the cooperative law and the agreement that the investors share(s) would be limited to a maximum of 40%. The county PMOs (later centres) would assist in the preparation of such agreement and prepare a standard format;
  - *Preparation of a business plan/investment proposal and financing plan*; Cooperative and investor(s) will jointly prepare an investment plan (format to be followed see Attachment 2). The eligible investment items would include: (a)

cooperative-level start-up or up-grading investments in new production systems, including field level production (e.g. advanced breeding stock, improved seedlings, re-grafting, technical assistance in improved soil and water management practices, IPM and other practices increasing production sustainability and climate change adaptation and resilience, etc.); (b) pre-processing and processing technologies for agriculture and related products; (c) storage, drying, packaging, or other marketing facilities using renewable energy when possible; (d) market exploration and market development to provide access to new and higher-value markets (analysis, development of marketing strategies, etc.); (d) up-grading of quality standards, labelling and certification, branding, product tracing, logistics, food safety and others; and (e) general services and training. IFAD funds cannot be used for annual operating expenses (e.g. salaries, annual production inputs, fertilizer, farm labour, etc.) or working capital. The matching contribution from the cooperative and/or investor(s) should include new investments (already existing assets cannot be considered) and could also include working capital;

- *Technical support*; the TAG will review and provide suggestions for improvement of the investment plan and comment on the technical and financial feasibility of the plan;
- *Review and approval of the business plan* by the County Department of Agriculture and Rural Development;
- Preparation of a tri-partite *Financing Agreement* between the Cooperative, the investor(s) and the county PMO;
- *Checking entry criteria and signing Financing Agreement*; the county PMOs will verify that the minimum entry criteria (No. 1 to 11 in Attachment 1) are met before signing of the tri-partite *Financing Agreement* between the Cooperative, the investor(s) and the county PMO;
- Notification of the PPMO about approved plan;
- Implementation by the cooperatives in close coordination with the county PMO.

81. **Activity A.1.4: Company-cooperative/household models.** Most of the agricultural industry development by the local governments focuses on investments for the expansion or up-grading of agricultural production with a limited consideration of the real demand and marketing opportunities. This activity is designed to support a fully demand driven company-cooperative/household production approach. The buyers (companies) and the producers (cooperatives or individual households) would engage in an up-front agreement and jointly prepare an investment proposal, where the cooperative part would be partially financed by the project. Some of the guiding principles of such arrangements are outlined in Attachment 3. Project investments up to RMB 1.5 million per cooperative (matched by at least RMB 1.5 million from the beneficiaries) would focus on technical assistance and the investment needs at the cooperative and household level identified in the investment proposal. They would be used mainly for jointly owned/operated assets by the cooperative (e.g. agricultural



machinery, preprocessing facilities, joint infrastructure such as water storage facilities and distribution pipes and canals, etc.) and land improvements (e.g. terracing, drainage, water pipes). To strengthen the cooperatives as partners of companies, cooperatives would be given priority under this activity and households would only be supported in cases where cooperative formation is not appropriate.

82. ***Implementation Strategy for Company-cooperative/household models.*** This activity will link farmer cooperatives and/or individual farmers in attractive value chains. Eligible companies must have proven business experience and technical, financial and management capacity and a ready market (more detailed criteria such as credit rating, minimum size, length of operational experience, etc., would still need to be defined in coordination with the implementing units).
83. The project investment (IFAD) funding will be limited to finance the cooperative or household investments including joint infrastructure, training and capacity building (no enterprise assets). Project funds would not be channelled from the PMO directly to coop/farmers (not through the companies/enterprises. The maximum total investment per beneficiary household would be RMB 30,000 with a total investment per each business plan not exceeding RMB 5 million, of which a maximum of 50% would be financed using IFAD funds. The remaining at least 50% should be financed as beneficiary contribution. The itemized financing plan should identify investment items to be financed by IFAD and items financed by the beneficiaries (cooperatives, companies, individual households, etc.). Co-financing from the beneficiaries can include labour and in-kind contributions. Past investments prior to the approval of the investment proposal and regular operational costs cannot be considered as co-financing.
84. The leading role in the implementation of this activity would initially be with the county PMO. As soon as the business incubation/service centres become operational, this function will be transferred to the centres. The approach would be as follows:
- *Identification of interested/suitable companies;* the county PMOs (later centres) will through the public advertisement and awareness workshops identify interested companies and present the general objective, eligibility criteria, conditions and procedures to interested candidates;
  - *Screening of potential companies;* the county PMOs (later centres) will do a screening and pre-select suitable candidates and provide a go-ahead to enter into a detailed participatory preparation of business plans/investment proposals;
  - *Identification and socio-economic profiling* of the beneficiary households (location, number, poverty, ethnic minority, gender and age of main participant/beneficiary, farm size, etc.);
  - *Participatory preparation of a joint investment proposal and financing plan;* Companies and farmer cooperatives or farmer households will jointly prepare an investment plan (format to be followed see Attachment 2). The eligible investment items would include: (a) cooperative-level start-up or up-grading investments or individual households investments in new production systems, including advanced breeding stock, improved seedlings, re-grafting technical assistance in improved

soil and water management practices, IPM and other practices increasing production sustainability and climate change adaptation and resilience, etc.; (b) pre-processing; (c) storage, drying, packaging, or other pre-marketing facilities using renewable energy when possible; (d) up-grading of quality standards, costs related to achieving green food or organic certification at the farm level, product tracing, logistics, food safety and others; and (e) general services and training. IFAD fund cannot be used for annual operating expenses (e.g. salaries, annual production inputs, fertilizer, farm labour, etc.) or working capital. The matching contribution from the cooperative and/or households should include new investments (already existing assets cannot be considered) and could also include labour and working capital;

- *Technical support*; the TAG will review and provide suggestions for improvement of the investment plan and comment on the technical and financial feasibility of the plan;
- *Review and approval of the business plan* by the County Department of Agriculture and Rural Development;
- Preparation of a tri-partite *Financing Agreement* between the company, cooperative/households and the county PMO;
- Notification of the PPMO about approved plan;
- Implementation by the county PMO in close coordination with cooperative/farmers and the company.

**85. Activity A.1.5: Other Innovative Models.** The project would support other innovative CYFP models to be proposed by the participating counties. Such models would need to feature the agreed guiding principles of the project in particular: i) a clear focus and identification of the IFAD target group as the main beneficiaries (poor, or poverty vulnerable smallholder households, women, youth and/or ethnic minority); ii) a full participation of the target groups in the design, implementation and benefit sharing; and iii) a reasonable assurance of sustainability and scaling up opportunity. Such innovative proposals would be individually reviewed and appraised by the IFAD team.

**86. Implementation Strategy for Other Innovative Models.** The project provides a window for supporting other innovative CYFP models to be proposed by the participating counties. The implementation approach would be as follows:

- The county PMOs would make proposals for individual investments within the scope of the project, while the investment intensity should not exceed RMB 30,000 per beneficiary households and the total investment per proposal should not exceed RMB 2 million.
- Counties will forward the suggested investment proposals with a detailed investment plan to the PPMO, which would review and confirm that proposals are in line with the agreed principles of the project in particular: i) have a clear focus and identification of the IFAD target groups as the main beneficiaries (poor, or poverty vulnerable smallholder households, women, youth and/or ethnic minority);

- ii) a full participation of the target groups in the design, implementation and benefit sharing; and iii) a reasonable assurance of sustainability and scaling up opportunity.
- The PPMO would forward the confirmed proposals to IFAD for an individual review and appraisal before the investments can be implemented.

87. **Activity A.1.6: Establishment of County Traceability System.** A trusted system that allows for following a food product from the place of production to the table of the consumer is often considered critical for: i) ensuring that food safety requirements are met and eventual breaches can be precisely identified and addressed; ii) generating consumer trust in food standards and certification (e.g. green, organic, fair trade (produced with fair benefit sharing with smallholders), place of origin); and iii) adding value by giving consumers a notion of direct and personal relationship with and support for the involved producer. Current IT technologies provide the tools for such systems and the governments at various levels are also supportive in monitoring food traceability. Despite the availability of commercially operated or agro-entities established traceability systems, the Ministry of Agricultural and Rural Affairs (MARA) has been promoting the synchronization of all such systems with the “National Agro-Products Traceability System”. The project would support the counties and related agro-entities in their application of the national traceability systems. This would include system access and registration, hard and software, and user training.

88. **Implementation Strategy Establishment of County Traceability System.**

The County Bureau of Agriculture and Rural Affairs (CARA) will be responsible for the implementation of this sub-component activity. The county PMO will identify the appropriate office (the “implementing agency”) within CARA for the specific undertaking of this activity. The implementation approach will be:

- *Awareness building and mobilization.* The implementing agency will follow up with the project supported agro-entities, to provide awareness training campaigning on traceability and system, explore their feasibility products and desire for embarking on food traceability practices;
- *Training and Registration:* the interested agro-entities will be registered onto the national traceability systems, with the support of the implementing agency. Related training will be undertaken for the operating of the system;
- *Adopting product traceability.* The enrolled agro-entities will acquire necessary equipment and materials for testing, labelling, QR printing and scanning and data processing to establish traceability.
- *Supervision and execution.* County supervisory and executing agencies relating to food traceability will be supported with necessary equipment, training and testing supplies for undertaking of their supervisory duty.
- *Promotion.* County implementing agencies and registered agro-entities will be supported to undertake promotional activities in marketing and consumer

awareness building of the agro-products and entities that have adopted food traceability.

89. ***Activity A.1.7: Improving Climate Information and Adaptation Advice.*** To improve farmers access to actionable weather and climate forecast information and advice on adaptation options in their farming practices, the project will finance the following activities; i) technical assistance to province level analysis of changes in crop climatic zones and identification of climate risks for different crops to improve information to counties for decision making on crop geographical suitability, and measures to reduce vulnerabilities of cropping systems; ii) upgrading of a few key meteorological stations to agro-meteorological stations including parameters relevant for agriculture (soil humidity and temperature, etc); iii) technical assistance to county level meteorological services, the agricultural agency, and the disaster risk reduction agency for improving seasonal and 10 days agricultural relevant forecasts and early warnings to farmers as well as advice on climate risks mitigation actions tailored to specific cropping systems; and iv) training of farmers in climate change risks and vulnerability management and options of adaptation practices to be applied in their cropping and animal raising systems.

***90. Implementation Strategy for Improving Climate Information and Adaptation Advice.***

91. The leading role in the implementation of this activity would be initially with the county Meteorological Bureau (CMB). Once the project sub-areas and priority products to be supported are identified, the county Meteorological Bureau will be assigned with the task of implementing the related activities. The main activities to be undertaken would be as follows:
- *Climatic risks and vulnerability analysis:* CMB will undertake these analyses based on history meteorological data and other agronomic data that would be available. Product such analysis to CPMO and related agro-entities and farmers for their awareness and planning purposes;
  - *Install monitoring units:* Based on mapped risks and vulnerabilities, in consideration of the existing monitoring system, CMB will deploy additional weather and agro-met monitoring units in the vicinities to collect additional data necessary for establishing real time monitoring and improving forecast relevant for agriculture;
  - *Early warning system:* CMB will explore to establish dynamic early warning system for priority products in selected areas of the county. This will be achieved based on risk and vulnerability analysis, acquisition of dynamic weather data and technical assistance if required;

- *Training of producers*: training and awareness building will be provided to farmers and agro-entities to enhance their access to climatic data, identification of risks and application of coping strategies.

*Smart agriculture*: when desire is confirmed with specific agro-entities, CMB in collaboration with CARA may also provide technical support to selected entities in their establishment of smart agricultural platform, by developing digital farm management systems to provide optimal production strategies based on dynamic climate and production correlation modules. Technical assistance from external sources may also be explored for this purpose..

### **3.1.2 Sub-component A.2: Stimulating entrepreneurship/attracting investors.**

92. **Rationale.** China's imbalanced rural and urban development along with a rapid urbanisation has resulted in a severe outflow of human and financial resources from rural areas. This does not only involve the active workforce of the middle-age generation but also the young people and the next generation. Money earned in agriculture is not invested back in the rural areas to create or sustain attractive job opportunities encouraging the youth and the middle age generation to stay, but is invested in the education of the children with the objective for them to move out of agriculture to better paid occupations in towns and cities. This combined outflow of money and human resources has rapidly eroded the attractiveness of rural areas for young people. A key challenge in the rural revitalisation program is to break this vicious cycle and provide incentives for young people to stay and/or attract business minded young people who has migrated back to start their own businesses including farm and non-farm business activities. This is equally important for young and middle generation women in rural areas, which constitute a significant potential for entrepreneurship and new business operations. Often, they have to stay in the villages, while the husband is migrating for work, and they have proven to be able to run highly successful rural businesses in their villages.
93. Attracting young people back into rural areas is a clear Government strategy with a high relevance for the rural revitalisation. The All-China-Women-Federation also runs programs to train women to become entrepreneurs and start their own business. The youth league is setting up finance and services facilitating centres for youth start-ups in rural areas. However, the local Governments are not well equipped to support entrepreneurship programs and business star-ups. The Government has no suitable support or services structure and facilities in place and the understanding and knowledge of Government officials of business entrepreneurship and related requirements is very limited. What is therefore suggested is to concentrate scattered training activities in a comprehensive training and service centre with professional

expert support, which would: a) provide a full range of business support services, and b) also act as a hub for communication and business facilitation.

94. **Scope of work.** Major activities under this sub-component would include: (i) Business Incubation/Service Centres (BI/SC); (ii) Investment Support for Start-ups; and (iii) Improved Access to Financing:

95. **Activity A.2. 1: Business Incubation/Service Centres.** The project would support the setting up and operation of comprehensive Business Incubation and Service Centres (BI/SC) at the county level, eventually in collaboration with the youth and women leagues centres, with a main focus on youth and women. The centres would provide services, training and advice in business development, management of climate risks, marketing skills and enable market linkages by reducing information asymmetries, building trust, and creating shared value between value chain actors. They would also provide training for financial management skills and help enterprises with access to appropriate financing products by facilitating linkages with partnering financial institutions. In addition, BI/SCs will offer business development services such as training (business management, business planning, loan application), and provide assistance in navigating regulatory requirements, standards, and compliance and using ecommerce opportunities. Other services could include promotion of business networks, study tours to major consumer centres and regular round table meetings between producers/cooperatives and invited buyers/processors. Finally, the BI/SCs would offer office facilities and meeting rooms for interested start-up entrepreneurs with reliable internet connection to enable sales, procurement, and management functions needed to operate in a professional environment. The project would provide funding for the establishment (e.g. refurbishing of a rented building, equipment), rental and office operating costs, salaries for a two-person management team, and TA, consultancy services and training. The operating plan of the centres would introduce a gradual cost sharing and the Centres are expected to become financially sustainable over time through generation of their own revenues to reach a point where they can cover their on-going operating expenses through earned revenues. Project funding would be reduced from 100% in the first 3 years to 50% in the last 2 years. The counties should inquire options, whether these Centres could be attached to the E-commerce Centres supported by the Ministry of Commerce, or the youth and women centres supported by the youth league.

96. **Implementation Strategy for Business Incubation/Service Centres.** The Business Incubation/Service Centre (BISC) will provide services to all small and medium rural business and enterprises including farmer organisations existing or newly established. Particular attentions will be given to the *new economic entities* and *new talents* strategical supported in the rural revitalisation approach (encouraging entrepreneurship

of college graduates, new professional farmers, agricultural professional managers, science and technology experts, and new rural leaders).

97. The BISC will be physically located at the recently established county level e-commerce centres (established under the Ministry of Commerce), which generally have sufficient office space, conference, meeting and communication facilities.

98. The implementation approach would be as follows:

- The county government will issue a document about the establishment of the BISC, role and functions, location and integration in the e-commerce centres;
- County PMOs will recruit a manager and assistant manager through competitive public recruitment;
- PMO/BISC manager will contract the development of a website for the BISC, which would serve as advertisement of the services and interactive platform with the clients of services (e.g. enrolling in training courses, requesting expertise and special services, etc.);
- BISC will develop a service program, which would include a calendar of regular services and events (e.g. quarterly training course in business accounting, training on business plan preparation, counselling sessions with business lawyers, monthly training on loan application, roundtable meetings with buyers, etc.) or irregular events (e.g. special study tours for cooperative chairmen) or subject matter awareness raising and training events (e.g. impact of climate change on business decisions (how to manage climate and environmental risks), and other business risk and risk mitigation measures) for which suitable experts would be invited. The above mentioned website would allow scoping the interest from the client community and responding to emerging service needs;
- The BISC service programs need to show a strong focus on the IFAD target groups (people from poor or poverty poor households, women and youth); they would become part of the AWPB and would need IFAD approval;
- BISC will establish, continuously up-date and maintain a database with all potential businesses and clients in the county to inform interested clients on services, upcoming event;
- The performance of the BISC and their managers would be measured according to the use and satisfaction with the client services provided (events and number of people attending, and end of events participant satisfaction surveys). Detailed records would be kept including list of attendants, their gender, age group, ID, date/time, etc.;
- The payment of the manager would include a performance-based element in his/her contract;
- The BISCs will not employ experts or trainers in addition to the manager and assistant but buy services through individual and institutional contracts procured under competitive procedures;
- For the targeted clients (individuals, youth, women, farmers professional cooperatives (except RBL registered cooperatives), SMEs, etc.) the services would initially be provided for free (costs paid by the project). Non-project clients (e.g.

representatives from large enterprises) and cooperatives registered as RBL cooperatives would be charged for the services;

- After year two the BISCs will prepare a gradual cost recovery proposal/plan showing what services could be provided as paid services. The cost recovery plan should aim for a 50% cost recovery at year 3 of the project.

99. **Activity A.2.2: Investment Support for Start-ups.** For youth and women entrepreneurs successfully participating in the business developing capacity building services under Activity 1 the project would provide start-up investment support as a matching grant. The investment would be based on an acceptable business plan and would cover up to 50% of the investment costs with a maximum of RMB 500,000 per start-up. The remaining funding should be financed from the investor's own funds (minimum 10%) and from commercial loans. The investment support would be provided to agricultural or non-agricultural businesses (e.g. tourism, private e-commerce shops and services, agricultural machinery services, etc.).

100. **Implementation Strategy for Investment Support for Start-ups.** For youth<sup>13</sup> and women entrepreneurs successfully participating in the business developing capacity building services under Activity 1 the project would provide start-up investment support as a matching grant.

101. The responsibility for the implementation of this activity would be assigned to the BISCs. The investment would be based on an acceptable business plan and would cover up to 50% of the investment costs with a maximum of RMB 500,000 per start-up. The remaining funding should be financed from the investor's own funds (minimum 10%) and for commercial loans. The investment support would be provided to agricultural or non-agricultural businesses (e.g. tourism, private e-commerce shops and services, agricultural machinery services, etc.) with the business to be registered in rural areas in the project counties. Registration of businesses in the county seats would not be eligible. Joint business registration by several individuals up to a maximum of 3 people are acceptable as long as all individuals meet the targeted client group of youth or women.

102. The implementation approach will be as follows:

- The BISCs will advertise this opportunity through websites and public announcements to interested candidates;
- Awareness workshops will be conducted for interested candidates, which would pre-register;

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<sup>13</sup> Youth entrepreneurs would be considered up to an age of 40 years (to be confirmed) at the time of application.



- Pre-registered candidates will participate in relevant training events organised by the BICS. A list of mandatory training events will be prepared by the BICS;
- Candidates successfully trained will prepare business plan proposals with a financing proposal. The BICS will provide technical support for the preparation of such proposals and present the proposals/candidate to the evaluation/approval committee;
- The county PMOs will nominate a 3-member evaluation/approval committee, which would evaluate and approve proposals/candidates. The members of the committee will include a government representative (e.g. the county PMO director) and two non-government members (e.g. member of private business community, local banks) with no relationship or personal interests in the proposal/candidate;
- For approved candidates the BISC will nominate a mentor, who will continue to provide periodic support to the start-up investor for at least a period of one year;
- Implementation/financing will be based on a signed a tri-partite *Financing Agreement* between the start-up investor(s), PMO and the BISC;
- Notification of the PPMO about approved candidate;
- Implementation by the investor in close coordination with the BISCs and PMO.

103. **3.1.3 Sub-component A.3: Improving access to finance.** This sub-component will stimulate financial service innovations to improve access to finance in the project area in support of Sub-component A.1 and A.2. Key activities under this sub-component include:

- *A.3.1: Strengthening financial capacity:* The project will provide specific capacity building opportunities (e.g. trainings, study tours, etc.) to cooperatives, small- and medium-enterprises (SMEs), financial institutions, financial service agents, staff of the PMO, etc. on financial matters.
- *A.3.2: Improving financial services:* The project will enhance the availability and capacity to provide financial services in the project area by (i) establishing one agribusiness credit system for the cooperatives, SMEs, and farmers; and (ii) establishing an information platform and developing digital micro-lending models in the counties willing to participate.
- *A.3.3: Establishing a financial advisory service center:* The project will support the establishment of a financial advisory service center which will act as a bridge between the supply side (i.e. financial institutions) and the demand side (i.e. cooperatives, SMEs, farmers) to provide financial services. This center could be combined with the incubation/business service center.

***Implementation Strategy for Strengthening financial capacity***

104. A.3.1: Building capacity for financial consumers will include: (i) developing training materials. Two types of training materials will be developed by the project for practical financial literacy and skills that meet the needs of farmer cooperatives

(including SMEs) and households. The content should include the basic knowledge of finance, financial products and their usage (payment, financing, insurance, etc.), credit establishment of cooperatives and SMEs (the basic requirements in the credit evaluation, how to improve the credit of cooperatives and SMEs), financing small investment (budgeting, sources for financing, return assessment and development of cash flow), how to ensure the financial health of cooperatives, SMEs and households. (ii) Training of trainers. The project will train 3-5 financial staff in training skills and knowledge of rural financial inclusion in each county. (iii) All project-supported cooperatives, SMEs and youths should be trained so to increase their access to credit lines in local banks. More than 30% households reached-by-project especially woman from these households should participated in financial capacity training.

105. A.3.2: Capacity building of financial inclusion for financial institutions. (i) Development of training materials for financial inclusion. The content includes basic knowledge of inclusive finance; financial needs of, tools to evaluate the financial credit of, microfinance risk control for cooperatives, SMEs and low-income households; How to use Fintech to improve agricultural financial services. (ii) The project will provide a 5-days training for 5-10 financial staff from local financial institutions.
106. Mechanism construction of inclusive rural finance. (i) project will support in-depth study of the needs of financial services (including financing, insurance, etc.) for cooperatives, entrepreneurial youth, SMEs, low-income households. Based on the results, solutions to the problem of “loan access difficulty” will be proposed especially by introducing FinTech in rural financial services. (ii) Workshops will be held annually to provide to promote dialogue among local government, regulators, financial institutions, cooperatives, SMEs, and households.
107. A.3.3: Regarding establishing a financial advisory service center, it should consist of 2-3 financial staff with rural financial work experience and will have the following tasks: (i) to take the responsible for the financial capacity building of cooperatives, SMEs and low-income households; (ii) to organize and support the credit evaluation of cooperatives, SMEs, youth, women and low-income households by financial institutions; (iii) to help the cooperatives, SMEs, youth, women and low-income households in evaluating the risk of their investing projects; (iiii) to help them to apply for financial resources to finance their production and/or business activities.
108. A.3.4: M&E tool will be developed for rural financial services. The data will be collected, analyzed and reported annually on the demand-side and supply-side to monitor the progress in financial inclusion. Indicators will be developed to measure financial accessibility, usage, quality and capacity. A base-line survey and after-project survey should be conducted to evaluate the project impact on financial inclusion.

### **3.2 Component B; Description and Implementation Strategy.**

#### **Component B: Climate Proofed Public Infrastructure Planning & Development**

109. **Objective.** This component aims at improving common/village infrastructure, that supports the resilience of cooperatives and village families against increased variation in rainfall (through access to irrigation and terracing) and physical isolation and loss of production and harvest during strong climate events (through improved climate proofed roads). The project will support the investments in the infrastructure improvements and expansion as well as the needed institutional strengthening for water, irrigation and road management, operation and maintenance adapted to the current and future challenges from climate change.
110. **Justification.** The justification of the component relates to (i) need for improved public or common irrigation and road services that enhance the resilience of the agricultural production against the increased variability in rainfall, increasing temperatures and extreme climate events; and (ii) the existence of insufficient village infrastructure that is required to improve agricultural production efficiency.
111. The targeted project counties have some gaps in infrastructure conditions, which may limit implementation of the proposed cooperatives development and poverty alleviation activities, including: underdeveloped and deteriorated irrigation systems, lack of drinking water system in some villages, incomplete rural road networks, and in some cases lack of terracing for soil conservation, and lack of electricity supply facilities. Improved village level infrastructure and their management, operation and maintenance will allow poor small scale producers to: (i) expand and improve agricultural production in line with market requirements; (iii) improve local livelihoods; and (iii) enhance resilience to climate variability and shocks.

#### **This component B is organized along two sub-components:**

##### **3.2.1 Sub-component B.1: Improving infrastructures for enhanced climate resilience.**

112. This sub-component will support the development and improvement of climate-resilient infrastructure systems in the project area including improved climate-risk assessment, planning and decision-making and Piloting Climate adapted Smart irrigation. All infrastructures supported under this sub-component will be climate-proofed. Key activities under this sub-component include:

113. **Activity B.1.1: Climate proofed irrigation planning, design & decision making.** The project will (i) support the analysis of current and future climate trends

and risks and the identification and preparation of disaster risk reduction, adaptation and mitigation measures in road, land improvement, and irrigation infrastructure planning and design in the three most vulnerable counties (Yongsheng, Zhenxiong, and Lanping); and (ii) support the development of adaptation guidelines for the design of infrastructure projects linked to key agricultural industries involving smallholders (water, roads, and soil conservation).

**114.      *Activity B.1.2 Climate proofed Smart irrigation.***

All counties in programme areas are in lack of irrigation water supply systems and on-farm irrigation, or the existing systems are deteriorated, with limited water supply reliability and delivery efficiency, which results in no buffer capacity against prolonged dry periods. In some counties and areas irrigation is based on non-regulate and unsustainable pumping of groundwater showing clear tendencies of over-pumping. This activity would support improvement and development of irrigation water supply systems based on available surface water resources (Jin Sha Jiang river and mountain streams), including water harvesting and storage facilities (construction of water pools, water ponds) and pumping station and delivery systems. This will provide irrigation water to both agribusiness entities, cooperatives, farmers, and drinking water for some villages.

115.      This activity will also support selected cooperative, in areas with periodic water scarcity, in the development and implementation of pilot digital water monitoring and management systems that will allow for continuous adaptation of irrigation systems and water use to the challenges from increased temperature, and rainfall variability. Farmers and cooperatives will receive training and assistance to adopt sprinkler and drip irrigation systems to improve water use efficiency.

116.      This activity would support rehabilitation and development of 222 km canals, 766 km pressure pipelines, 16 set system, 12 pumping stations, 17 water pond, 150 water cellar, 295 water pool, and 1330 km water pipeline. These interventions would contribute to enhancement of agricultural productivity, agriculture diversification, climate resilience and farmers' income generation.

117.      Total base cost of this activity is estimated as USD 45.88 million, which will be shared between IFAD Loan (24.17%) and Government co financing (75.83%). Cost estimates for improvement and development of *irrigation* are based on data provided in the programme proposal prepared by the County governments and filed verification conducted during the detailed design missions. Average unit cost is estimated as: 22579.8 USD/km for canal development, 18539 USD/km for pressure pipelines, 98870 USD/set for head control and system, 329770 USD/place for pumping stations, 128780 USD/place for water pond, 1129.9 USD/place for water cellar, 40888 USD/place for

water pool, and 5044 USD/km for water pipeline. These are subject to adjustments during project implementation.

118. Ownership of the irrigation and the water source facilities improved and developed under the 32 Township will belong to the beneficiary villages, *water* users' associations or farmers' cooperatives depending on the decision of respective county project management offices made during the programme implementation, based on the size and benefiting scope of the systems. To support the sustainability of the irrigation systems, before any infrastructure investments are made Water Users Associations (WUA) or other O&M associations/groups should be formed and they should be involved in decisions on the design of the irrigation system taking into account the future challenged from climate change. The WUA or other O&M group will be trained as needed in irrigation water management using rainfall forecasts and operation and maintenance of water infrastructure. They will be supported in the preparation and implementation of an operation and maintenance (O&M) plan for each section of the irrigation system, including roles and responsibilities, budget and cost recovery mechanism.

119. WUAs or other O&M associations/group in areas of water scarcity will be trained in adaptive water management for water use efficiency under different climate conditions and supported in the installment of a network of digital water meters in strategic places in the irrigation system and in the design of an instant water flow data registration and analysis system. The data on water flows will be combined with data collected on temperatures influencing crop water needs, crops and varieties cultivated in the various fields, their yields and type of irrigation equipment used. This will allow for monitoring and analysing water productivity and water use efficiency throughout the irrigation system and for implementing improved and adaptive water management and use efficiency.

### **3.2.2 Sub-component B.2: Public Rural Infrastructure Development.**

120. This sub-component will address some of the major gaps in the current rural road infrastructure system and land conservation structures on slopes in the project area, which may limit or constrain the implementation of the proposed project activities. Gaps in access to drinking water for some villages will also be filled.. Key activities under this sub-component include:

121. ***Activity B.2.1: Improvement and development of road systems.*** Some of the programme areas are in lack of roads between villages or linking villages with production areas and field roads. This activity would support development and improvement of village roads and production roads, which will serve both the agribusiness entities and village farmers.

This activity would support development of 190 km village roads, 161 km production roads, 216 km earth roads.

Total base cost of this activity is estimated as USD 40.42 million. Average unit cost is estimated as: 126,654 USD/km for village road, 43162 USD/km for production road, 43615 USD/km for earth road.

Before the investment in any road infrastructure an operation and maintenance (O&M) plan for each section of the roads must be prepared, including roles and responsibilities, budget and sources of funding

122. **Activity B.2.2 Improvement and development of safe drinking water supply systems.** Some villages in the programme area are in lack of access to safe drinking water or the existing systems/facilities are deteriorated.

This activity would support development of 37 km water pipeline. Total base cost of this activity is estimated as USD 0.71 million. Average unit cost is estimated as: 19086 USD/km for water pipeline.

123. **Activity B.2.3 Land improvement and preparation.** Some of the farmlands in the programme areas are sloping lands, segmented, unlevelled or unprotected with serious soil erosion, and reduced soil water storage capacity. This activity would support land levelling in order to enable safe and productive farming, soils and water conservation. This activity would support development of 500 ha land levelling.

Total base cost of this activity is estimated as USD 2.74 million. Average unit cost is estimated as: 536.7 USD/ha.

### **Implementation Strategy for Component B**

124. **Implementation arrangements.** The activities will be implemented at selected sites in the Programme counties linked to the supported cooperatives and value chains in component A and based on local infrastructure constraints for agribusiness development and poverty alleviation. Engineering design and construction will be conducted by contractors selected through proper procedure in line with government and IFAD procurement guidelines involving and collaborating closely with WUAs and O&M associations. The PPMO will be responsible for overall supervision and coordination. Its sub-ordinate offices at prefecture level will be responsible for supervision and coordination of Sub-component activities within their respective prefectures. The sub-ordinate offices at county level will be responsible for detailed implementation of sub-component activities within their respective counties. The project covers a large scope of activities, including the development of irrigation facilities, construction of village roads, land improvements, and drinking water systems. Implementation of these activities, including related trainings for beneficiaries and the development of operation and maintenance mechanisms of

project outputs, will remain with the implementing agencies at each level. Close cooperation will be established with county bureaus of water, transport and power in order to ensure their compliance with government strategies and policies.

125. Technical standards. System planning and engineering design of the proposed infrastructure systems will follow the relevant standards and technical guidance. Close cooperation will be established with county bureaus of agricultural water, household water and transport in order to ensure their compliance with government standards, strategies and policies. Qualified experts will be mobilized for technical assistance and training. Procurement of civil works, goods and services will follow relevant government and IFAD guidelines and processes. Suitable infrastructure management organization, such as the WUAs and the road maintenance group, will be identified/established before the commencement of each infrastructure improvement work and be involved in the whole process of system planning, design and construction supervision, and take over the O&M responsibility after completion of construction.
126. Integrating climate considerations. Sustainable and climate-smart approach will be mainstreamed at each phase of the program cycle. During preparation the impacts of climate change on water availability, water demands, flood and drought frequency and intensity will be assessed and incorporated into system planning. Environmental-friendly practices will be adopted during construction to avoid and mitigate potential negative impacts, including assessment of environmental impacts before implementation, and protection of trees and vegetation (see details in the Environmental and Social Management Plan (ESMP)).
127. The composition of PMO personnel. The construction of public infrastructure involves irrigation projects, drinking water supply projects, land improvement, and roads. At present, PPMO personnel come only from the agricultural institutions. PPMO personnel are as such not familiar with water engineering construction, water balance calculation of supply and demand, irrigation system management, road and drinking water systems engineering, and operation management and maintenance of the infrastructure. PMO should therefore integrated personnel from multiple departments.
128. Management of public infrastructure. Reservoirs, pumping stations, water pipes and field irrigation facilities need routine maintenance. Reasonable water management and irrigation plans need to be developed based on crops, meteorology, soil, etc. The management agencies should be established, and relevant management systems should be developed, and operating management maintenance funds should be provided.
129. Investment in field works. The experience of China is that governments should invest in and manage key water projects such as reservoirs, main canals, branch canals and water pipelines. For irrigation projects in the field, most of the investment should come from the government, farmers should also invest part of the money, which can enhance the responsibility of farmers to manage the irrigation system.

### **3.3 Component C: Project Management, Knowledge Management, M&E, and Policy:**

130. This component will support the planning, coordinating, monitoring, reporting and overall management functions of the project management offices (PMOs) at provincial and county level. An important partnership will be established with the Agricultural Information Institute, Center of International Agricultural Research of the Chinese Academy of Agricultural Science (AII-CAAS) for the provision of support in monitoring and evaluation functions, knowledge management, and policy engagement.



**Component A****132. Attachment 1: Operational Standards of Pro-Poor Farmer Professional Cooperatives:**

The following checklist would be used for the initial certification of a pro-poor farmer professional cooperative. Other parameters indicate the standards for continuing operations of the cooperatives. All indicators would be continued to be monitored of the performance of pro-poor cooperatives. If the essential compliance parameters are met a cooperative would also be eligible for further support under the project (e.g. for co-financing partners).

		<b>Assessment content and standards</b>	<b>Required for 'pro-poor coop'</b>
<b>I. Registration, Membership, Operational Settings</b>	(i) Formal registration	1. Registration at the Industrial and Commercial Bureau under the Law of farmers' specialized cooperatives in the Peoples Republic of China from 2006 as amended in 2017 effective July 1, 2018	yes
		2. Business license, Organization Code certificate, tax registration certificate, Bank account	yes
	(ii) Genuine farmers' cooperatives	3. Ordinary Farmer members are at least 80% of the total number of members, and other members of enterprises, institutions or social organizations shall not exceed 5%.	yes
	(iii) Asset recognition	4. Each member has a clearly defined share. A complete list is available. The sum of all Members' shares is 100%.	yes
		5. Fixed assets (buildings and equipment) are appropriately validated. Cash contributions are deposited in the cooperatives' account. Land contributions are clearly recorded and validated in agreements with the cooperative's general assembly decisions making.	yes
	(iv) Member information	6. Cooperative has at least 20 members.	yes
		7. A full membership list is maintained including information such as name of the member, gender, ID number, occupation, home address, poverty status, shareholding ratio, contact information.	yes
	(v) Shares composition	8. Ordinary farmer members hold total shares of at least 60% of the cooperation shares.	yes
	(vi) Distribution of profits	9. The cooperative has a written and clear profit distribution system.	yes
		10. The profit distribution arrangements are adopted by	yes

		all members prior to the commencement of each fiscal year, the distribution of profits explains the reserves (non-distributed profits), distributable profits by means of distribution such as volumes traded, capital shares owned) with clear percentages allocated.	
	(vii) Participation of poor households	11. At least thirty percent (30%) of the cooperative's members are Registered Poor Households or forty percent (40%) of all Registered Poor Households in each of the covered administrative villages are members of the cooperative. (Only one of the two criteria need to be met). Any household in Registered Poor Household data base since 2015 qualifies.	yes
	(viii)	12. The percentage of young (18-35 years old) cooperative members is the same as the percentage of young people in the covered administrative villages or at least 25% of the cooperative's members are young. (Only one of the two criteria need to be met).	Yes
	(ix) Participation of women and youth	13. The percentage of women cooperative members is higher than the percentage of women in the covered administrative villages or at least 40% of the cooperative's members are women. (Only one of the two criteria need to be met).	Yes
	(x) Inclusion of women in decision making	14. At least 30% of the members of the board are women and women in leading positions is encouraged	Yes
	(viii) Environmental standards	15. The cooperative adheres to Good Agricultural Practices (GAP) or follows national standards and good practices regarding agricultural waste management, soil erosion control and water management, recycling of resources (e.g. nutrients, biomass, materials), minimum use of chemical fertilizers and pesticides, and other sustainable and climate resilient agriculture/livestock practices and technologies.	As soon as applicable
<b>II. Financial Management</b>	(i) Accounting	16. The cooperative has a qualified accountant or entrusted the rural management agencies or other accounting agencies with bookkeeping, accounting.	yes
	(ii) Financial software	17. The cooperative uses a computerized accounting software for bookkeeping	yes
	(iii) Financial records	18. Accurate recording of financial information and timely data updates (records are computerized not more than one month after transactions occurred).	As soon as applicable

<b>III: Governance and Decision making</b>	(iv) Financial statements	19. Interim financial reports can be produced at any time and are available to the Board of Supervisors for review.	<b>As soon as applicable</b>
		20. Clear annual financial statements are prepared at the end of the fiscal year including a profit and loss statement, a simple balance sheet and a profit distribution table.	<b>As soon as applicable</b>
	(i) Meetings	21. Members (representatives) the General Assembly, the Council, the Board of Supervisors and other institutions are sound and operate effectively.	<b>As soon as applicable</b>
		22. At least the mandatory meetings of the General Assembly, Council, and the Board of Supervisors are conducted with minutes available	<b>yes</b>
		23. Regular meetings (including the three mandatory yearly meetings) are conducted, with minutes prepared and recorded.	<b>As soon as applicable</b>
	(ii) Trans- parency	24. Summary financial information, asset information and earnings and loss information is disclosed and publicly displayed not less than one months after the closing of the financial year.	<b>As soon as applicable</b>

### 133. **Attachment 2: Annotated Outline of the Business Plan:**

*Each Business Plan (investment proposals) should follow a common outline and be presented in a paper with a length of 10 to 15 pages plus annex tables and should cover the following sections:*

#### **1. Proposing Unit:** *(all information provided here should refer to the existing situation and not to future plans)*

1.1. Name of the Cooperative

1.2. Village(s)

1.3. Date of registration

1.4. Current business activities *(please indicate the main business activities of the proposing unit, type of business, size of operation including volumes of products produced/traded/processed during the past years, main area of operations (e.g. township, county, national, etc.;*

1.5. Current financial situation *(registered capital, annual turn-over, annual profits, existing loans incl. types and maturity, dept/equity ratio, etc.)*

1.6. Current business relationships *(in what way is the proposing unit already linked to down- and up-stream partners such as formal or informal contracts with farmers or farmer cooperatives, who are the major buyers/processors, ,*

#### **2. Background Situation of the Related ‘Industry’:** *Explain the relevant background situations related to the proposed investment. Current production/trading/processing arrangements, technologies, etc. What is wrong or inefficient with the current situation, in particular in terms of technologies, organizational arrangements, benefit sharing in the value chain, etc. Are there any market failures preventing the private sector to develop the proposed production system?*

#### **3. Objective and Targets of the Proposed Investment:** *This section should explain what is going to be achieved with the proposed investment and how the achievement would be measured. The objective and targets should be concrete, measurable and in particular realistic: e.g. ‘the net production value would be increased by xxx million RMB, this incremental production value would be shared between the enterprise and the farmers with the farmers receiving at least xx% of the incremental value’. It is important that the objective and targets are realistic. They will be monitored, and the investment will be considered a failure, if the objective is not achieved, in which case financing will also be stopped.*

#### **4. Rational of the Proposal:** *This section should explain why this specific investment is necessary, what would happen without the project, what alternatives have been*

*considered and why can't the above stated objective not be achieved without implementing this investment in the proposed way.*

## **5. Main beneficiaries:**

5.1. Direct Beneficiaries: *Who would directly benefit from this investment? Farmers? Company? Cooperative? How many farmers disaggregated by gender and age? How would poor farmers, women farmers and youth farmers be targeted? How many poor farmers would directly benefit from the investment and what would be the benefits?*

5.2. Indirect Beneficiaries: *What other benefits are expected from this investment and who would indirectly benefit? In what way*

## **6. Description of the Investment:** *This section should provide a detailed description of the proposed investment activities; this section should explain how the money would be used, who would be the owners of each of the investments and who would have the responsibilities for operation and maintenance (e.g.: farmers, cooperatives, enterprises, etc.); the section could be structured as follows:*

6.1. Investment in Production Facilities, *type, areas (mu), households (No.),*

6.2. Investment in Processing and Marketing facilities, *type, size, location, etc.*

6.3. Investment in Other Infrastructure, *type, size, location, etc.*

6.4. Investment in Services and Training, *including who is providing services and training, contents, timing, number of households receiving services/training, etc.*

6.5. Investment in Other Activities, *please describe here any other proposed investments not covered already in the above sections.*

6.6. Detailed Cost Tables, *Following the same structure above (6.1. to 6.5.) a detailed cost table should be presented showing all investment activities, units, quantities, unit costs and total costs. The format for the detailed cost table, which needs to be used, is attached (Attachment 1).*

## **7. Financing Arrangements:** *A table should be provided here showing the proposed financing arrangements for each investment activity (see Sample Table: Attachment 2)*

## **8. Organizational Arrangements:** *This section should describe the proposed organizational arrangements; what steps have already been taken and what steps will be implemented to achieve these organizational arrangements. It should cover such items as formations of farmer groups/cooperatives, contractual arrangements among farmers or between companies and farmers, services agreements, land leasing/contracting, etc. Evidence of organizational arrangements (e.g. copies of*

*contracts, registration of cooperatives, etc.) should be provided in an attachment to the proposal).*

**9. Cash flow and financial analysis.** *To understand whether the proposed investment is really profitable and competitive a detailed cash flow and financial analysis needs to be provided separately for each major stakeholders in the value chain. This needs to include crop or livestock models at the farm level (example tables are provided in Attachment 2) and cash flow analysis at the company/enterprise level (details will be explained at the project preparation workshop). It is very important that the assumptions used in the crop models and business cash flow tables are realistic reflecting the true field situations. Many yield and price assumptions used by the Governments are highly optimistic as they refer to best case scenarios and do not reflect average field observations. This is not acceptable as such false assumption expose farmers to high risks.*

**10. Benefit Sharing and Poverty Impact.** *This section should quantify the benefit sharing between different stakeholders and the impact, which the proposed investment would have on poverty alleviation.*

**11. Market analysis and comparative production cost analysis.** *Each of the proposals promoting the development or expansion of a product/industry need to be supported by a detailed market analysis showing where the markets for the product are and what quantities these market are likely to absorb at what prices. This needs to take into account developments in other production areas. Often the same product is also expanded in other areas. To assure longer term competitiveness of a product the production costs in the main producing areas should be compared with the production costs in the project areas (comparative production cost analysis). If the production costs in other main producing areas are significantly lower, it must be assumed that these areas will expand production and out-compete the produce from project areas.*

**12. Safeguards.** *This section should assess all potential environmental and social risks related to the proposed investment, and include all safeguard and mitigation measures for these risks and to avoid any negative social and environmental impacts.*

**12.1 Environmental safeguards:** *Assess all risks including but not limited to the risks relate to land conversion from natural habitats, soil erosion and land degradation, contamination from agrochemicals and climate vulnerabilities and include mitigation measures. For proposals involving agro-processing assess all risks including but not limited to risks related to solid and liquid waste, land conversion from natural habitats, energy and water consumption and sources and include safeguard and mitigation*

*measures. State national environmental standards and approval requirements that applies.. In case of approvals already granted (e.g. by the environmental protection bureaus) copies of the approval should be attached.*

*State whether the proposal meets the sub-project screening standard for environment management and the location screening standard for environment management. If the proposal already has an environment impact assessment the Chinese version of the environment impact assessment report must be attached. If the proposal has been cleared by the local environment evaluation authority, the approval document by county or city environmental production bureau should be attached. The county PMO need to provide the review, approval opinion and conclusion to the proposal (cleared, rejected or resubmitted for review and approval after revision) from the perspective of environment safeguard.*

**12.2 Social Safeguards** *(In compliance with relevant stipulations of the Environmental and Social Management Plan of the project). Assess all social safeguard issues and propose mitigation measures including the following issues:*

- i. *Land Issue. In case the project involves land-use changes, explanation should be given to specify the current use and user rights for the land, scale (mu) of the land implicated, instrument used to allow for the land-use change (land adjustment or acquisition). For new land acquisition, the time of acquisition by the village or town shall be specified. In case of land-use an user rights adjustment after consultation, all the procedures should be in place with documentation of the village committee meeting minutes (with seal of village committee) for voluntary land adjustment, and the commitment letter with villagers' thumb print (archives for check)*
- ii. *Poverty targeting. Specify number of Project Beneficiaries (specify the number of cooperative farmers and that of non-cooperative farmers). Number of beneficiaries fromy poor household (specify the number of poor households and poverty probability in the project area, the number of poor households joined in the cooperative and its proportion to the total number of the poor households in the project area).*
- iii. *Ethnic Minority Population. State the participating minority people group, number as well as the name and number of main minority groups in the project area. Included are the following: the proportion of minority people to the total population in project area; the proportion of participating minority people among the proposed project beneficiaries; the proportion of minority people in the managerial staff of the cooperative.*
- iv. *Women participation. Specify the proportion of women among the farmers and workers, that will benefit from the project, and what the project proponent will do to increase this proportion if below 50%. Specify the proportion of women in the managerial staff of the cooperative, and what the project proponent will do to increase this number if currently below 30%. State the strategy that will be used to facilitate that women's voice are heard (with actions arranged) and that they are given full roles in management and operation.*

v. Inclusion of youth. *Specify the proportion of youth (8-35 years) among the farmers and workers, that will benefit from the project, and what the project proponent will do to increase this proportion. Specify the proportion of youth in the managerial staff of the cooperative, and what the project proponent will do to increase this number. State the strategy that will be used to facilitate that youth's voice are heard (with actions arranged).*

vi. Capacity building & training. *Specify training plan, contents, arrangement and number of trainees. Efforts should be made to ensure equal participation of women, youth and minority groups. Specify: number of cooperative managerial staff to be trained including number and proportion of women, number and proportion of youth, and number and proportion of people from minority groups. Specify number of farmers to be trained, including number and proportion of women, number and proportion of youth, number and proportion of people from poor households, and number and proportion of people from minority groups.*



**Appendix Table 1: Format and Example for Detailed Cost Table**

**2020-2024 Investment Plan for XXX Farmer Cooperative**

**Unit:thousand  
yuan**

Project Activity		Cost Estimate by Year							Base Cost by Year						
		Unit	2020	2021	2022	2023	2024	Total	Unit Cost	2020	2021	2022	2023	2024	Total
I. Investment Cost															
1.Establishment of Cooperative															
1.1	Office	M <sup>2</sup>													
1.2	Equipment	Set													
1.3	Office Furniture	Set													
Sub-total															
2.Development of Cooperative															
2.1	Farming (Livestock)	mu (head)													
2.2	Nursery	mu													
2.3	Greenhouse	M <sup>2</sup>													
	Seedling	ten thousand													

2.4		pieces													
2.5	Supplementary Fertilizer (Organic Fertilizer)	ton													
2.6	Sticky plates as Insect Trap	ten thousand pieces													
2.7															
2.8															
Sub-total															
3. Value-added Incremental															
3.1	New Water Tank	M <sup>3</sup>													
3.2	Cold Storage	M <sup>3</sup>													
3.3	Extension of Processing Plant	M <sup>2</sup>													
3.4	Setting up of Internet	set													
3.5	Machinery Equipment	piece													
3.6	Processing Plant Equipment	piece													
3.7															
Sub-total of Value-added Incremental															

4. Market Survey and Development															
4.1	Agro-market	piece													
4.2	Trading Market														
4.3	Brand Verification, Development and Promotion														
4.4	Food Safety Test														
4.5		piece													
4.6															
Sub-total of Market															
5. Technical Support															
5.1	Hiring of Technical Experts	Person/days													
5.2	Test and Identification of Products	Person/days													
5.3	Peer Training	Person/times													
5.4	Study Tour to Main Markets	Person/years													
5.5															
Sub-total															
6. Risk Prevention and Mitigation															

6.1	Insurance														
6.2															
Sub-total															
7.Stand-by Investment		2~3 years													
7.1	20%—30%														
8.Enterprise Investment															
8.1	Plants and Buildings	total													
8.2	Testing Lab	total													
8.2	Boiler	total													
8.3	Equipment														
8.4	Others														
8.5		total													
Sub-total of Enterprise Investment		total													
		total													
<b>II. Other Costs</b>															
1	Labor	number													
2	Farm Manure	ton													
3	Self-raised by Cooperative Members														
4	Management Cost														
5	Operational Cost														
Sub-total of Other Costs															
Total of Investment															

Commitment of Cooperative	The cooperative development and investment plan has been discussed and confirmed by the cooperative assembly and opened to the public.
	Witness Signature of Cooperative Assembly of Board Directors and Supervision Members:
	Cooperative Facilitator Signature:
	Cooperative Seal:
Opinions of Technical Advisory Group	Signature/Seal of Reviewer (Expert) :                      Day      Month      Year
Opinions of County PMO	Seal of County PMO :                      Day      Month      Year

**Appendix Table 2: The Financing Arrangement of xxx Farmer Cooperative**

Unit: Thousand Yuan

Project Activities		Total Cost						Total Financing (RMB 000')
			IFAD	Cooperative	Enterprise	Farmer	Other (Please Specify)	
<b>I. Project Investment Cost</b>								
1. Establishment of Cooperative								
1.1	Office							
1.2	Equipment							
1.3	Office Furniture							
Sub-total of Establishment								
2. Development of Cooperative								
2.1	Farming (Livestock)							
2.2	Nursery							
2.3	Greenhouse							
2.4	Seedling							
2.5	Supplementary Fertilizer							

	(Organic Fertilizer)							
2.6	Sticky Plates as Insect Trap							
2.7								
2.8								
Sub-total of Development								
3. Value-added Incremental								
3.1	New Water Tank							
3.2	Cold Storage							
3.3	Extension of Processing Plant							
3.4	Setting up of Internet							
3.5	Machinery Equipment							
3.6	Processing Plant Equipment							
3.7								
Sub-total of Value-added Incremental								
4. Market Survey and Development								
4.1	Agro-Market							
4.2	Trading Market							

4.3	Brand Verification, Development and Promotion							
4.4	Food Safety Test							
4.5								
4.6								
Sub-total								
5.Technical Support								
5.1	Hiring of Technical Experts							
5.2	Test and Identification of Product							
5.3	Peer Training							
5.4	Main Market Survey							
5.5								
Sub-total								
6.Risk Prevention and Mitigation								
6.1	Insurance fee							
6.2								
Sub-total								
7.Stand-by Investment								



7.1	20%—30%							
8.Enterprise Investment								
8.1	Plants and Buildings							
8.2	Testing Lab							
8.2	Boiler							
8.3	Equipment							
8.4	Others							
8.5								
Sub-total of Enterprise Investment								
<b>II. Other Cost</b>								
1	Labor							
2	Farm Manure							
3	Self-raised by Cooperative Members							
4	Management Cost							
5	Operation Cost							
Sub-total of Other Cost								
Total of Investment								

**Appendix Table 3: Cooperative Input & Output Analysis**

**\*\* Cooperative Input & Output**

No.	Project	Quantity	Unit Price	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
I、	Productive Inputs												
1、	Seed												
2、	Fertilizer												
3、	Pesticide												
4、	Land Rental Fee												
II、	Labor Cost												
1、	Salary												
III、	Fixed Assets Input												
1、	Office Room												
2、	Machinery Equipment												
3、	Depreciation												
	⋮												
IV、	Management Cost												
1、	Office Cost												
2、	Financial Cost												
	⋮												
V、	Other Cost												

VI、	Tax Fee												
1、													
2、													
VII、	Sales Revenue												
1、	Product 1												
2、	Product 2												
VIII、	Gross Profit												
IX、	Reserve												
X	Distributive Profit												

**134. Attachment 3: Guiding Principles for Company-Cooperative/Household (CC/H) models under the project.**

The project would develop guidelines for CC/H support models, which would cover the following principles:

- Suitable companies should have proven business experience and technical, financial and management capacity (clear criteria would be defined);
- Company can prove that it has a sufficiently large and secure market for the product;
- A clear identification and socio-economic profile of the beneficiary households (location, number, poverty, ethnic minority, gender and age of main participant/beneficiary, farm size, etc.);
- A joint investment proposal and financing plan to be prepared based on a documented consultation process with the involved cooperatives/households and written samples of sustainable and fair purchasing arrangements;
- A financing plan showing the enterprise investment if applicable, and the cooperative farmer technical assistance and investment needs;
- Project funds would be provided based on a tri-partied financing agreement (enterprise/coop/PMO);
- Project funds can only be used to finance the cooperative or household investments including joint infrastructure and training and capacity building (no enterprise assets);
- Cost sharing should be applied (e.g. project funds 50% for productive assets, 100% for training and capacity building);
- Project funds would not be channelled through the enterprise but provided directly to coop/farmers;
- a set of quantified targets (e.g. number of smallholder farmers/poverty households engaged, volume of products to be procured, minimum prices to be paid, etc.) with a written commitment by the enterprise to achieve these targets as part of the trip-partied financing agreement;
- arrangements and an agreement for a third-party monitoring.

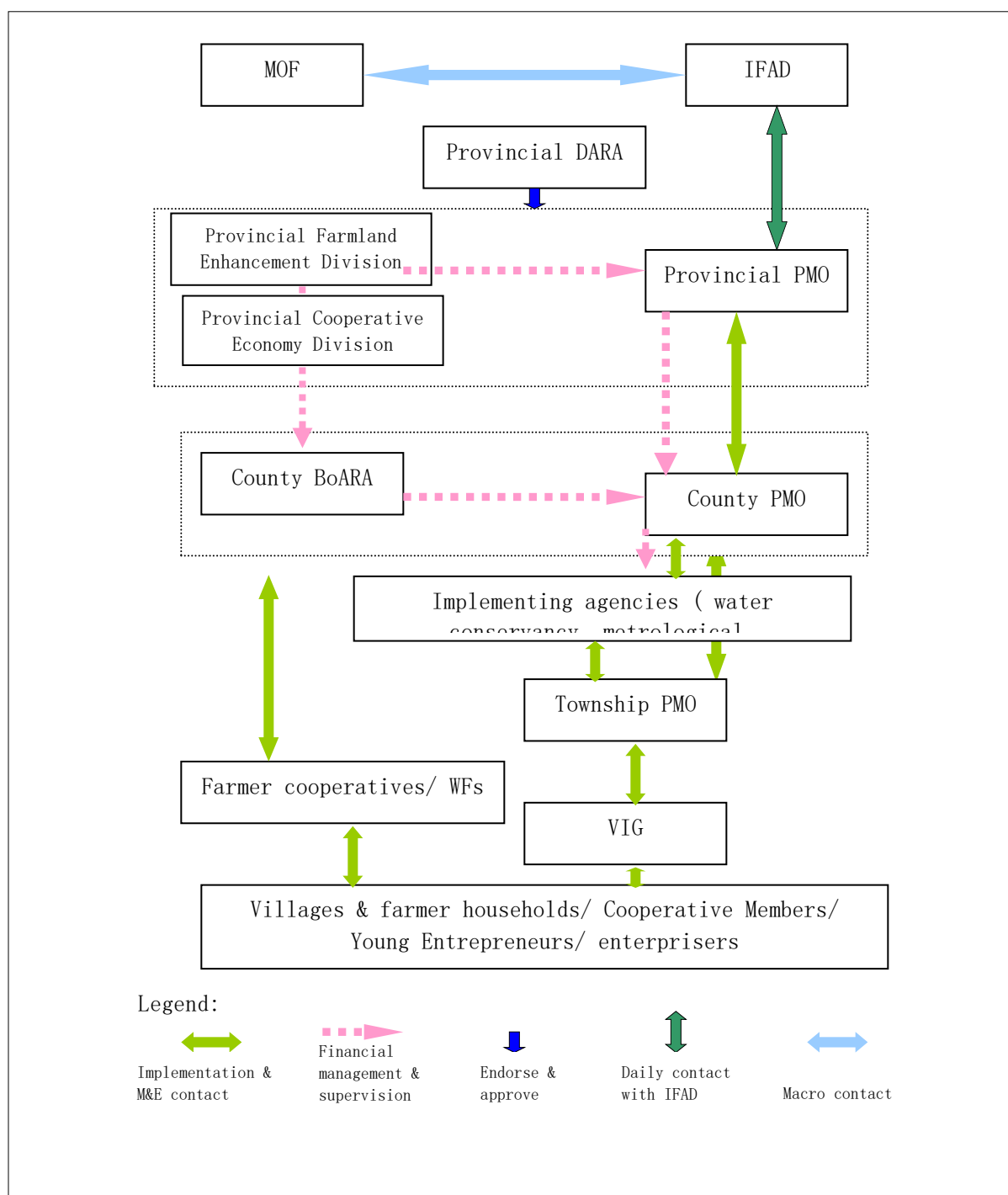
## Chapter 4: Project Implementation Structure

### 4.1 Project management and coordination

135. **Lead Implementing Agency:** For successful implementation of the Project, a project management system, PMOs, will be established at county levels and at province level which will operate under the guidance of Provincial Department of Agriculture and Rural Affairs as lead agency. Specifically the Farmland Enhancement Division within DARA would take lead responsibility for project implementation management, supervision and evaluation, and will act as the Provincial Project Management Office (PPMO). Additional support will be mobilized from the Division of Cooperative Economy of DARA, and other division whenever needed.
136. **County Project Management Offices:** Major implementation responsibilities of the project lie with the counties. County Project Management Offices (CPMOs) will be established at the County Bureau of Agriculture and Rural Affairs. Relevant technical bureaus in the counties (such as water conservancy, metrological, transportation bureaus, etc.) will be mobilized to support the project implementation in the related activities of the project as per need.
137. The prime responsibilities of a PMO, inter alia, are to consolidate annual work plan and budget (AWPB) at their respective level, coordinate project implementation, manage the project resources, monitor project implementation, report on implementation progress on a six-monthly basis and project impact on required basis, and to ensure that project's implementation strategy is effectively applied in all activities. Generally, the overall responsibilities of the CPMO/PPMO staff are similar to that of a project management office. However, each PMO staff has his/her specific tasks and responsibilities in accordance with the post he/she holds.
138. **Role of the Department/Bureaus of Finance:** The Department/Bureau of Finance at Provincial/County level will be responsible for administering project resources, including the IFAD loan and counterpart funds.
139. **Implementing Support Units:** Implementing Support Units will be established in the project townships to facilitate project implementation, targeting and related monitoring activities.
140. **Project Joint Meeting:** At provincial level, a coordinating committee comprising at least the Provincial Department of Finance (DOF), the Provincial Department of Agriculture and Rural Affairs (DARA), the Provincial Development and Reform Commission (PDRC), and the Provincial Office of Poverty Alleviation may be established to provide overall guidance and coordination of the project implementation. Involvement of the Women Federation, Youth League, the Meteorological Service, and Work Bureau is also recommended. Similar coordination committees led by the county mayors should be established at county level

141. **Independent third-party Verification Agency:** An independent third-party verification agency will be contracted by the project to verify that the disbursement-linked indicator target set for the activity that would pilot the result-based lending approach (A.1.1 - Promoting pro-poor farmer cooperatives) (i.e. number of cooperatives that meet defined operational standards) is achieved.
142. **Verification protocol:** The Agricultural Bureaus or the Economic and Management Bureaus of DARA at the county levels will record the cooperative information in a database on a regular basis and be responsible for the accuracy of the information. Cooperatives meeting all the agreed eligibility requirements will be reported to the PPMO on a semi-annual basis. The independent third-party Verification Agency (VA) will conduct a verification of all cooperatives deemed to meet the agreed operational standards in a given DLI disbursement period (e.g. quarterly). The cooperatives will report to the VA who after verification will report to the PPMO according to the agreed check list. Confirmation that the disbursement-linked indicators (DLI) target has been achieved would be through a letter of confirmation to IFAD.
143. **Role of the County Meteorological Bureaus:** The County Meteorological Bureaus will take the lead in implementing the Improving climate information and adaptation advice activity (Ref. Activity A.1.7).
- 144.
145. **The role of the Agricultural Information Institute of the Chinese Academy of Agricultural Science:** IFAD and the Agricultural Information Institute, Center of International Agricultural Research of the Chinese Academy of Agricultural Science (AII-CAAS) are entering into an agreement by which CAAS would provide support to IFAD in monitoring and evaluating the IFAD portfolio in China, extracting relevant knowledge from IFAD portfolio, and utilizing it to inform policy making. Within this context, the project would enter into an agreement with AII-CAAS for carrying out major functions related to M&E, knowledge management and policy dialogue, i.e. carrying out baseline, midline, and end line surveys, analysis of data, impact evaluations, policy notes, etc.
- 146.
147. **Procurement** of goods, works and services financed by the project will be carried out in accordance with the Procurement Law of the People's Republic of China (2002) and its amendments to the extent that they are consistent with the provisions of IFAD's Project Procurement Guidelines and Handbook (2010) and its amendments. The procurement methods to be applied, prior review arrangements, and the thresholds for different procurement methods will depend on the expenditure and the estimated value of the contract, and will be detailed in the letter to the borrower.

## Project Organizational Structure



## 4.2 Project Planning

148. Planning will follow current practices for the IFAD-funded projects in China: planning will be done on annual basis through the development of annual work plan and budgets (AWPBs). AWPBs will be developed through participatory approach. AWPBs would include, among other things, a detailed description of the planned activities and required budget, a procurement plan, and a plan for the implementation of the activities. AWPBs would need to receive IFAD's "no objection".
149. The AWPB is an essential covenant in the legal Financing Agreement. The failure to prepare it on a timely, annual basis, may lead to delay or suspension of loan and grant disbursements on the part of IFAD. AWPB serves both as a tool for guiding project implementation and as a collection of benchmarks against which actual implementation progress can be measured throughout the year. A poorly thought-through and prepared AWPB may cause a loss of purpose and direction in implementation, give rise to the need for resource-consuming ad-hoc problem solving when unforeseen (but foreseeable) obstacles to implementation surface during the year, and make it difficult to ascertain if implementation progress is on track.
150. The AWPB is the outcome of the annual project planning process. Through annual work planning, the project decides what activities will be carried out over the next 12 months, by whom, the resources and the time needed to complete them. The AWPB is therefore a planning and management tool that specifies what is expected to be done during the year, how and at what cost. The AWPB should be results-oriented and with clear descriptions of the results that the project is expected to achieve in the AWPB period. The draft AWPB will be sent to IFAD for review and no-objection 60 days prior to start of each year of implementation.
151. The PPMO will prepare the Annual Workplan and Budget Report using the following table of contents:

- A. Introduction
  - Project Outline
  - The Annual Planning Process and This AWPB
- B. Implementation Progress and Performance
- C. Project Strategy and Focus for the Coming Year
  - Key Constraints and Required Actions
  - Overall Strategic Focus
  - Components
- D. Consolidated Annual Budget

### **Annexes:**

- Annex 1. The Logical Framework
- Annex 2. Procurement Plan
- Annex 3. Staff Development Plan
- Annex 4. Detailed Work Plans and Budgets



152. **Monitoring and evaluation (M&E):** Monitoring and evaluation is an essential function that would support project management. M&E will be supported by a management information system (MIS) which will be specifically developed for the project, and that will integrate information regarding project management, financial management and physical progress, allowing real-time reporting. see for details in chapter 5
153. **Learning and knowledge management (KM):** The project knowledge management strategy would be built on the following key elements: (i) an effective M&E framework will be established to monitor implementation progress, and would provide the evidence for learning; (ii) a baseline, mid-line, and endline survey will be conducted at the beginning, mid-term, and completion of the project; (iii) workshops at different levels will be held regularly to share knowledge, experiences, innovations, and best practices; (iv) study tours, exposure and exchange visits, both in the country and outside the country will be encouraged as a vehicle for sharing knowledge; (v) an agreement with the Agricultural Information Institute, Center of International Agricultural Research of the Chinese Academy of Agricultural Science (AII-CAAS) will be signed for the provision of support in M&E, and knowledge management. See details in Chapter 6
154. **Innovations:** One of the main objectives of the project is to introduce, test, pilot, and demonstrate innovative models, approaches, mechanisms that, that - if successful - could be replicated and scaled-up, and inform policy-making. Anticipated innovations include: **(a) Innovative chanyie fupin benefit sharing mechanisms** (Ref. Sub-component A.1); **(b) Inclusive finance models:** Possible application of digital finance services (including remittances) in the project area and to the project target group is being assessed (Ref. Sub-component A.3); **(c) Climate proofed design of infrastructure** (Ref. Component B); **(d) Disbursement against results:** Disbursing project funds allocated for a sub-set of activities (Ref. Activity A.1.1) against the achievement of agreed and independently verifiable targets or milestones that are considered important towards contributing to the achievement of the project objectives. The achievements of the agreed targets or milestones, or disbursement linked indicators (DLIs), will be verified by an assigned independent agency following agreed verification protocols. The disbursement against results will be piloted on a small scale by the project, and replication at a larger scale could be considered at mid-term on the basis of the positive results and lessons generated during implementation; **(e) Performance-based budget allocation among counties:** Include a criteria linked to "performance" in the overall allocation of resources to the counties.

## Chapter 5: Project Monitoring and Evaluation (M&E)

155. Monitoring and Evaluation (M&E) system for Y2RDP will be developed by the PPMO with the assistance of IFAD within the first year of the project as a tool for effective project implementation management. The M&E system will enable IFAD, the Chinese government and the stakeholders to monitor Project's internal performance. The objective of the tool is to collect reliable data and information for measuring performance and progress towards achievement of results; and to provide information about success and failures, so that corrective measures can be taken for successful implementation of project activities. It will be also used as a learning tool to provide information for critical reflection on project strategies and operations and supporting decision-making at various levels as a basis for results based management. During the initial years, the project monitoring system will provide information to see how the project activities are being implemented and what adjustments are required to be made in the course of implementation, and later as a tool to assess achievement of outcomes and impacts.

### Results Based Approach and Managing for Impact

156. The results-based approach will be adopted, involving regular recording of, and accounting for progress against AWPB targets; and routine, periodic assessments of movement towards beneficiary impact. The M&E and Knowledge Management unit will be responsible for all M&E activities, based on the IFAD Guideto orient the selection of indicators, baseline data, methods for data collection, synthesis and a communication strategy for lessons learned. Service providers, contractors, and beneficiary groups will be the prime sources of data emanating from grass roots activities. This will be prepared in a participatory manner as part of the start-up activities in line with the logical framework.

157. Managing for impact means to respond to changing circumstances and increased understanding by adapting the project so that it will be more likely to achieve its intended impacts. This is only possible if there is reliable information about the progress of activities and their outcomes, the reasons for success and failure, and the context in which activities are taking place. This information is the output of the M&E procedures. Analyzing this information with key stakeholders can support good decisions that improve the project. Box 1. illustrates how to assess how well the project is doing in terms of managing for impact.

<b>Box 1 Managing for Impact</b>		
<b>Elements</b>	<b>Project that manages for impact</b>	<b>Project that does not manage for impact</b>
<b>A focus on rural revitalization</b>	The implementing partners, including primary stakeholders, collect data on impact and meet regularly to consider if impacts can be seen and whether they meet	The project leaves impact assessment to outside organizations and only focuses on monitoring the implementation of activities

	expectations	
<b>A learning environment</b>	Project and partner staff and primary stakeholders regularly and openly discuss progress and problems. Problems and mistakes are the basis for learning how to work better. People feel safe enough to share their ideas and observations with higher authorities and peers.	Staff focus only on implementing activities, without asking if they are relevant to local poverty needs. Project/Partner organization staff feel that their ideas and observations are not valued and do not speak up when they see things going wrong. Primary stakeholders are rarely asked their opinions.
<b>Effective operations</b>	Clear systems exist for tracking staff performance, equipment use, etc. People are clear about their responsibilities and deadlines, and the resources they need to do their work are available. The managers allocate sufficient budget and are building capacity where needed.	People are often unclear about what they should be doing, when and where. Vehicles and other resources are poorly coordinated and often not available on time. Much time is wasted inactivity. No efforts are made to fill capacity gaps.
<b>A supportive M&amp;E system</b>	The project manager has quick and easy access to information about progress. Staff and partners generate information about outcomes and impact achievements. Information about progress is shared regularly with all stakeholders in a visually appropriate way. The walls of the project office show up-to-date information, graphs, pictures etc. about project progress. Studies are undertaken to explain any emerging problems. Project reports make interesting reading and tell both the good and bad and how improvements will be made.	Few people know what the project has achieved to date. There is little evidence about whether all the activities of the project are leading anywhere. M&E is seen largely as an external reporting function. Project reports are uninteresting, are not analytical, and exaggerated success while not mentioning problems. Little information is shared with project stakeholders.

## 158. Setting up the M&E system

The M&E system is the set of planning, information gathering and synthesis, reflection and reporting processes, along with the necessary supporting conditions and capacities required for the outputs of M&E to make a valuable contribution to decision-making and learning. Key project

stakeholders need to develop the different elements of the system together if they are all to use the outputs to improve implementation.

Setting up an M&E system involves six steps that need to be dealt with twice - generally at initial design and in detail at start-up:

1. Establishing the purpose and scope - Why do we need M&E and how comprehensive should our M&E system be?
2. Identifying performance questions, information needs and indicators - What do we need to know to monitor and evaluate the project in order to manage it well?
3. Planning information gathering and organizing - How will the required information be gathered and organized?
4. Planning critical reflection processes and events - How will we make sense of the information gathered and use it to make improvements?
5. Planning for quality communication and reporting - What, how and to whom do we want to communicate in terms of our project activities and processes?
6. Planning for the necessary conditions and capacities - What is needed to ensure that the M&E system actually works?

159. These steps can be used when initiating a new project or when revising and expanding the M&E system of an existing project. Existing projects might have planned for some of these M&E elements but miss or undervalue others, so M&E does not perform optimally. This might seem like a lot to remember but in practice is often quite clear.

160. The purpose of monitoring the activities and the different components of the project is to enable the management to track the progress or any obstacles facing the project and modify the plan if required. This requires designing a plan for monitoring and evaluation including the actual activities that are implemented and their indicators. In developing the M&E system, it was taken into consideration the IFAD requirements that were provided in the project design and the project implementation manual. In the following the tasks required for the monitoring and evaluation will be presented with highlighting the IFAD requirements.

### **The role of M&E in IFAD projects**

161. The following table summarizes the expected M&E tasks during the different stages in IFAD projects life cycle.

Phase	Tasks
<i>Early design phase (formulation and appraisal)</i>	<ul style="list-style-type: none"> <li>• Establish the scope and purpose of the M&amp;E system.</li> <li>• Indicate key performance questions and indicators, plus associated monitoring mechanisms.</li> <li>• Identify organizational arrangements for M&amp;E.</li> <li>• Develop terms of reference for M&amp;E staff.</li> <li>• Indicate the process for how M&amp;E is to be established during start-up.</li> <li>• Establish an indicative M&amp;E budget.</li> <li>• Document the above in the M&amp;E framework.</li> </ul>

<b><i>Start-up prior to loan effectiveness (with the Special Operating Fund)</i></b>	<ul style="list-style-type: none"> <li>• Revise performance questions, indicators and monitoring mechanisms after reviewing the project strategy.</li> <li>• Organize training with staff and partners likely to be involved in M&amp;E.</li> <li>• Initiate baseline studies, as appropriate.</li> </ul>
<b><i>Start-up after loan effectiveness</i></b>	<ul style="list-style-type: none"> <li>• Review project design in relation to M&amp;E with key stakeholders.</li> <li>• Develop a detailed M&amp;E plan, taking into consideration existing mechanisms with partners.</li> <li>• Put in place necessary conditions and capacities for M&amp;E to be implemented.</li> </ul>
<b><i>Main implementation</i></b>	<ul style="list-style-type: none"> <li>• Ensure information needs for management are met.</li> <li>• Coordinate information gathering and management.</li> <li>• Facilitate informal information gathering and communication.</li> <li>• Support regular review meetings and processes with all implementers.</li> <li>• Prepare for supervision missions.</li> <li>• Prepare for and facilitate the annual project review.</li> <li>• Conduct focused studies on emerging questions.</li> <li>• Communicate results to stakeholders.</li> <li>• Prepare annual progress reports.</li> </ul>
<b><i>Mid-term review (MTR)</i></b>	<ul style="list-style-type: none"> <li>• Collate information for the mid-term review.</li> <li>• Facilitate the internal review process to prepare for the external review process.</li> <li>• Help respond to MTR feedback.</li> <li>• Adjust the M&amp;E system, as necessary.</li> </ul>
<b><i>Three-wave survey</i></b>	<ul style="list-style-type: none"> <li>• Take place in three stages: a) a baseline survey in 2020, b) a midline survey in 2022, c) an endline survey in 2024</li> <li>• Develop a detailed sampling and design methodology of the survey</li> <li>• Tailor the questionnaires to project objectives</li> <li>• Collect and analyze the detailed data from survey</li> <li>• Prepare three-wave survey reports</li> </ul>
<b><i>Phasing-out and completion</i></b>	<ul style="list-style-type: none"> <li>• Assess what the implementers can do to sustain impact and sustain M&amp;E after closing down - and implement these ideas.</li> <li>• Hold workshops and do field studies with key stakeholders to assess impacts.</li> <li>• Identify lessons learned for the next phase and/or other projects.</li> </ul>

## 162. Operational Results Management System (ORMS)

163. A revised Results and Impact Management System (RIMS), including new output and outcome Core Indicators (CIs), was approved by the Executive Management Committee (EMC) in January 2017 and endorsed by the Evaluation Committee and Executive Board in March and April 2017, respectively. The new RIMS CIs consist of a set of new and improved output and outcome indicators, that measure the more recurrent results achieved through IFAD operations. The new CIs and related measurement approaches have been developed to be consistent with and complementary to IFAD's impact assessment programme, thus ensuring that the performance of IFAD operations is measured across the results chain, i.e. at the output, outcome and impact levels.

164. The ORMS is a full-fledged online system that builds on interconnected templates for the online presentation, analysis, reporting, and approval of project design, supervision and completion documents. Although, the data entered into the system for the project will be done at IFAD level, yet the project will have to provide this data on an annual basis.

On an annual basis, the M&E unit will compile the progress of all indicators under the project log frame and send it to IFAD no later than the 31 January of the following year.

**165. Annual Outcome Surveys** The annual outcome survey (AOS) is a simple household survey that will be undertaken annually by project staff and will cover a small sample of at least 300 households selected randomly. The survey will be conducted exclusively in villages targeted by the project or receiving project interventions, and will include both project beneficiaries and non beneficiaries (the latter used as control group). Overall, the exercise is expected to take no more than 3 months and can be implemented by project staff and extension officers, with or without external support. The main objectives of the survey are to: (i) measure changes happening at the household level in terms of livelihoods and food security during the project life; (ii) assess targeting efficiency; (iii) provide evidence of project success or failure; and (iv) provide timely performance information necessary to undertake corrective actions.

166. The AOS will provide information on “why” and “how” some outcomes were or were not achieved. The project will use the standard AOS questionnaire as the main frame for conducting the survey and will modify it accordingly as per the project thematic areas of intervention. The AOS will be implemented starting from the end of PY2.

## **167. Progress Reporting**

The progress reports are to be prepared annually and, at a minimum, should address (i) quantitative and qualitative progress made in implementing the Project and achieving its objectives, (ii) problems encountered during the reporting period, (iii) steps taken or proposed to be taken to remedy these problems, and (iv) the proposed programme of activities and the progress expected during the following reporting period. Sufficient information must be made available about what money is spent on, how much is spent on what, and what the results are.

168. The main functions of progress reports are:

1. Review current progress compared to planned activities, and expenditure compared to budget;

2. Provide overall status information on the project since it started, in terms of physical progress and total expenditure;
3. Identify problems during the reporting period and steps to solve these problems;
4. Analyse strengths and weaknesses, opportunities and threats;
5. Discuss quantitative and qualitative progress made in achieving overall objectives; and
6. Provide strategic direction for the next planning cycle.

### **Preparation of Progress Reports**

169. Each County Program Management Office (CPMO) will submit annually progress report to PPMO. The reports will record the financial and physical activities against Annual Work Plan & Budget (AWPB) targets. The PPMO will prepare the reporting formats and contents to be submitted and be responsible for the compilation of annual reports. The reports will be submitted to IFAD with the format and content described in the following section, no later than two months after the end of each reporting period. The Project Progress Report will have the following format and content.

### **170. Format of Progress Reports**

1. **Section A – Introduction:** A brief summary of the Project Objectives and the design features as is given in the Project Design Report will be presented in this section. It will be written once and used for all future Progress Reports, with minor changes as may be necessary.
2. **Section B - Executive Summary:** A brief summary of the content of the report will be presented in this section, highlighting performance during the project period and to date; trends; explanations for large variations from the initially set Project Design Report targets and objectives; problems and issues, if any; and proposed action during the next reporting period and beyond.
3. **Section C - Detailed Report:** This section will include the following: (a) Descriptions of the Progress made during the reporting period and to date (by components, sub-components and activities); (b) Sources and Uses of Funds Statement; (c) Statement of Use of Funds by Expenditure Type and by Components; (d) Reconciliation of the IFAD funded Special Accounts; (e) Output Monitoring Report; (f) Procurement Report; and (g) Other Relevant Reports. The information contained in the above statements and tables will provide the linkages between physical and financial progress.
  1. **Progress Made by the Project:** This part will be a summary of the most important aspects of project implementation to date including any special issues that have surfaced and with suggestions for resolution. It will concisely describe and highlight: progress of all key project components including physical works, implementation and project output, actual costs incurred vs. estimates, financing received from IFAD and government of China, as well as major expenditures, large procurements carried out and disbursement performance, critical studies undertaken, technical assistance and training received. It will assess performance in reaching and benefiting the intended target groups, in particular the poorer, as well as gender and ethical equity and youth in participation and benefits. It will include numerical information on activities,

numbers of participants (male and female) and information about the socio-economic status of individual participants.

2. **Sources and Uses of Funds Statement for the Reporting Period and Year-to-Date.** This will indicate the opening cash and bank balances, listing of the sources and amounts of funds received and expenditures by project component and in line with the IFAD loan/ grant withdrawal schedule in the respective agreements, and the cash and bank balances. It also shows cumulative figures to date side by side.
3. **Statement of Use of Funds by Expenditure Type** - These tables list expenditures by component, by expenditure type, and by disbursement categories. An important feature of these tables will be the comparative listing of the actual expenditure figures with the estimates from the latest Annual Work Plan & Budget (AWPB) and the showing of the variances and appropriate explanation for each such variance. The total estimated base costs of the project components and expenditure categories as per the appraisal report will also be shown side by side.
4. **Output Monitoring Report** - Physical progress and expenditures in relation to such progress will be presented here. The output indicators will be taken from the physical performance targets set at appraisal. Here again, actual and targets set at appraisal will be compared and explanation provided for deviations.
5. **Procurement Report (Updated Procurement Plan)** - The Procurement Report consists of the approved Procurement Plan at grant effectiveness and duly up dated and all the key procurements made on behalf of the project and their status as at the end of the reporting period. The Procurement Report will also include all key procurement of works, vehicles, equipment, goods and consulting and other services undertaken by the project since project start up.
6. **Other Relevant Aspects** - Status on the following aspects of the project will be included in this part of the progress report:
  - (i) **Organization and Staffing:** The progress report will include the latest organization chart of the Project. The Chart will give the names, titles, and gender of all senior staff and any changes in the senior management and project compensation details will be reported.
  - (ii) **Accounts and Audit:** This part will describe the status of the books of accounts, preparation of quarterly accounts, readiness for the accounts for annual audit and progress or completion of the audit (during the appropriate quarter). Where audits have been completed, key findings, observations, qualifications, and recommendations of the auditors will be provided in this part of the progress report.
  - (iii) **Compliance with Conditionality/Legal Covenants:** Status of compliance with all stipulated conditions included as covenants in the loan agreement will be given. Problem relating to non-compliance of any legal covenant will also be highlighted with suggested resolution.

## **171. Other key aspects**

### **Mid Term Review and Three-wave surveys**



Annual Supervision and the milestone Mid Term Review and Completion Review will be organized by IFAD. These reviews are based on the AOS and three-wave surveys: a) a baseline survey in 2020, b) a midline survey in 2022, c) an endline survey in 2024. Annual reviews will be mainly based on AOS as mentioned above. This part is mainly about the Mid Term Review and the relevant three-wave surveys.

## **172. Mid-term Review**

The Yunnan Agricultural and Rural Affairs Department, as the lead project agency and IFAD will jointly carry out a review of Project implementation at the end of project year three, (Mid-term Review), based on the following terms of reference:

The main thrust of the Mid-term Review (MTR) will be to evaluate the overall progress of project implementation, particularly in achieving its goals and objectives and make recommendations for the remaining project period. In particular, MTR will:

- (a) review the achievements of each project component and sub-component vis-a-vis Project Design Report estimates, including their financial and physical progress;
- (b) assess the validity and relevance of project goals, objectives, and strategies, taking into account the implications of evolving public policies and the country's socio-economic circumstances;
- (c) review the effectiveness of participatory approaches and targeting, focusing on constraints for reaching the poorest and the adequacy and effectiveness of support to women beneficiaries;
- (d) assess the post project sustainability of the assets and other development outcomes created through project support;
- (e) identify the critical factors and constraints that have inhibited timely project implementation, both in global terms and by component and sub-component, including the institutional and socio-economic policy issues, in addition to any other external factors unforeseen at design;
- (f) examine the arrangements for project implementation, co-ordination and management, including the roles and responsibilities of all key players at the national, regional and local levels, in particular assess the adequacy, the overall effectiveness and the institutional;
- (g) the process of formation, financial management and performance of PMOs; their Management Boards and respective service providers.
- (h) review the adequacy of existing policies and procedures governing project's financial management, external audit, liquidity and the use of the special account facility, and staff training needs and make practical recommendations to improve the effectiveness and efficiency of project co-ordination and management;
- (i) examine the efficiency and overall adequacy of the arrangements for annual planning, budgeting, and the flow of funds;
- (j) assess the efficiency of procurement and disbursement procedures, and make recommendations to redress any constraints encountered with a view to ensure the timely delivery of goods and services required for the project;

- (k) examine the effectiveness of the M&E system, in particular its capacity to collect and analyse data and information, and report on the performance of the project in line with the key performance indicators highlighted in the project's results framework;
- (l) examine the need, nature and scope for adjustments or reorientation of project design and implementation strategy, and propose practical recommendations for corrective remedial measures by component and sub-component to be carried out during the remaining or extended period of implementation with a view to achieve the project goals and objectives;
- (m) critically examine project costs and financing plan by component, sub-component and categories, bearing in mind any revisions to the physical and financial targets;
- (n) assess the effectiveness of supervision process in terms of implementation support, its timeliness and ability to identify and deal with problem issues, the adequacy of its expertise mix, and effectiveness in following up on its recommendations; and
- (o) evaluate the important lessons learnt in the course of project implementation and highlight their implications on future project activities

The MTR will largely be based on, inter-alia, the Project Design Report; Environmental and Social Impact Assessment Reports, Procurement Plans, the Reports of Supervision and Follow Up Missions; the Project's Annual Work Plans and Budgets as well as Progress Reports; and Financing Agreements; evolving government policies and strategies; and additional data and information collected through commissioned studies. The MTR will include extensive field visits and consultations with key implementation agencies at the national, district and local levels, in addition to interacting and conducting interviews with beneficiary households in the three project governorates.

The findings of the MTR will be communicated promptly to the implementing agencies and discussed jointly between the Chinese government and IFAD. On the basis of conclusions and recommendations of the MTR, necessary adjustments will be made in the Project design and the Financing Agreements to remove constraints and put the Project on track to achieve its objectives. The Chinese government will ensure that the recommendations resulting from the Mid-term Review are implemented within the specified time and to the satisfaction of IFAD.

### 173. **Three-wave Survey**

The three-wave survey will be conducted by Agricultural Information Institute (AII) of Chinese Academy of Agricultural Sciences (CAAS). Data collection will take place in three stages: a) a baseline survey in 2020, b) a midline survey in 2022, c) an endline survey in 2024. Data from the baseline, midline and endline surveys will cover both beneficiary households and cooperatives as well as control households and cooperatives with a representative sample size. CAAS will be responsible for collection/analysing data from the surveys.

#### **Household**

- Demographics
- Asset ownership
- Income, expenditure and consumption
- Agricultural production stats

- Project details
- Women empowerment
- Youth participation
- Degree of satisfaction and influence

- Cooperatives
- Basic information
- Operation and development
- Training and technical assistance
- Project practice and impact
- Assistance requiring from IFAD

**Control group:** In order to better understand the attribution of the project interventions on beneficiaries, a control group (counterfactual) will also be used. This group will be identified based on similar characteristics of the beneficiaries (nearby locations with similar demographics). However, care would be taken to ensure that this group does not include indirect project beneficiaries.

**174. Baseline survey.** The baseline survey will provide information that will fit into the M&E system; basically baseline data for the programme M&E indicators. The survey will cover both beneficiary villages as well as control villages with a representative sample size. Data from the baseline for the M&E indicators will be updated on survey basis to track the different project indicators over time, including for the MTR. Under the M&E system the data will be analysed to ensure that Y2RDP activities are on the right directions and assess whether or not the targets for the indicators will be achieved.

The goal of the baseline study is to understand the level of poverty, agricultural activities, community development, gender inequality of the population, with special focus on women and youth within the seven targeted counties.

The survey should: (i) focus on key indicators required to measure the outcomes and impact of the planned activities as it was mentioned in the Project's Logical Framework; (ii) not duplicate existing available data; (iii) not require an excessive amount of interviewees time; (iv) generate accurate and reliable results based on sound statistical best practice, and; (v) allow disaggregation by gender, age, and targeting categories.

**175. Endline Survey/Project completion survey.** Programme completion survey (impact evaluation) can be conducted with the endline survey which will use the same questionnaires used for the baseline to allow for comparison against baseline results. Analysis will be done by beneficiary status, region and gender of household head.

The impact evaluation will assess the project impact using the same indicators (ORMS and project specific derived from the Log frame) as the baseline survey. The key elements of the Survey will include both socio-economic characteristics of the Project primary target group and status of social and economic infrastructure. The Survey will be aimed to measure the changes brought about by the Project in the socio-economic development of its beneficiaries. It is anticipated that the Survey

will combine a formal household sample survey with a more qualitative and in-depth study. The Survey will also compare the socio-economic situation of beneficiaries and non-beneficiaries in order to better attribute the impact to the project. Detailed analysis will be undertaken of the changes observed between baseline survey and the impact survey. Where possible, panel data will be used i.e. some of the beneficiaries interviewed during the baseline survey will also be included in the sample of the impact survey.

#### **176. Staffing for M&E**

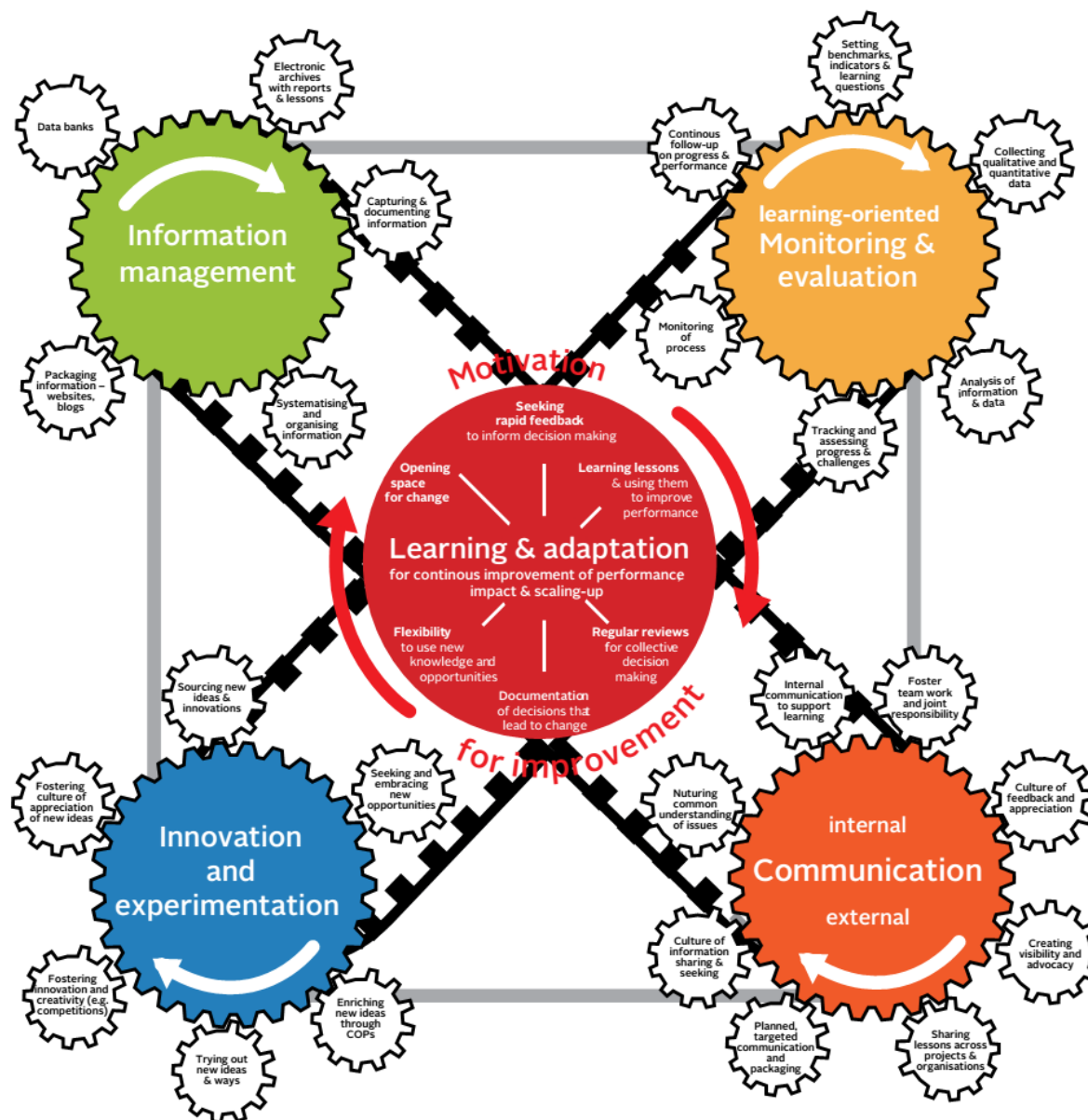
177. The Monitoring and Evaluation unit at the PPMO will be responsible for ensuring that a responsive M&E system is established and regular monitoring and progress reporting is in place for Project activities. The county-level office will summary and report to the municipal project management office. The village-level implementation team members should be responsible for collecting the monitoring data of the farming households and avoid repetitive counting, especially for important data regarding gender and youth participants, beneficiary farmers of different activities and other required indicators. The monitoring data of relevant institutions and staff training will be collected by the implementing agencies. The municipal project management office will summarize the monitoring data reported by the county project management office, and submit to IFAD through provincial project semi-annually and annually.
178. All Project staff are expected to be active participants in the M&E system where the overall coordination of information collection and flow will be guided by the M&E unit at PPMO and IFAD. Quantitative and qualitative information will be collected at beneficiary level by the young professionals using M&E indicators that have been developed by the M&E unit based on the M&E plan.
179. Clear reporting lines will be established with PPMO. The objective is to develop and operate a systematic Management information system (MIS) that focuses on strategic analysis, rather than on data compilation with limited transformation into information. The task will be to go from outputs, up the monitoring scale, to outcomes by transforming the information into knowledge about Project's impact. The accurate dissemination and reporting of the transformation will be dependent on the M&E staff's capacity to generate narratives on the why and how of the changes documented.

## Chapter 6: Knowledge Management and Communication

180. Knowledge Management (KM) and Learning is the integrated approach of identifying, capturing, evaluating, retrieving and sharing information. It is the using of knowledge more effectively with 5 interconnected functions:

- **Learning and Adaptation:** Seeking regular feedback, learning lessons to improve performance, regular reviews for collective decision making, documentation of decision that leads to change, flexibility for the use of knowledge and new innovation.
- **Learning oriented M&E:** Setting benchmarks, indicators and learning question; collective qualitative and quantitative data, analyzing data, monitoring process, continuous follow up of progress and performance.
- **Internal and External Communication:** Internal communication to support learning, foster teamwork and joint responsibility, culture of feedback and appreciation, creating visibility and advocacy, sharing lessons across projects and organizations
- **Innovation and Experimentation:** Sourcing new ideas and innovations, seeking and embracing new opportunities, enriching new ideas through Communities of Practice (CoPs) groups of people who focus on particular aspects and trying out new ideas.
- **Information management:** Electronic archives with reports and lessons, capturing and documenting information, systematizing and organizing information, packaging information to suit the targeted audience into websites and blogs as well as keeping data banks.

## The Integrated Knowledge Management and Learning System



**Figure 1 Integrated Knowledge Management and Learning System**

181. Building on lessons from IFAD country programme, special attention will be put on making sure: (i) programme launch is effective for visibility (ii) knowledge management indicators are included in the M&E system; (iii) of setting up solid information management systems (e.g. electronic archives); (iv) clarifying roles and responsibilities in knowledge management in the programme management and implementation teams; (v) facilitating internal programme learning and cross-project exchanges; (vi) organising exchanges with

other projects and agencies, organising targeted workshops, and other activities to disseminate results and attract the interest of government and development partners for improvement of their practices, replication and scaling up of tested and documented innovations.

182. In order to enhance the learning process and the dissemination of results, a knowledge management and communication strategy (KMC strategy) will be developed and integrated into the management of the programme. The strategy will include which thematic areas of learning the programme will be focusing on. The strategy will outline how the knowledge generated will be disseminated and will identify most appropriate channels.

### **Knowledge Management and Communication**

183. The KMC strategy will be formulated based on the IFAD's knowledge management and learning framework which recognizes 5 interconnected functions which include: learning for adaptation, learning oriented monitoring and evaluation, internal and external communication, information management and innovation and experimentation.

### **Knowledge product**

184. The knowledge products are suggested but not limited as follows: (i) a systematic Management information system (MIS); (ii) an official account on WeChat to facilitate internal and external KMC; (iii) publicity material including newsletters, radio and television programmes; (iv) studies and publications on lessons learned; and (v) Policy dialogue and Policy brief produced and submitted.
185. The project follows the guidelines of IFAD's supervision and evaluation to establishes a Management Information System (MIS) from the provincial project management office, the municipal project management office, the county project management office, the township project management office, and the village-level implementation team. The project will employ a third-party to build the system. Experts and consultants from AII of CAAS will provide support in designing the system.

## Chapter 7: Project Costing and Financing

186. **Project costs:** The total project cost is estimated at US\$ 234.28 million, including contingencies. The total base cost is US\$ 224.58 million; physical and price contingencies account for an estimated US\$ 9.70 million (i.e. 4.32% of the total base cost or 4.14% of the total project cost). Project costs are allocated among the three components as follows: (A) Supporting Inclusive Rural Development (49% of the total base cost); (B) Climate-proofed public infrastructure planning and development (47% of total base cost); and (C) Project Management, Knowledge Management, M&E, and Policy (4% of the total base cost). Costs per component and sub-component, and financier are summarized in below cost tables.
187. **Project financing and co-financing:** The provincial government of Yunnan requested IFAD to contribute to the project with a loan in the estimated amount of US\$ 75 million (31.8% of the total project cost). The Government will contribute US\$ 115.27 million (49.2% of the total cost), and participating enterprises and cooperatives are expected to contribute approximately US\$ 41.69.80 million (17.8% of the total cost). The beneficiaries' contribution is expected to be approximately US\$ 2.76 million (1.2% of the total cost).
188. **Co-financing ratio:** The IFAD loan has a co-financing ratio of approximately 1:2. This is well-above the IFAD11 target of 1:1.4 (and well-above the 1:0.8 target for domestic co-financing).
189. **Assumptions:** Key assumptions used in estimating the project costs include (i) price contingencies assumed at 5% and applied on all items, except for Grant and Subsidies category; (ii) exchange rate at CNY 7.07 per USD; (iii) taxes as prevailing at the time of design and broadly based at 10%; (iv) a FIVE year implementation phase and the project starting in April 2020; (v) all unit costs are input in Chinese Yuen, i.e. CNY and the price contingencies at 2% based on an average annual inflation rate in China; (vi) taxes excluded from IFAD financing rules and (vii) cost tables are presented in China fiscal year which corresponds to Calendar Year.
190. **Unit costs:** Unit costs for all detailed Tables were provided by the respective counties, in particular for the Component-2: Climate proofed public infrastructure activities. Operations and maintenance costs for these interventions have been assumed at 1% of annual investment costs. Unit costs for Component 1: Support to inclusive rural development were developed in consultation with the respective Counties during the field visits and refined with the Provincial PMO. In doing so, some adjustments have been made but otherwise, total average expenditure for this component is more or less identical. Unit costs for the Component 3, Project Management, M&E, KM and Policy were provided by the Provincial PMO.
191. **Costab accounts:** Costab accounts are organised into following three accounts: (i) procurement accounts, (ii) disbursement accounts and (iii) expenditure accounts. Following accounts have been created in accordance with the project expenditure categories and the project financing arrangements:



Procurement accounts (PA) a/	Disbursement accounts (DA)	Expenditure accounts (EA)
<i>Civil work_PA</i>	<i>Civil work_DA</i>	<i>Civil work_EA</i>
<i>Smart Civil work_PA</i>	<i>Smart Civil work_DA</i>	<i>Smart Civil work_EA</i>
<i>Equipment and materials_PA</i>	<i>Equipment and materials_DA</i>	<i>Equipment and materials_EA</i>
<i>Training, capacity building and TA_PA</i>	<i>Training, capacity building and TA_DA</i>	<i>Training, capacity building and TA_EA</i>
<i>Goods, services and inputs_PA</i>	<i>Goods, services and inputs_DA</i>	<i>Goods, services and inputs_EA</i>
<i>Grants and subsidy_PA</i>	<i>Grants and subsidy_DA</i>	<i>Grants and subsidy_EA</i>
<i>Salary and allowances_PA</i>	<i>Salary and allowances_DA</i>	<i>Salary and allowances_EA</i>
<i>Operating costs_PA</i>	<i>Operating costs_DA</i>	<i>Operating costs_EA</i>
<i>Operations and maintenance_PA</i>	<i>Operations and maintenance_DA</i>	<i>Operations and maintenance_EA</i>
a/ in Summary and Detailed tables, these accounts will end up with PA, DA & EA respectively		

192. **Y2RDP Project accounts:** The project has three expenditure components including the project management and 5 sub-components. Cost Tables have accordingly organised, prepared and provided in following pages: (i) first Summary Tables for components, (ii) detailed Tables by Components and sub-components and (iii) Detailed Tables by Counties.
193. **Summary Tables:** These Tables are presented summarising all components by financiers (that is GOC, IFAD, PRIVATE SECTOR and BENEFICIARIES) under the project in thousand USD currency units. (*Tab file: Y2RDP\_components.tab*)
194. **Detailed Cost Tables:** Each Detailed Table contains the following data and information relating to the project interventions and activities. These are description of an activity, unit, physical quantities by year, unit cost in CNY and USD, base costs in thousand USD currency unit, total costs including contingencies in thousand USD, percentage of disbursement account and financing rule (ie % of financing by Government, IFAD, private sector and the beneficiaries).

195.

Components	Sub-components	Cost Table reference #
Support to Inclusive Rural Development	Improving <i>chanye fupin</i> models	1.1
	Stimulating entrepreneurship	1.2
	Improving access to finance	1.3
Climate-proofed public infrastructure planning and development	Improving infrastructure climate resilience	2.1
	Improving rural infrastructure system	2.2
Project Management, M&E, KM and Policy	Project management, M&E, KM and Policy	3.1

196. **County Detailed Cost Tables:** There are 7 counties under FOUR Prefectures. Detailed cost tables for each county have been prepared and these are presented in following pages.

Prefecture	County	Table reference #
Zhaotong	1. Zhengxiong	1.1 to 1.7
	2. Suijiang	2.1 to 2.7
Dali	3. Yongping	3.1 to 3.7
	4. Yunlong	4.1 to 4.7
Nujiang	5. Lanping	5.1 to 5.7
Lijiang	6. Yongsheng	6.1 to 6.7
	7. Huaping	7.1 to 7.7
<i>Prefecture PMO costs are given in Table 8.1</i> <i>PMO costs are given in Table 9.1</i>		

### Abbreviations used in costab Tables

SCW	Smart Civil work carried out under climate resilience
CW	Civil work
TWC	Training, workshop, capacity building and TA
GAS	Grant and subsidy
GSI	Goods, services and inputs
EAM	Equipment and materials
SAA	Salary and allowances

OPC	Office operating costs
OAM	Operations and maintenance
DA	Disbursement account

197. **Retroactive financing** As an exception to the General Conditions for Agricultural Development Financing, IFAD will be seeking IFAD Executive Board approval that for retroactive financing from the loan up to a maximum of 10% of the total IFAD financing (i.e US\$7.5 million) for eligible expenditures incurred as from the date which the design document got approval by Quality assurance group to the date of the entry in force of the financing agreement. Eligible expenditures for retroactive financing are considered those incurred to finance the start-up and preparation project activities such as : (i) purchase of essential items (including equipment and procurement of MIS system) for the PMOs; (ii) recruitment of project staff; (iii) costs related to tendering, selection, and recruitment of service providers; (iv) costs related to the finalization of the program implementation manual, customization of accounting software to fit IFAD requirement and license fees, start-up trainings and workshops; (v) establishment of the M&E system, including carrying-out of the baseline survey and development of MIS; (vi) exposure visits for knowledge and experiences sharing; (vii) surveys and feasibility studies; (viii) training and technical assistance for cooperatives, including recruitment of service providers, cooperative support field officers, technical advisors for business plans development, brokers/facilitators for linkages with supermarkets; and value-chain officers and monitoring & evaluation officers; and (ix) business plans.
198. **Financing of taxes:** In order to improve the efficiency of funds flow and better support project implementation, IFAD's funds may be used to finance taxes that are not "excessive, discriminatory or otherwise unreasonable". In case the Government intends to use IFAD financing to finances taxes that is impossible or impractical to exempt, the Government would need to formalize such request in writing.

**PIM – Y2RDP: Project cost and financing****Summary tables Y2RDP (from Component costables)****Y2RDP Components by Financiers**

China

Y2RDP PDR

Components by Financiers

(US\$ '000)

	Govt of China		IFAD		Private sector		Beneficiaries		Total		Duties & Taxes
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	
<b>A. Components</b>											
<b>1. Comp-1: Supporting inclusive rural development</b>											
a. Improving Chanye fupin model	19,276.4	18.6	44,898.1	43.3	39,565.7	38.1	-	-	1,03,740.1	44.3	320.6
b. Stimulating entrepreneurship	898.0	9.5	6,422.9	68.0	2,120.0	22.5	-	-	9,440.9	4.0	371.6
c. Improving access to finance	51.0	10.0	458.9	90.0	-	-	-	-	509.9	0.2	51.0
<b>Subtotal Comp-1: Supporting inclusive rural development</b>	<b>20,225.3</b>	<b>17.8</b>	<b>51,779.9</b>	<b>45.5</b>	<b>41,685.7</b>	<b>36.7</b>	<b>-</b>	<b>-</b>	<b>1,13,690.9</b>	<b>48.5</b>	<b>743.3</b>
<b>2. Comp 2: Climate-proofed public infrastructure</b>											
a. Improving infrastructure climate resilience	2,195.7	9.7	19,761.5	87.3	-	-	687.0	3.0	22,644.2	9.7	2,195.7
b. Improving rural infrastructure	86,311.1	97.6	-	-	-	-	2,082.0	2.4	88,393.1	37.7	8,631.1
<b>Subtotal Comp 2: Climate-proofed public infrastructure</b>	<b>88,506.8</b>	<b>79.7</b>	<b>19,761.5</b>	<b>17.8</b>	<b>-</b>	<b>-</b>	<b>2,769.0</b>	<b>2.5</b>	<b>1,11,037.3</b>	<b>47.4</b>	<b>10,826.8</b>
<b>3. Comp 3 Project management, M&amp;E, KM and policy</b>											
a. Project management, M&E, KM and Policy	6,524.5	68.3	3,031.9	31.7	-	-	-	-	9,556.4	4.1	425.4
<b>Total PROJECT COSTS</b>	<b>1,15,256.6</b>	<b>49.2</b>	<b>74,573.3</b>	<b>31.8</b>	<b>41,685.7</b>	<b>17.8</b>	<b>2,769.0</b>	<b>1.2</b>	<b>2,34,284.6</b>	<b>100.0</b>	<b>11,995.4</b>

**Y2RDP Disbursement Accounts by Financiers**

China

Y2RDP PDR

**Disbursement Accounts by Financiers**

(US\$ '000)

	Govt of China		IFAD		Private sector		Beneficiaries		Total		Duties & Taxes
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	
1. Civil work	86,311.1	100.0	-	-	-	-	-	-	86,311.1	36.8	8,631.1
2. Smart civil work	2,048.3	10.0	18,434.6	90.0	-	-	-	-	20,482.9	8.7	2,048.3
3. Equipment and materials	145.3	50.8	140.7	49.2	-	-	-	-	286.0	0.1	28.6
4. Training, workshop, capacity building and TA	1,368.1	14.8	7,903.1	85.2	-	-	-	-	9,271.2	4.0	927.1
5. Goods, services and inputs	599.0	16.6	3,004.2	83.4	-	-	-	-	3,603.3	1.5	360.3
6. Grants and subsidy	18,955.7	18.1	44,132.3	42.1	41,685.7	39.8	-	-	1,04,773.7	44.7	-
7. Salary and allowances	2,405.5	80.6	580.5	19.4	-	-	-	-	2,986.0	1.3	-
8. Operating costs	3,423.6	90.1	377.9	9.9	-	-	-	-	3,801.5	1.6	-
9. Operations and maintenance	-	-	-	-	-	-	2,769.0	100.0	2,769.0	1.2	-
<b>Total PROJECT COSTS</b>	<b>1,15,256.6</b>	<b>49.2</b>	<b>74,573.3</b>	<b>31.8</b>	<b>41,685.7</b>	<b>17.8</b>	<b>2,769.0</b>	<b>1.2</b>	<b>2,34,284.6</b>	<b>100.0</b>	<b>11,995.4</b>

## Y2RDP Expenditure accounts by financiers

China Y2RDP PDR Expenditure Accounts by Financiers (US\$ '000)											
	Govt of China		IFAD		Private sector		Beneficiaries		Total		Duties & Taxes
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	
<b>I. Investment Costs</b>											
A. Civil works	86,311.1	100.0	-	-	-	-	-	-	86,311.1	36.8	8,631.1
B. Smart civil work	2,048.3	10.0	18,434.6	90.0	-	-	-	-	20,482.9	8.7	2,048.3
C. Equipment and materials	145.3	50.8	140.7	49.2	-	-	-	-	286.0	0.1	28.6
D. Training, workshop, capacity building & TA	1,368.1	14.8	7,903.1	85.2	-	-	-	-	9,271.2	4.0	927.1
E. Goods, services and inputs	599.0	16.6	3,004.2	83.4	-	-	-	-	3,603.3	1.5	360.3
F. Grants and subsidy	18,955.7	18.1	44,132.3	42.1	41,685.7	39.8	-	-	1,04,773.7	44.7	-
<b>Total Investment Costs</b>	<b>1,09,427.5</b>	<b>48.7</b>	<b>73,615.0</b>	<b>32.8</b>	<b>41,685.7</b>	<b>18.5</b>	-	-	<b>2,24,728.2</b>	<b>95.9</b>	<b>11,995.4</b>
<b>II. Recurrent Costs</b>											
A. Salary and allowances	2,405.5	80.6	580.5	19.4	-	-	-	-	2,986.0	1.3	-
B. Operating costs	3,423.6	90.1	377.9	9.9	-	-	-	-	3,801.5	1.6	-
C. Operations and maintenance	-	-	-	-	-	-	2,769.0	100.0	2,769.0	1.2	-
<b>Total Recurrent Costs</b>	<b>5,829.1</b>	<b>61.0</b>	<b>958.3</b>	<b>10.0</b>	-	-	<b>2,769.0</b>	<b>29.0</b>	<b>9,556.5</b>	<b>4.1</b>	-
<b>Total PROJECT COSTS</b>	<b>1,15,256.6</b>	<b>49.2</b>	<b>74,573.3</b>	<b>31.8</b>	<b>41,685.7</b>	<b>17.8</b>	<b>2,769.0</b>	<b>1.2</b>	<b>2,34,284.6</b>	<b>100.0</b>	<b>11,995.4</b>

**Y2RDP Project components by year –total including contingencies**

China

Y2RDP PDR

**Project Components by Year -- Totals Including Contingencies**

(US\$ '000)

	Totals Including Contingencies					Total
	2020	2021	2022	2023	2024	
<b>A. Components</b>						
<b>1. Comp-1: Supporting inclusive rural development</b>						
a. Improving Chanye fupin model	11,904.2	26,649.1	34,052.8	27,201.3	3,932.7	1,03,740.1
b. Stimulating entrepreneurship	1,203.1	1,998.7	2,038.7	2,079.4	2,121.0	9,440.9
c. Improving access to finance	98.0	99.9	101.9	104.0	106.1	509.9
<b>Subtotal Comp-1: Supporting inclusive rural development</b>	<b>13,205.3</b>	<b>28,747.7</b>	<b>36,193.4</b>	<b>29,384.7</b>	<b>6,159.8</b>	<b>1,13,690.9</b>
<b>2. Comp 2: Climate-proofed public infrastructure</b>						
a. Improving infrastructure climate resilience	6,570.8	9,499.2	5,507.4	831.8	234.9	22,644.2
b. Improving rural infrastructure	21,401.9	26,566.9	22,957.4	12,555.5	4,911.3	88,393.1
<b>Subtotal Comp 2: Climate-proofed public infrastructure</b>	<b>27,972.7</b>	<b>36,066.1</b>	<b>28,464.8</b>	<b>13,387.3</b>	<b>5,146.2</b>	<b>1,11,037.3</b>
<b>3. Comp 3 Project management, M&amp;E, KM and policy</b>						
a. Project management, M&E, KM and Policy	2,179.3	1,834.2	2,007.7	1,884.6	1,650.6	9,556.4
<b>Total PROJECT COSTS</b>	<b>43,357.3</b>	<b>66,648.1</b>	<b>66,666.0</b>	<b>44,656.6</b>	<b>12,956.6</b>	<b>2,34,284.6</b>

## PIM: DETAILED COST TABLES BY COUNTIES (generated from county costables)

Table 1.1: Zhengxiong-Improving *Chanye fupin* models

China Y2RDP PDR Table 1.1. Zhengxiong Improving Chanye fupin model																	
Detailed Costs																	
	Unit	Quantities					Unit Cost (CNY)	Unit Cost (US\$)	Totals Including Contingencies (CNY '000)						Disb. Acct.	Fin. Rule	
		2020	2021	2022	2023	2024	Total			2020	2021	2022	2023	2024	Total		
I. Investment Costs																	
A. Upgrading cooperative meeting operational standard																	
1. Payment to cooperative meeting operational standard	coop	-	6	9	-	-	15	200,000	28,531	-	1,236.2	1,891.4	-	-	3,127.7	TWC_DA	IFAD ( 100% )
2. Verification expenses																	
Verification agency	LS	1	1	1	1	-	4	15,000	2,140	15.2	15.5	15.8	16.1	-	62.4	TWC_DA	IFAD ( 100% )
MIS for RBL	LS	-	1	1	1	1	4	7,500	1,070	-	7.7	7.9	8.0	8.2	31.8	TWC_DA	IFAD ( 100% )
Subtotal Verification expenses										15.2	23.2	23.6	24.1	8.2	94.3		
3. Investment on pro-poor cooperatives																	
Project grant support	coop	-	-	2	4	2	8	1,500,000	213,980	-	-	3,152.4	6,430.9	3,279.8	12,863.1	GAS_DA	IFAD ( 100% )
Private investments	coop	-	-	2	4	2	8	1,000,000	142,653	-	-	2,101.6	4,287.3	2,186.5	8,575.4	GAS_DA	PRIVATE ( 100% )
Govt assistance	coop	-	-	2	4	2	8	1,000,000	142,653	-	-	2,101.6	4,287.3	2,186.5	8,575.4	GAS_DA	GOVT
Subtotal Investment on pro-poor cooperatives										-	-	7,355.6	15,005.5	7,652.8	30,013.9		
Subtotal Upgrading cooperative meeting operational standard										15.2	1,259.4	9,270.7	15,029.6	7,661.0	33,235.9		
B. Matching grant for cooperative co-investers																	
Project grant support	coop	-	4	6	4	-	14	1,200,000	171,184	-	4,945.0	7,565.8	5,144.7	-	17,655.5	GAS_DA	IFAD (100%)
Private investment	coop	-	4	6	4	-	14	1,200,000	171,184	-	4,945.0	7,565.8	5,144.7	-	17,655.5	GAS_DA	PRIVATE ( 100% )
Govt assistance	coop	-	4	6	4	-	14			-	-	-	-	-	-	GAS_DA	IFAD ( 100% )
Subtotal Matching grant for cooperative co-investers										-	9,889.9	15,131.6	10,289.5	-	35,311.0		
C. Company-cooperative-households models																	
1. Company-cooperative-household models																	
Project grant	model	3	5	5	-	-	13	1,500,000	213,980	4,545.0	7,726.5	7,881.0	-	-	20,152.5	GAS_DA	IFAD ( 100% )
Private sector participation	model	3	5	5	-	-	13	1,500,000	213,980	4,545.0	7,726.5	7,881.0	-	-	20,152.5	GAS_DA	PRIVATE ( 100% )
Support from Govt	model	3	5	5	-	-	13	1,500,000	213,980	4,545.0	7,726.5	7,881.0	-	-	20,152.5	GAS_DA	GOVT
Subtotal Company-cooperative-household models										13,635.0	23,179.5	23,643.1	-	-	60,457.6		
2. Other innovative models																	
Project support	model	3	5	5	-	-	13	500,000	71,327	1,515.0	2,575.5	2,627.0	-	-	6,717.5	GAS_DA	IFAD ( 100% )
Private sector	model	3	5	5	-	-	13	500,000	71,327	1,515.0	2,575.5	2,627.0	-	-	6,717.5	GAS_DA	PRIVATE ( 100% )
Govt assistance	model	3	5	5	-	-	13	1,000,000	142,653	3,030.0	5,151.0	5,254.0	-	-	13,435.0	GAS_DA	GOVT
Subtotal Other innovative models										6,060.0	10,302.0	10,508.0	-	-	26,870.0		
Subtotal Company-cooperative-households models										19,695.0	33,481.5	34,151.1	-	-	87,327.6		
D. Product traceability system																	
Promotion and user registration	LS	1	1	1	1	-	4	2,500	357	2.5	2.6	2.6	2.7	-	10.4	GSI_DA	IFAD ( 90% )
Training of Govt staff and agro-entity	LS	-	1	1	1	1	4	7,000	999	-	7.2	7.4	7.5	7.7	29.7	GSI_DA	IFAD ( 90% )
Equipment support /a	LS	-	1	1	1	1	4	25,000	3,566	-	25.8	26.3	26.8	27.3	106.2	GSI_DA	IFAD ( 90% )
Operating costs, supervision	LS	-	1	2	3	4	10	5,000	713	-	5.2	10.5	16.1	21.9	53.6	GSI_DA	IFAD ( 90% )
Subtotal Product traceability system										2.5	40.7	46.8	53.1	56.8	199.9		
E. Improving climate information and adoption advice	LS	-	1	1	1	-	3	500,000	71,327	-	515.1	525.4	535.9	-	1,576.4	GSI_DA	IFAD ( 90% )
Total										19,712.7	45,186.6	59,125.6	25,908.0	7,717.8	1,57,650.8		

<sup>a</sup> Such as bar-code printer, computer set, scanner, data hardware, fast-testing tools, etc



Table-1.2: Zhengxiong-Stimulating entrepreneurs/ attracting investors

China																		Other
Y2RDP PDR																		
Table 1.2. Zhengxiong Stimulating entrepreneurship																		
Detailed Costs																		
	Unit	Quantities						Unit Cost (CNY)	Unit Cost (US\$)	Totals Including Contingencies (CNY '000)						Disb. Acct.	Fin. Rule	
		2020	2021	2022	2023	2024	Total			2020	2021	2022	2023	2024	Total			
I. Investment Costs																		
A. Business incubation / Service centres	centre	1	-	-	-	-	1	250,000	35,663	252.5	-	-	-	-	252.5	GSI_DA	IFAD ( 90% )	
B. Technical assistance to the service centre																		
TA support from the project	LS/year	1	1	1	1	1	5	660,000	94,151	666.6	679.9	693.5	707.4	721.5	3,469.0	TWC_DA	IFAD ( 100% )	
C. Startup investments																		
Project support	each	-	2	2	2	2	8	500,000	71,327	-	1,030.2	1,050.8	1,071.8	1,093.3	4,246.1	GAS_DA	IFAD ( 100% )	
Private sector support	each	-	2	2	2	2	8	500,000	71,327	-	1,030.2	1,050.8	1,071.8	1,093.3	4,246.1	GAS_DA	PRIVATE ( 100% )	
Subtotal Startup investments										-	2,060.4	2,101.6	2,143.6	2,186.5	8,492.2			
Total Investment Costs										919.1	2,740.3	2,795.1	2,851.0	2,908.1	12,213.7			
II. Recurrent Costs																		
A. Staff salary																		
Manager	pers/year	1	1	1	1	1	5	74,880	10,682	75.6	77.1	78.7	80.3	81.9	393.6	SAA_DA	IFAD ( 90% )	
Adminstrator	pers/year	1	1	1	1	1	5	48,000	6,847	48.5	49.4	50.4	51.4	52.5	252.3	SAA_DA	IFAD ( 90% )	
Subtotal Staff salary										124.1	126.6	129.1	131.7	134.3	645.9			
B. Other operating costs																		
Rental costs	per year	1	1	1	1	1	5	80,000	11,412	80.8	82.4	84.1	85.7	87.5	420.5	OPC_DA	GOVT	
Other operating costs	per year	1	1	1	1	1	5	80,000	11,412	80.8	82.4	84.1	85.7	87.5	420.5	OPC_DA	IFAD ( 90% )	
Subtotal Other operating costs										161.6	164.8	168.1	171.5	174.9	841.0			
Total Recurrent Costs										285.7	291.4	297.3	303.2	309.3	1,486.8			
Total										1,204.8	3,031.8	3,092.4	3,154.2	3,217.3	13,700.5			

Table-1.3: Zhengxiong-Improving access to finance

China Y2RDP PDR Table 1.3. Zhengxiong Improving access to finance																	Other
Detailed Costs		Quantities						Unit Cost	Unit Cost	Totals Including Contingencies (CNY '000)						Disb.	
	Unit	2020	2021	2022	2023	2024	Total	(CNY)	(US\$)	2020	2021	2022	2023	2024	Total	Acct.	Fin. Rule
I. Investment Costs																	
A. Improving access to finance																	
Strengthening financial capacity	LS	1	1	1	1	1	5	90,000	12,839	90.9	92.7	94.6	96.5	98.4	473.0	TWC_DA	IFAD ( 100% )
Improving financial advisory services	LS	1	1	1	1	1	5	80,000	11,412	80.8	82.4	84.1	85.7	87.5	420.5	TWC_DA	IFAD ( 100% )
Total										171.7	175.1	178.6	182.2	185.9	893.5		

Table-1.4: Zhengxiong-Improving infrastructure climate resilience

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Table-1.5: Zhengxiong-Improving rural infrastructure system

China Y2RRDP PDR Table 1.5. Zhengxiong Improving rural infrastructure																	
<b>Detailed Costs</b>																	Ot
	Unit	Quantities					Unit Cost (CNY)	Unit Cost (US\$)	Totals Including Contingencies (CNY '000)						Total	Disb. Acct.	Fin. Rule
		2020	2021	2022	2023	2024	Total		2020	2021	2022	2023	2024	Total			
<b>I. Investment Costs</b>																	
A. Road design and management	per year	1	1	1	1	1	5	1,200,000	171,184	1,212.0	1,236.2	1,261.0	1,286.2	1,311.9	6,307.3	CK_DA	GOVT
<b>B. Rural infrastructure</b>																	
Rural road, new construction	km	4.9	5.3	9.6	4.8	5.95	30.55	1,300,000	185,449	6,433.7	7,098.1	13,114.0	6,688.2	8,456.3	41,790.3	CK_DA	GOVT
New lateral road	km	3	4.12	2.12	2.16	1.6	13	900,000	128,388	2,727.0	3,820.0	2,004.9	2,083.6	1,574.3	12,209.8	CK_DA	GOVT
Rehabilitation of lateral road	km	5	7	7	4	-	23	600,000	85,592	3,030.0	4,326.8	4,413.4	2,572.4	-	14,342.6	CK_DA	GOVT
Miscellaneous structures	mu	-	300	300	400	-	1,000	3,000	428	-	927.2	945.7	1,286.2	-	3,159.1	CK_DA	GOVT
<b>Subtotal Rural infrastructure</b>										12,190.7	16,172.1	20,478.1	12,630.3	10,030.6	71,501.8		
<b>Total Investment Costs</b>										13,402.7	17,408.3	21,739.0	13,916.5	11,342.5	77,809.1		
<b>II. Recurrent Costs</b>																	
A. Operations and maintenance																	
Annual maintenance	lumpsum									-	136.7	331.1	573.8	741.9	1,783.5	OAM	BEN ( 100% )
<b>Total Recurrent Costs</b>										-	136.7	331.1	573.8	741.9	1,783.5		
<b>Total</b>										13,402.7	17,545.0	22,070.1	14,490.3	12,084.4	79,592.6		

Table-1.6: Zhengxiong-County Project management, M&amp;E, KM and Policy

China Y2RDP PDR Table 1.6. Zhenxiong County PMO																	On
Detailed Costs																	
	Unit	Quantities					Unit Cost (CNY)	Unit Cost (US\$)	Totals Including Contingencies (CNY '000)						Disb.		
		2020	2021	2022	2023	2024	Total			2020	2021	2022	2023	2024	Total	Acct.	Fin. Rule
I. Investment Costs																	
A. Office equipment /a	LS	1	-	-	-	-	1	155,000	22,111	156.6	-	-	-	-	156.6	EAM_DA	IFAD ( 90% )
B. Staff training																	
General management training	person	5	5	5	5	5	25	1,000	143	5.1	5.2	5.3	5.4	5.5	26.3	TWC_DA	IFAD ( 100% )
FM & procurement training	person	4	4	-	4	-	12	1,000	143	4.0	4.1	-	4.3	-	12.4	TWC_DA	IFAD ( 100% )
Social safe-guard training	person	1	1	-	1	-	3	1,000	143	1.0	1.0	-	1.1	-	3.1	TWC_DA	IFAD ( 100% )
Environmental safe-guard training	person	1	1	-	1	-	3	1,000	143	1.0	1.0	-	1.1	-	3.1	TWC_DA	IFAD ( 100% )
Other Technical training	person	10	10	10	10	10	50	500	71	5.1	5.2	5.3	5.4	5.5	26.3	TWC_DA	IFAD ( 100% )
Overseas training	team	-	1	1	-	-	2	50,000	7,133	-	51.5	52.5	-	-	104.1	TWC_DA	IFAD ( 100% )
Subtotal Staff training										16.2	68.0	63.0	17.1	10.9	175.3		
C. Study tours																	
Within the region	persons	13	13	13	13	13	65	2,500	357	32.8	33.5	34.2	34.8	35.5	170.8	TWC_DA	IFAD ( 100% )
Outside the region	LS/year	3	3	-	-	-	6	5,000	713	15.2	15.5	-	-	-	30.6	TWC_DA	IFAD ( 100% )
Overseas study tour	LS	-	-	2	-	-	2	50,000	7,133	-	-	105.1	-	-	105.1	TWC_DA	IFAD ( 100% )
Subtotal Study tours										48.0	48.9	139.2	34.8	35.5	306.5		
D. Consultants & short-term staff																	
Project planning and design	LS	1	1	1	1	-	4	200,000	28,531	202.0	206.0	210.2	214.4	-	832.6	TWC_DA	IFAD ( 100% )
Short-term staff	pers_month	2	2	2	2	2	10	36,000	5,136	72.7	74.2	75.7	77.2	78.7	378.4	TWC_DA	IFAD ( 100% )
Subtotal Consultants & short-term staff										274.7	280.2	285.8	291.5	78.7	1,211.0		
E. Workshops and meetings	Lumpsum	4	4	4	4	4	20	10,000	1,427	40.4	41.2	42.0	42.9	43.7	210.2	TWC_DA	IFAD ( 100% )
F. Monitoring and evaluation and KM	LS/year	1	1	1	1	1	5	250,000	35,663	252.5	257.6	262.7	268.0	273.3	1,314.0	GSI_DA	IFAD ( 90% )
Total Investment Costs										788.3	695.9	792.8	654.3	442.2	3,373.6		
II. Recurrent Costs																	
Staff salary (three staff)	per year	1	1	1	1	1	5	274,600	39,173	277.3	282.9	288.6	294.3	300.2	1,443.3	SAA_DA	GOVT
Vehicle hiring charges	per year	1	1	1	1	1	5	50,000	7,133	50.5	51.5	52.5	53.6	54.7	262.8	OPC_DA	GOVT
Office operating costs	per year	1	1	1	1	1	5	300,000	42,796	303.0	309.1	315.2	321.5	328.0	1,576.8	OPC_DA	GOVT
Total Recurrent Costs										630.8	643.5	656.3	669.5	682.8	3,282.9		
Total										1,419.2	1,339.4	1,449.2	1,323.8	1,125.1	6,656.6		

/a Such as computer, printers, photo copier, projector, laptops, digital and video cameras, etc

Table-1.7: Zhengxiong-Summary cost

China Y2RDP PDR Components by Financiers (US\$ '000)											
	Govt of China		IFAD		Private sector		Beneficiaries		Total		Duties & Taxes
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	
<b>A. Zhengxiong county</b>											
<b>1. Comp 1: Supporting inclusive rural development</b>											
Improving Chanye fupin models	6,086.0	27.1	8,828.4	39.3	7,575.0	33.7	-	-	22,489.4	9.6	71.3
Stimulating entrepreneurship	128.3	6.6	1,220.4	62.4	605.7	31.0	-	-	1,954.4	0.8	53.1
Improving access to finance	12.7	10.0	114.7	90.0	-	-	-	-	127.5	0.1	12.7
<b>Subtotal Comp 1: Supporting inclusive rural development</b>	<b>6,227.0</b>	<b>25.3</b>	<b>10,163.5</b>	<b>41.4</b>	<b>8,180.7</b>	<b>33.3</b>	<b>-</b>	<b>-</b>	<b>24,571.3</b>	<b>10.5</b>	<b>137.1</b>
<b>2. Comp 2: Climate-proofed public infrastructure</b>											
Improving infrastructure climate resilience	308.8	9.7	2,779.2	87.2	-	-	97.8	3.1	3,185.8	1.4	308.8
Improving rural infrastructure	11,099.7	97.8	-	-	-	-	254.4	2.2	11,354.1	4.8	1,110.0
<b>Subtotal Comp 2: Climate-proofed public infrastructure</b>	<b>11,408.5</b>	<b>78.5</b>	<b>2,779.2</b>	<b>19.1</b>	<b>-</b>	<b>-</b>	<b>352.2</b>	<b>2.4</b>	<b>14,540.0</b>	<b>6.2</b>	<b>1,418.8</b>
<b>3. Comp 3: Project management, KM, M&amp;E</b>											
County PMO	516.4	54.4	433.1	45.6	-	-	-	-	949.6	0.4	48.1
<b>Subtotal Zhengxiong county</b>	<b>18,152.0</b>	<b>45.3</b>	<b>13,375.9</b>	<b>33.4</b>	<b>8,180.7</b>	<b>20.4</b>	<b>352.2</b>	<b>0.9</b>	<b>40,060.8</b>	<b>17.1</b>	<b>1,604.0</b>

China Y2RDP PDR Project Components by Year -- Totals Including Contingencies (US\$ '000)						
	Totals Including Contingencies					
	2020	2021	2022	2023	2024	Total
<b>A. Zhengxiong county</b>						
<b>1. Comp 1: Supporting inclusive rural development</b>						
Improving Chanye fupin models	2,812.1	6,446.0	8,434.5	3,695.9	1,101.0	22,489.4
Stimulating entrepreneurship	171.9	432.5	441.1	450.0	459.0	1,954.4
Improving access to finance	24.5	25.0	25.5	26.0	26.5	127.5
<b>Subtotal Comp 1: Supporting inclusive rural development</b>	<b>3,008.4</b>	<b>6,903.5</b>	<b>8,901.1</b>	<b>4,171.8</b>	<b>1,586.5</b>	<b>24,571.3</b>
<b>2. Comp 2: Climate-proofed public infrastructure</b>						
Improving infrastructure climate resilience	1,202.3	809.5	1,103.6	35.8	34.7	3,185.8
Improving rural infrastructure	1,911.9	2,502.9	3,148.4	2,067.1	1,723.9	11,354.1
<b>Subtotal Comp 2: Climate-proofed public infrastructure</b>	<b>3,114.2</b>	<b>3,312.3</b>	<b>4,252.0</b>	<b>2,102.9</b>	<b>1,758.5</b>	<b>14,540.0</b>
<b>3. Comp 3: Project management, KM, M&amp;E</b>						
County PMO	202.4	191.1	206.7	188.8	160.5	949.6
<b>Subtotal Zhengxiong county</b>	<b>6,325.1</b>	<b>10,406.9</b>	<b>13,359.8</b>	<b>6,463.6</b>	<b>3,505.5</b>	<b>40,060.8</b>

Table 2.1: Suijiang-Improving *Chanye fupin* models

China Y2RDP PDR Table 2.1. Suijiang: Improving Chanye fupin model																	On	
Detailed Costs																		
	Unit	2020	2021	2022	2023	2024	Total	Unit Cost (CNY)	Unit Cost (US\$)	Totals Including Contingencies (CNY '000)						Disb. Acct.	Fin. Rule	
										2020	2021	2022	2023	2024	Total			
I. Investment Costs																		
A. Upgrading cooperative meeting operational standard																		
1. Payment to cooperative meeting operational standard	coop	-	2	3	-	-	5	200,000	28,531	-	412.1	630.5	-	-	1,042.6	TWC_DA	IFAD ( 100% )	
2. Verification expenses																		
Verification agency	LS	1	1	1	1	-	4	15,000	2,140	15.2	15.5	15.8	16.1	-	62.4	TWC_DA	IFAD ( 100% )	
MIS for RBL	LS	-	1	1	1	1	4	7,500	1,070	-	7.7	7.9	8.0	8.2	31.8	TWC_DA	IFAD ( 100% )	
Subtotal Verification expenses											15.2	23.2	23.6	24.1	8.2	94.3		
3. Investment on pro-poor cooperatives																		
Project grant support	coop	-	-	1	2	1	4	1,500,000	213,980	-	-	1,576.2	3,215.5	1,639.9	6,431.6	GAS_DA	IFAD ( 100% )	
Private investments	coop	-	-	1	2	1	4	1,000,000	142,653	-	-	1,050.8	2,143.6	1,093.3	4,287.7	GAS_DA	PRIVATE ( 100% )	
Govt assistance	coop	-	-	1	2	1	4			-	-	-	-	-	-	GAS_DA	GOVT	
Subtotal Investment on pro-poor cooperatives											-	-	2,627.0	5,359.1	2,733.1	10,719.3		
Subtotal Upgrading cooperative meeting operational standard											15.2	435.3	3,281.1	5,383.2	2,741.3	11,856.1		
B. Matching grant for cooperative co-investors																		
Project grant support	coop	-	3	4	3	-	10	1,200,000	171,184	-	3,708.7	5,043.9	3,858.6	-	12,611.1	GAS_DA	IFAD (100% )	
Private investment	coop	-	3	4	3	-	10	1,200,000	171,184	-	3,708.7	5,043.9	3,858.6	-	12,611.1	GAS_DA	PRIVATE ( 100% )	
Govt assistance	coop	-	3	4	3	-	10			-	-	-	-	-	-	GAS_DA	IFAD ( 100% )	
Subtotal Matching grant for cooperative co-investors											-	7,417.4	10,087.7	7,717.1	-	25,222.3		
C. Company-cooperative-households models																		
1. Company-cooperative-household models																		
Project grant	model	2	3	3	2	-	10	1,500,000	213,980	3,030.0	4,635.9	4,728.6	3,215.5	-	15,610.0	GAS_DA	IFAD ( 100% )	
Private sector participation	model	2	3	3	2	-	10	1,500,000	213,980	3,030.0	4,635.9	4,728.6	3,215.5	-	15,610.0	GAS_DA	PRIVATE ( 100% )	
Support from Govt	model	2	3	3	2	-	10	1,000,000	142,653	2,020.0	3,090.6	3,152.4	2,143.6	-	10,406.7	GAS_DA	GOVT	
Subtotal Company-cooperative-household models											8,080.0	12,362.4	12,609.6	8,574.6	-	41,626.6		
2. Other innovative models																		
Project support	model	2	3	3	2	-	10	500,000	71,327	1,010.0	1,545.3	1,576.2	1,071.8	-	5,203.3	GAS_DA	IFAD ( 100% )	
Private sector	model	2	3	3	2	-	10	500,000	71,327	1,010.0	1,545.3	1,576.2	1,071.8	-	5,203.3	GAS_DA	PRIVATE ( 100% )	
Govt assistance	model	2	3	3	2	-	10	500,000	71,327	1,010.0	1,545.3	1,576.2	1,071.8	-	5,203.3	GAS_DA	GOVT	
Subtotal Other innovative models											3,030.0	4,635.9	4,728.6	3,215.5	-	15,610.0		
Subtotal Company-cooperative-households models											11,110.0	16,998.3	17,338.3	11,790.0	-	57,236.6		
D. Product traceability system																		
Promotion and user registration	LS	1	1	1	1	-	4	2,500	357	2.5	2.6	2.6	2.7	-	10.4	GSI_DA	IFAD ( 90% )	
Training of Govt staff and agro-entity	LS	-	1	1	1	1	4	7,000	999	-	7.2	7.4	7.5	7.7	29.7	GSI_DA	IFAD ( 90% )	
Equipment support /a	LS	-	1	1	1	1	4	25,000	3,566	-	25.8	26.3	26.8	27.3	106.2	GSI_DA	IFAD ( 90% )	
Operating costs, supervision	LS	-	1	2	3	4	10	5,000	713	-	5.2	10.5	16.1	21.9	53.6	GSI_DA	IFAD ( 90% )	
Subtotal Product traceability system											2.5	40.7	46.8	53.1	56.8	199.9		
E. Improving climate information[and adoption advice	LS	-	1	1	1	-	3	500,000	71,327	-	515.1	525.4	535.9	-	1,576.4	GSI_DA	IFAD ( 90% )	
Total											11,127.7	25,406.8	31,279.3	25,479.3	2,798.2	96,091.2		

1a Such as bar-code printer, computer set, scanner, data hardware, fast-testing tools, etc

China

Table 2.2. Suijiang: Stimulating entrepreneurship



Table-2.3: Suijiang-Improving access to finance

China																		Other
Y2RDP PDR																		
Table 2.3. Suijiang Improving access to finance																		
Detailed Costs																		
	Unit	Quantities					Unit Cost (CNY)	Unit Cost (US\$)	Totals Including Contingencies (CNY '000)						Disb.			
		2020	2021	2022	2023	2024	Total			2020	2021	2022	2023	2024	Total	Acct.	Fin. Rule	
I. Investment Costs																		
A. Improving access to finance																		
Strengthening financial capacity	LS	1	1	1	1	1	5	45,000	6,419	45.5	46.4	47.3	48.2	49.2	236.5	TWC_DA	IFAD ( 100% )	
Improving financial advisory services	LS	1	1	1	1	1	5	40,000	5,706	40.4	41.2	42.0	42.9	43.7	210.2	TWC_DA	IFAD ( 100% )	
Total										85.9	87.6	89.3	91.1	92.9	446.8			

Table-2.4: Suijiang-Improving infrastructure climate resilience

China Y2RDP PDR Table 2.4. Suijiang: Improving infrastructure																	Other
Detailed Costs																	
	Unit	Quantities						Unit Cost (CNY)	Unit Cost (US\$)	Totals Including Contingencies (CNY '000)						Disb.	
		2020	2021	2022	2023	2024	Total			2020	2021	2022	2023	2024	Total	Acct.	Fin. Rule
I. Investment Costs																	
A. Climate resilient infrastructure																	
Planning & design	LS	1	1	1	1	-	4	122,000	17,404	123.2	125.7	128.2	130.8	-	507.9	SCW_DA	IFAD ( 90% )
Pond	each	15	15	-	-	-	30	80,000	11,412	1,212.0	1,236.2	-	-	-	2,448.2	SCW_DA	IFAD ( 90% )
Pipeline	km	15	15	-	-	-	30	20,000	2,853	303.0	309.1	-	-	-	612.1	SCW_DA	IFAD ( 90% )
Irrigation system	mu	-	8,000	-	-	-	8,000	1,250	178	-	10,302.0	-	-	-	10,302.0	SCW_DA	IFAD ( 90% )
Drip irrigation system	mu	-	2,000	-	-	-	2,000	3,500	499	-	7,211.4	-	-	-	7,211.4	TWC_DA	IFAD ( 90% )
Total Investment Costs										1,638.2	19,184.4	128.2	130.8	-	21,081.6		
II. Recurrent Costs																	
A. Operations and maintenance	lumpsum									-	16.7	212.7	218.3	224.0	671.7	OAM	BEN ( 100% )
Total Recurrent Costs										-	16.7	212.7	218.3	224.0	671.7		
Total										1,638.2	19,201.1	340.9	349.0	224.0	21,753.3		

Table-2.5: Suijiang-Improving rural infrastructure system

China Y2RDP PDR Table 2.5. Suijiang: Improving rural infrastructure																	Other
Detailed Costs																	
	Unit	Quantities					Unit Cost (CNY)	Unit Cost (US\$)	Totals Including Contingencies (CNY '000)						Disb. Acct.	Fin. Rule	
		2020	2021	2022	2023	2024	Total			2020	2021	2022	2023	2024	Total		
I. Investment Costs																	
A. Road design and management	per year	1	1	1	1	1	5	1,000,000	142,653	1,010.0	1,030.2	1,050.8	1,071.8	1,093.3	5,256.1	CK_DA	GOVT
B. Rural infrastructure																	
Fire-control observation tower	each	6	-	-	-	-	6	200,000	28,531	1,212.0	-	-	-	-	1,212.0	CK_DA	GOVT
Farm road	km	10	25	25	-	-	60	558,400	79,658	5,639.8	14,381.6	14,669.2	-	-	34,690.7	CK_DA	GOVT
Tractor road	km	12.5	12.5	12.5	12.5	-	50	713,500	101,783	9,007.9	9,188.1	9,371.9	9,559.3	-	37,127.2	CK_DA	GOVT
Canal road	km	7.5	7.5	7.5	7.5	-	30	300,000	42,796	2,272.5	2,318.0	2,364.3	2,411.6	-	9,366.4	CK_DA	GOVT
Subtotal Rural infrastructure										18,132.3	25,887.6	26,405.4	11,970.9	-	82,396.2		
Total Investment Costs										19,142.3	26,917.8	27,456.2	13,042.7	1,093.3	87,652.3		
II. Recurrent Costs																	
A. Operations and maintenance	lumpsum									-	195.3	473.7	763.2	911.5	2,343.8	OAM	BEN ( 100% )
Total Recurrent Costs										-	195.3	473.7	763.2	911.5	2,343.8		
Total										19,142.3	27,113.1	27,929.9	13,806.0	2,004.8	89,996.0		

Table-2.6: Suijiang-County Project management, M&amp;E, KM and Policy

China Y2RDP PDR Table 2.6. Suijiang County PMO																	Other
Detailed Costs																	
	Unit	Quantities					Unit Cost (CNY)	Unit Cost (US\$)	Totals Including Contingencies (CNY '000)						Disb.		
		2020	2021	2022	2023	2024			Total	2020	2021	2022	2023	2024	Total	Acct.	Fin. Rule
I. Investment Costs																	
A. Office equipment /a	LS	1	-	-	-	-	1	155,000	22,111	156.6	-	-	-	-	156.6	EAM_DA	IFAD ( 90% )
B. Staff training																	
General management training	person	5	5	5	5	5	25	1,000	143	5.1	5.2	5.3	5.4	5.5	26.3	TWC_DA	IFAD ( 100% )
FM & procurement training	person	4	4	-	4	-	12	1,000	143	4.0	4.1	-	4.3	-	12.4	TWC_DA	IFAD ( 100% )
Social safe-guard training	person	1	1	-	1	-	3	1,000	143	1.0	1.0	-	1.1	-	3.1	TWC_DA	IFAD ( 100% )
Environmental safe-guard training	person	1	1	-	1	-	3	1,000	143	1.0	1.0	-	1.1	-	3.1	TWC_DA	IFAD ( 100% )
Other Technical training	person	10	10	10	10	10	50	500	71	5.1	5.2	5.3	5.4	5.5	26.3	TWC_DA	IFAD ( 100% )
Overseas training	team	-	1	1	-	-	2	50,000	7,133	-	51.5	52.5	-	-	104.1	TWC_DA	IFAD ( 100% )
Subtotal Staff training										16.2	68.0	63.0	17.1	10.9	175.3		
C. Study tours																	
Within the region	persons	13	13	13	13	13	65	2,500	357	32.8	33.5	34.2	34.8	35.5	170.8	TWC_DA	IFAD ( 100% )
Outside the region	LS/year	3	3	-	-	-	6	5,000	713	15.2	15.5	-	-	-	30.6	TWC_DA	IFAD ( 100% )
Overseas study tour	LS	-	-	2	-	-	2	50,000	7,133	-	-	105.1	-	-	105.1	TWC_DA	IFAD ( 100% )
Subtotal Study tours										48.0	48.9	139.2	34.8	35.5	306.5		
D. Consultants & short-term staff																	
Project planning and design	LS	1	1	1	1	-	4	200,000	28,531	202.0	206.0	210.2	214.4	-	832.6	TWC_DA	IFAD ( 100% )
Short-term staff	pers_month	2	2	2	2	2	10	36,000	5,136	72.7	74.2	75.7	77.2	78.7	378.4	TWC_DA	IFAD ( 100% )
Subtotal Consultants & short-term staff										274.7	280.2	285.8	291.5	78.7	1,211.0		
E. Workshops and meetings	Lumpsum	4	4	4	4	4	20	10,000	1,427	40.4	41.2	42.0	42.9	43.7	210.2	TWC_DA	IFAD ( 100% )
F. Monitoring and evaluation and KM	LS/year	1	1	1	1	1	5	250,000	35,663	252.5	257.6	262.7	268.0	273.3	1,314.0	GSI_DA	IFAD ( 90% )
Total Investment Costs										788.3	695.9	792.8	654.3	442.2	3,373.6		
II. Recurrent Costs																	
Staff salary (three staff)	per year	1	1	1	1	1	5	274,600	39,173	277.3	282.9	288.6	294.3	300.2	1,443.3	SAA_DA	GOVT
Vehicle hiring charges	per year	1	1	1	1	1	5	50,000	7,133	50.5	51.5	52.5	53.6	54.7	262.8	OPC_DA	GOVT
Office operating costs	per year	1	1	1	1	1	5	300,000	42,796	303.0	309.1	315.2	321.5	328.0	1,576.8	OPC_DA	GOVT
Total Recurrent Costs										630.8	643.5	656.3	669.5	682.8	3,282.9		
Total										1,419.2	1,339.4	1,449.2	1,323.8	1,125.1	6,656.6		

/a Such as computer, printers, photo copier, projector, laptops, digital and video cameras, etc

Table-2.7: Suijiang-Summary cost

China Y2RDP PDR Components by Financiers (US\$ '000)											
	Govt of China		IFAD		Private sector		Beneficiaries		Total		Duties & Taxes
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	
<b>B. Suijiang county</b>											
<b>1. Comp 1: Supporting inclusive rural development</b>											
Improving Chanye fupin models	2,268.4	16.5	6,059.6	44.2	5,379.8	39.2	-	-	13,707.7	5.8	41.6
Stimulating entrepreneurship	128.3	9.5	917.6	68.0	302.9	22.5	-	-	1,348.7	0.6	53.1
Improving access to finance	6.4	10.0	57.4	90.0	-	-	-	-	63.7	-	6.4
<b>Subtotal Comp 1: Supporting inclusive rural development</b>	<b>2,403.0</b>	<b>15.9</b>	<b>7,034.5</b>	<b>46.5</b>	<b>5,682.6</b>	<b>37.6</b>	<b>-</b>	<b>-</b>	<b>15,120.2</b>	<b>6.4</b>	<b>101.0</b>
<b>2. Comp 2: Climate-proofed public infrastructure</b>											
Improving infrastructure climate resilience	300.7	9.7	2,706.6	87.2	-	-	95.8	3.1	3,103.2	1.3	300.7
Improving rural infrastructure	12,503.9	97.4	-	-	-	-	334.3	2.6	12,838.2	5.5	1,250.4
<b>Subtotal Comp 2: Climate-proofed public infrastructure</b>	<b>12,804.6</b>	<b>80.3</b>	<b>2,706.6</b>	<b>17.0</b>	<b>-</b>	<b>-</b>	<b>430.2</b>	<b>2.7</b>	<b>15,941.4</b>	<b>6.8</b>	<b>1,551.1</b>
<b>3. Comp 3: Project management, KM, M&amp;E</b>											
County PMO	516.4	54.4	433.1	45.6	-	-	-	-	949.6	0.4	48.1
<b>Subtotal Suijiang county</b>	<b>15,724.1</b>	<b>49.1</b>	<b>10,174.3</b>	<b>31.8</b>	<b>5,682.6</b>	<b>17.8</b>	<b>430.2</b>	<b>1.3</b>	<b>32,011.2</b>	<b>13.6</b>	<b>1,700.3</b>

China Y2RDP PDR Project Components by Year -- Totals Including Contingencies (US\$ '000)						
	Totals Including Contingencies					
	2020	2021	2022	2023	2024	Total
<b>B. Suijiang county</b>						
<b>1. Comp 1: Supporting inclusive rural development</b>						
Improving Chanye fupin models	1,587.4	3,624.4	4,462.1	3,634.7	399.2	13,707.7
Stimulating entrepreneurship	171.9	285.5	291.2	297.1	303.0	1,348.7
Improving access to finance	12.2	12.5	12.7	13.0	13.3	63.7
<b>Subtotal Comp 1: Supporting inclusive rural development</b>	<b>1,771.5</b>	<b>3,922.4</b>	<b>4,766.1</b>	<b>3,944.8</b>	<b>715.4</b>	<b>15,120.2</b>
<b>2. Comp 2: Climate-proofed public infrastructure</b>						
Improving infrastructure climate resilience	233.7	2,739.1	48.6	49.8	32.0	3,103.2
Improving rural infrastructure	2,730.7	3,867.8	3,984.3	1,969.5	286.0	12,838.2
<b>Subtotal Comp 2: Climate-proofed public infrastructure</b>	<b>2,964.4</b>	<b>6,606.9</b>	<b>4,032.9</b>	<b>2,019.3</b>	<b>317.9</b>	<b>15,941.4</b>
<b>3. Comp 3: Project management, KM, M&amp;E</b>						
County PMO	202.4	191.1	206.7	188.8	160.5	949.6
<b>Subtotal Suijiang county</b>	<b>4,938.4</b>	<b>10,720.3</b>	<b>9,005.7</b>	<b>6,152.9</b>	<b>1,193.9</b>	<b>32,011.2</b>

Table 3.1: Yonping-Improving *Chanye fupin* models

China Y2RDP PDR Table 3.1. Yongping: Improving Chanye fupin model																	On	
Detailed Costs																		
	Unit	Quantities					Unit Cost (CNY)	Unit Cost (US\$)	Totals Including Contingencies (CNY '000)						Disb. Acct.	Fin. Rule		
		2020	2021	2022	2023	2024	Total			2020	2021	2022	2023	2024	Total			
I. Investment Costs																		
A. Upgrading cooperative meeting operational standard																		
1. Payment to cooperative meeting operational standard	coop	-	2	3	-	-	5	200,000	28,531	-	412.1	630.5	-	-	1,042.6	TWC_DA	IFAD ( 100% )	
2. Verification expenses																		
Verification agency	LS	1	1	1	1	-	4	15,000	2,140	15.2	15.5	15.8	16.1	-	62.4	TWC_DA	IFAD ( 100% )	
MIS for RBL	LS	-	1	1	1	1	4	7,500	1,070	-	7.7	7.9	8.0	8.2	31.8	TWC_DA	IFAD ( 100% )	
Subtotal Verification expenses										15.2	23.2	23.6	24.1	8.2	94.3			
3. Investment on pro-poor cooperatives																		
Project grant support	coop	-	-	1	2	1	4	1,500,000	213,980	-	-	1,576.2	3,215.5	1,639.9	6,431.6	GAS_DA	IFAD ( 100% )	
Private investments	coop	-	-	1	2	1	4	1,000,000	142,653	-	-	1,050.8	2,143.6	1,093.3	4,287.7	GAS_DA	PRIVATE ( 100% )	
Govt assistance	coop	-	-	1	2	1	4			-	-	-	-	-	-	GAS_DA	GOVT	
Subtotal Investment on pro-poor cooperatives										-	-	2,627.0	5,359.1	2,733.1	10,719.3			
Subtotal Upgrading cooperative meeting operational standard										15.2	435.3	3,281.1	5,383.2	2,741.3	11,856.1			
B. Matching grant for cooperative co-investors																		
Project grant support	coop	-	3	4	3	-	10	1,200,000	171,184	-	3,708.7	5,043.9	3,858.6	-	12,611.1	GAS_DA	IFAD (100%)	
Private investment	coop	-	3	4	3	-	10	1,200,000	171,184	-	3,708.7	5,043.9	3,858.6	-	12,611.1	GAS_DA	PRIVATE ( 100% )	
Govt assistance	coop	-	3	4	3	-	10			-	-	-	-	-	-	GAS_DA	IFAD ( 100% )	
Subtotal Matching grant for cooperative co-investors										-	7,417.4	10,087.7	7,717.1	-	25,222.3			
C. Company-cooperative-households models																		
1. Company-cooperative-household models																		
Project grant	model	2	3	3	2	-	10	1,500,000	213,980	3,030.0	4,635.9	4,728.6	3,215.5	-	15,610.0	GAS_DA	IFAD ( 100% )	
Private sector participation	model	2	3	3	2	-	10	1,500,000	213,980	3,030.0	4,635.9	4,728.6	3,215.5	-	15,610.0	GAS_DA	PRIVATE ( 100% )	
Support from Govt	model	2	3	3	2	-	10	1,000,000	142,653	2,020.0	3,090.6	3,152.4	2,143.6	-	10,406.7	GAS_DA	GOVT	
Subtotal Company-cooperative-household models										8,080.0	12,362.4	12,609.6	8,574.6	-	41,626.6			
2. Other innovative models																		
Project support	model	2	3	3	2	-	10	500,000	71,327	1,010.0	1,545.3	1,576.2	1,071.8	-	5,203.3	GAS_DA	IFAD ( 100% )	
Private sector	model	2	3	3	2	-	10	500,000	71,327	1,010.0	1,545.3	1,576.2	1,071.8	-	5,203.3	GAS_DA	PRIVATE ( 100% )	
Govt assistance	model	2	3	3	2	-	10	500,000	71,327	1,010.0	1,545.3	1,576.2	1,071.8	-	5,203.3	GAS_DA	GOVT	
Subtotal Other innovative models										3,030.0	4,635.9	4,728.6	3,215.5	-	15,610.0			
Subtotal Company-cooperative-households models										11,110.0	16,998.3	17,338.3	11,790.0	-	57,236.6			
D. Product traceability system																		
Promotion and user registration	LS	1	1	1	1	-	4	2,500	357	2.5	2.6	2.6	2.7	-	10.4	GSI_DA	IFAD ( 90% )	
Training of Govt staff and agro-entity	LS	-	1	1	1	1	4	7,000	999	-	7.2	7.4	7.5	7.7	29.7	GSI_DA	IFAD ( 90% )	
Equipment support /a	LS	-	1	1	1	1	4	25,000	3,566	-	25.8	26.3	26.8	27.3	106.2	GSI_DA	IFAD ( 90% )	
Operating costs, supervision	LS	-	1	2	3	4	10	5,000	713	-	5.2	10.5	16.1	21.9	53.6	GSI_DA	IFAD ( 90% )	
Subtotal Product traceability system										2.5	40.7	46.8	53.1	56.8	199.9			
E. Improving climate information[and adoption advice	LS	-	1	1	1	-	3	500,000	71,327	-	515.1	525.4	535.9	-	1,576.4	GSI_DA	IFAD ( 90% )	
Total										11,127.7	25,406.8	31,279.3	25,479.3	2,798.2	96,091.2			
\a Such as bar-code printer, computer set, scanner, data hardware, fast-testing tools, etc																		

<sup>a</sup> Such as bar-code printer, computer set, scanner, data hardware, fast-testing tools, etc

Table-3.2: Yonping-Stimulating entrepreneurs/ attracting investors

China Y2RDP PDR Table 3.2. Yonping: Stimulating entrepreneurship																	Other	
Detailed Costs		Quantities						Unit Cost	Unit Cost	Totals Including Contingencies (CNY '000)						Disb.		
	Unit	2020	2021	2022	2023	2024	Total	(CNY)	(US\$)	2020	2021	2022	2023	2024	Total	Acct.	Fin. Rule	
I. Investment Costs																		
A. Business incubation / Service centres	centre	1	-	-	-	-	1	250,000	35,663	252.5	-	-	-	-	252.5	GSI_DA	IFAD ( 90% )	
B. Technical assistance to the service centre																		
TA support from the project	LS/year	1	1	1	1	1	5	660,000	94,151	666.6	679.9	693.5	707.4	721.5	3,469.0	TWC_DA	IFAD ( 100% )	
C. Startup investments																		
Project support	each	-	1	1	1	1	4	500,000	71,327	-	515.1	525.4	535.9	546.6	2,123.0	GAS_DA	IFAD ( 100% )	
Private sector support	each	-	1	1	1	1	4	500,000	71,327	-	515.1	525.4	535.9	546.6	2,123.0	GAS_DA	PRIVATE ( 100% )	
Subtotal Startup investments																		
Total Investment Costs											919.1	1,710.1	1,744.3	1,779.2	1,814.8	7,967.6		
II. Recurrent Costs																		
A. Staff salary																		
Manager	pers/year	1	1	1	1	1	5	74,880	10,682	75.6	77.1	78.7	80.3	81.9	393.6	SAA_DA	IFAD ( 90% )	
Administrator	pers/year	1	1	1	1	1	5	48,000	6,847	48.5	49.4	50.4	51.4	52.5	252.3	SAA_DA	IFAD ( 90% )	
Subtotal Staff salary											124.1	126.6	129.1	131.7	134.3	645.9		
B. Other operating costs																		
Rental costs	per year	1	1	1	1	1	5	80,000	11,412	80.8	82.4	84.1	85.7	87.5	420.5	OPC_DA	GOVT	
Other operating costs	per year	1	1	1	1	1	5	80,000	11,412	80.8	82.4	84.1	85.7	87.5	420.5	OPC_DA	IFAD ( 90% )	
Subtotal Other operating costs											161.6	164.8	168.1	171.5	174.9	841.0		
Total Recurrent Costs											285.7	291.4	297.3	303.2	309.3	1,486.8		
Total											1,204.8	2,001.6	2,041.6	2,082.4	2,124.1	9,454.4		

Table-3.3: **Yonping**—Improving access to finance

China Y2RDP PDR Table 3.3. Yongping: Improving access to finance																	Other
Detailed Costs																	
	Unit	Quantities						Unit Cost (CNY)	Unit Cost (US\$)	Totals Including Contingencies (CNY '000)						Disb.	
		2020	2021	2022	2023	2024	Total			2020	2021	2022	2023	2024	Total	Acct.	Fin. Rule
I. Investment Costs																	
A. Improving access to finance																	
Strengthening financial capacity	LS	1	1	1	1	1	5	45,000	6,419	45.5	46.4	47.3	48.2	49.2	236.5	TWC_DA	IFAD ( 100% )
Improving financial advisory services	LS	1	1	1	1	1	5	40,000	5,706	40.4	41.2	42.0	42.9	43.7	210.2	TWC_DA	IFAD ( 100% )
Total										85.9	87.6	89.3	91.1	92.9	446.8		



Table-3.4: Yonping-Improving infrastructure climate resilience

China Y2RDP PDR Table 3.4. Yongping: Improving infrastructure climate resilience																		Other
Detailed Costs	Unit	Quantities					Unit Cost (CNY)	Unit Cost (US\$)	Totals Including Contingencies (CNY '000)						Disb.			
		2020	2021	2022	2023	2024			Total	2020	2021	2022	2023	2024	Total	Acct.	Fin. Rule	
I. Investment Costs																		
A. Climate resilient infrastructure																		
Design and planning	lumpsum	1	1	1	1	-	4	125,000	17,832	126.3	128.8	131.4	134.0	-	520.4	SCW_DA	IFAD ( 90% )	
Pond	each	36	36	36	-	-	108	38,900	5,549	1,414.4	1,442.7	1,471.5	-	-	4,328.6	SCW_DA	IFAD ( 90% )	
Pipeline	km	61	61	61	61	-	244	54,500	7,775	3,357.7	3,424.9	3,493.4	3,563.3	-	13,839.3	SCW_DA	IFAD ( 90% )	
Irrigation canal	km	1	-	-	-	-	1	50,000	7,133	50.5	-	-	-	-	50.5	SCW_DA	IFAD ( 90% )	
Pumping stations	each	2	2	-	-	-	4	750,000	106,990	1,515.0	1,545.3	-	-	-	3,060.3	TWC_DA	IFAD ( 90% )	
Total Investment Costs										6,463.9	6,541.7	5,096.3	3,697.2	-	21,799.1			
II. Recurrent Costs																		
A. Operations and maintenance	lumpsum								-	65.9	134.0	188.6	230.1	618.7	OAM	BEN ( 100% )		
Total Recurrent Costs										-	65.9	134.0	188.6	230.1	618.7			
Total										6,463.9	6,607.6	5,230.3	3,885.9	230.1	22,417.8			

Table-3.5: Yonping-Improving rural infrastructure system

China Y2RDP PDR Table 3.5. Yongping: Improving rural infrastructure																	Other
Detailed Costs	Unit	Quantities						Unit Cost (CNY)	Unit Cost (US\$)	Totals Including Contingencies (CNY '000)						Disb.	
		2020	2021	2022	2023	2024	Total			2020	2021	2022	2023	2024	Total	Acct.	Fin. Rule
I. Investment Costs																	
A. Road design and management	per year	1	1	1	1	1	5	5,127,000	731,384	5,178.3	5,281.8	5,387.5	5,495.2	5,605.1	26,947.9	CK_DA	GOVT
B. Rural infrastructure																	
Pumping stations	each	7	-	-	-	-	7	842,900	120,243	5,959.3	-	-	-	-	5,959.3	CK_DA	GOVT
Pipeline	km	5	5	-	-	-	10	280,000	39,943	1,414.0	1,442.3	-	-	-	2,856.3	CK_DA	GOVT
Electricity transmission line	km	5	5	-	-	-	10	600,000	85,592	3,030.0	3,090.6	-	-	-	6,120.6	CK_DA	GOVT
Farm road, transportable	km	13	9	9	-	-	31	1,580,600	225,478	20,753.3	14,655.0	14,948.1	-	-	50,356.4	CK_DA	GOVT
Tractor road	km	15	10	10	10	-	45	100,000	14,265	1,515.0	1,030.2	1,050.8	1,071.8	-	4,667.8	CK_DA	GOVT
Cross-drainage structures	each	1	1	-	-	-	2	1,000,000	142,653	1,010.0	1,030.2	-	-	-	2,040.2	CK_DA	GOVT
Subtotal Rural infrastructure										33,681.6	21,248.3	15,998.9	1,071.8	-	72,000.6		
Total Investment Costs										38,859.9	26,530.1	21,386.4	6,567.0	5,605.1	98,948.5		
II. Recurrent Costs																	
A. Operations and maintenance	lumpsum									-	396.4	674.9	906.1	991.7	2,969.1	OAM	BEN ( 100% )
Total Recurrent Costs										-	396.4	674.9	906.1	991.7	2,969.1		
Total										38,859.9	26,926.5	22,061.3	7,473.2	6,596.8	1,01,917.6		

Table-3.6: Yonping-County Project management, M&amp;E, KM and Policy

China Y2RDP PDR Table 3.6. Yongping County PMO																	On
Detailed Costs																	
	Unit	Quantities					Unit Cost (CNY)	Unit Cost (US\$)	Totals Including Contingencies (CNY '000)					Total	Disb.		
		2020	2021	2022	2023	2024			Total	2020	2021	2022	2023		2024	Acct.	Fin. Rule
I. Investment Costs																	
A. Office equipment /a	LS	1	-	-	-	-	1	155,000	22,111	156.6	-	-	-	-	156.6	EAM_DA	IFAD ( 90% )
B. Staff training																	
General management training	person	5	5	5	5	5	25	1,000	143	5.1	5.2	5.3	5.4	5.5	26.3	TWC_DA	IFAD ( 100% )
FM & procurement training	person	4	4	-	4	-	12	1,000	143	4.0	4.1	-	4.3	-	12.4	TWC_DA	IFAD ( 100% )
Social safe-guard training	person	1	1	-	1	-	3	1,000	143	1.0	1.0	-	1.1	-	3.1	TWC_DA	IFAD ( 100% )
Environmental safe-guard training	person	1	1	-	1	-	3	1,000	143	1.0	1.0	-	1.1	-	3.1	TWC_DA	IFAD ( 100% )
Other Technical training	person	10	10	10	10	10	50	500	71	5.1	5.2	5.3	5.4	5.5	26.3	TWC_DA	IFAD ( 100% )
Overseas training	team	-	1	1	-	-	2	50,000	7,133	-	51.5	52.5	-	-	104.1	TWC_DA	IFAD ( 100% )
Subtotal Staff training										16.2	68.0	63.0	17.1	10.9	175.3		
C. Study tours																	
Within the region	persons	13	13	13	13	13	65	2,500	357	32.8	33.5	34.2	34.8	35.5	170.8	TWC_DA	IFAD ( 100% )
Outside the region	LS/year	3	3	-	-	-	6	5,000	713	15.2	15.5	-	-	-	30.6	TWC_DA	IFAD ( 100% )
Overseas study tour	LS	-	-	2	-	-	2	50,000	7,133	-	-	105.1	-	-	105.1	TWC_DA	IFAD ( 100% )
Subtotal Study tours										48.0	48.9	139.2	34.8	35.5	306.5		
D. Consultants & short-term staff																	
Project planning and design	LS	1	1	1	1	-	4	200,000	28,531	202.0	206.0	210.2	214.4	-	832.6	TWC_DA	IFAD ( 100% )
Short-term staff	pers_month	2	2	2	2	2	10	36,000	5,136	72.7	74.2	75.7	77.2	78.7	378.4	TWC_DA	IFAD ( 100% )
Subtotal Consultants & short-term staff										274.7	280.2	285.8	291.5	78.7	1,211.0		
E. Workshops and meetings	Lumpsum	4	4	4	4	4	20	10,000	1,427	40.4	41.2	42.0	42.9	43.7	210.2	TWC_DA	IFAD ( 100% )
F. Monitoring and evaluation and KM	LS/year	1	1	1	1	1	5	250,000	35,663	252.5	257.6	262.7	268.0	273.3	1,314.0	GSI_DA	IFAD ( 90% )
Total Investment Costs										788.3	695.9	792.8	654.3	442.2	3,373.6		
II. Recurrent Costs																	
Staff salary (three staff)	per year	1	1	1	1	1	5	274,600	39,173	277.3	282.9	288.6	294.3	300.2	1,443.3	SAA_DA	GOVT
Vehicle hiring charges	per year	1	1	1	1	1	5	50,000	7,133	50.5	51.5	52.5	53.6	54.7	262.8	OPC_DA	GOVT
Office operating costs	per year	1	1	1	1	1	5	300,000	42,796	303.0	309.1	315.2	321.5	328.0	1,576.8	OPC_DA	GOVT
Total Recurrent Costs										630.8	643.5	656.3	669.5	682.8	3,282.9		
Total										1,419.2	1,339.4	1,449.2	1,323.8	1,125.1	6,656.6		

la Such as computer, printers, photo copier, projector, laptops, digital and video cameras, etc

/a Such as computer, printers, photo copier, projector, laptops, digital and video cameras, etc

Table-3.7: Yonping-Summary cost

China Y2RDP PDR Components by Financiers (US\$ '000)											
	Govt of China		IFAD		Private sector		Beneficiaries		Total		Duties & Taxes
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	
<b>C. Yongping county</b>											
<b>1. Comp 1: Supporting inclusive rural development</b>											
Improving Chanye fupin models	2,268.4	16.5	6,059.6	44.2	5,379.8	39.2	-	-	13,707.7	5.8	41.6
Stimulating entrepreneurship	128.3	9.5	917.6	68.0	302.9	22.5	-	-	1,348.7	0.6	53.1
Improving access to finance	6.4	10.0	57.4	90.0	-	-	-	-	63.7	-	6.4
<b>Subtotal Comp 1: Supporting inclusive rural development</b>	<b>2,403.0</b>	<b>15.9</b>	<b>7,034.5</b>	<b>46.5</b>	<b>5,682.6</b>	<b>37.6</b>	<b>-</b>	<b>-</b>	<b>15,120.2</b>	<b>6.4</b>	<b>101.0</b>
<b>2. Comp 2: Climate-proofed public infrastructure</b>											
Improving infrastructure climate resilience	311.0	9.7	2,798.7	87.5	-	-	88.3	2.8	3,198.0	1.4	311.0
Improving rural infrastructure	14,115.3	97.1	-	-	-	-	423.5	2.9	14,538.9	6.2	1,411.5
<b>Subtotal Comp 2: Climate-proofed public infrastructure</b>	<b>14,426.3</b>	<b>81.3</b>	<b>2,798.7</b>	<b>15.8</b>	<b>-</b>	<b>-</b>	<b>511.8</b>	<b>2.9</b>	<b>17,736.9</b>	<b>7.6</b>	<b>1,722.5</b>
<b>3. Comp 3: Project management, KM, M&amp;E</b>											
County PMO	516.4	54.4	433.1	45.6	-	-	-	-	949.6	0.4	48.1
<b>Subtotal Yongping county</b>	<b>17,345.8</b>	<b>51.3</b>	<b>10,266.4</b>	<b>30.4</b>	<b>5,682.6</b>	<b>16.8</b>	<b>511.8</b>	<b>1.5</b>	<b>33,806.6</b>	<b>14.4</b>	<b>1,871.6</b>

China Y2RDP PDR Project Components by Year -- Totals Including Contingencies (US\$ '000)						
	Totals Including Contingencies					
	2020	2021	2022	2023	2024	Total
<b>C. Yongping county</b>						
<b>1. Comp 1: Supporting inclusive rural development</b>						
Improving Chanye fupin models		1,587.4	3,624.4	4,462.1	3,634.7	13,707.7
Stimulating entrepreneurship		171.9	285.5	291.2	303.0	1,348.7
Improving access to finance		12.2	12.5	12.7	13.0	63.7
<b>Subtotal Comp 1: Supporting inclusive rural development</b>		<b>1,771.5</b>	<b>3,922.4</b>	<b>4,766.1</b>	<b>715.4</b>	<b>15,120.2</b>
<b>2. Comp 2: Climate-proofed public infrastructure</b>						
Improving infrastructure climate resilience		922.1	942.6	746.1	554.3	3,198.0
Improving rural infrastructure		5,543.5	3,841.2	3,147.1	1,066.1	14,538.9
<b>Subtotal Comp 2: Climate-proofed public infrastructure</b>		<b>6,465.6</b>	<b>4,783.8</b>	<b>3,893.2</b>	<b>973.9</b>	<b>17,736.9</b>
<b>3. Comp 3: Project management, KM, M&amp;E</b>						
County PMO		202.4	191.1	206.7	188.8	949.6
<b>Subtotal Yongping county</b>		<b>8,439.5</b>	<b>8,897.2</b>	<b>8,866.0</b>	<b>1,849.8</b>	<b>33,806.6</b>

Table 4.1: Yunlong-Improving *Chanye fupin* models

China																		On
Y2RDP PDR																		
Table 4.1. Yunlong: Improving Chanye fupin model																		
Detailed Costs																		
	Unit	Quantities					Unit Cost (CNY)	Unit Cost (US\$)	Totals Including Contingencies (CNY '000)						Disb. Acct.	Fin. Rule		
		2020	2021	2022	2023	2024	Total			2020	2021	2022	2023	2024	Total			
I. Investment Costs																		
A. Upgrading cooperative meeting operational standard																		
1. Payment to cooperative meeting operational standard	coop	-	2	3	-	-	5	200,000	28,531	-	412.1	630.5	-	-	1,042.6	TWC_DA	IFAD ( 100% )	
2. Verification expenses																		
Verification agency	LS	1	1	1	1	-	4	15,000	2,140	15.2	15.5	15.8	16.1	-	62.4	TWC_DA	IFAD ( 100% )	
MIS for RBL	LS	-	1	1	1	1	4	7,500	1,070	-	7.7	7.9	8.0	8.2	31.8	TWC_DA	IFAD ( 100% )	
Subtotal Verification expenses										15.2	23.2	23.6	24.1	8.2	94.3			
3. Investment on pro-poor cooperatives																		
Project grant support	coop	-	-	1	2	1	4	1,500,000	213,980	-	-	1,576.2	3,215.5	1,639.9	6,431.6	GAS_DA	IFAD ( 100% )	
Private investments	coop	-	-	1	2	1	4	1,000,000	142,653	-	-	1,050.8	2,143.6	1,093.3	4,287.7	GAS_DA	PRIVATE ( 100% )	
Govt assistance	coop	-	-	1	2	1	4			-	-	-	-	-	-	GAS_DA	GOVT	
Subtotal Investment on pro-poor cooperatives										-	-	2,627.0	5,359.1	2,733.1	10,719.3			
Subtotal Upgrading cooperative meeting operational standard										15.2	435.3	3,281.1	5,383.2	2,741.3	11,856.1			
B. Matching grant for cooperative co-investors																		
Project grant support	coop	-	3	4	3	-	10	1,200,000	171,184	-	3,708.7	5,043.9	3,858.6	-	12,611.1	GAS_DA	IFAD ( 100% )	
Private investment	coop	-	3	4	3	-	10	1,200,000	171,184	-	3,708.7	5,043.9	3,858.6	-	12,611.1	GAS_DA	PRIVATE ( 100% )	
Govt assistance	coop	-	3	4	3	-	10			-	-	-	-	-	-	GAS_DA	IFAD ( 100% )	
Subtotal Matching grant for cooperative co-investors										-	7,417.4	10,087.7	7,717.1	-	25,222.3			
C. Company-cooperative-households models																		
1. Company-cooperative-household models																		
Project grant	model	2	3	3	2	-	10	1,500,000	213,980	3,030.0	4,635.9	4,728.6	3,215.5	-	15,610.0	GAS_DA	IFAD ( 100% )	
Private sector participation	model	2	3	3	2	-	10	1,500,000	213,980	3,030.0	4,635.9	4,728.6	3,215.5	-	15,610.0	GAS_DA	PRIVATE ( 100% )	
Support from Govt	model	2	3	3	2	-	10	1,000,000	142,653	2,020.0	3,090.6	3,152.4	2,143.6	-	10,406.7	GAS_DA	GOVT	
Subtotal Company-cooperative-household models										8,080.0	12,362.4	12,609.6	8,574.6	-	41,626.6			
2. Other innovative models																		
Project support	model	2	3	3	2	-	10	500,000	71,327	1,010.0	1,545.3	1,576.2	1,071.8	-	5,203.3	GAS_DA	IFAD ( 100% )	
Private sector	model	2	3	3	2	-	10	500,000	71,327	1,010.0	1,545.3	1,576.2	1,071.8	-	5,203.3	GAS_DA	PRIVATE ( 100% )	
Govt assistance	model	2	3	3	2	-	10	500,000	71,327	1,010.0	1,545.3	1,576.2	1,071.8	-	5,203.3	GAS_DA	GOVT	
Subtotal Other innovative models										3,030.0	4,635.9	4,728.6	3,215.5	-	15,610.0			
Subtotal Company-cooperative-households models										11,110.0	16,998.3	17,338.3	11,790.0	-	57,236.6			
D. Product traceability system																		
Promotion and user registration	LS	1	1	1	1	-	4	2,500	357	2.5	2.6	2.6	2.7	-	10.4	GSI_DA	IFAD ( 90% )	
Training of Govt staff and agro-entity	LS	-	1	1	1	1	4	7,000	999	-	7.2	7.4	7.5	7.7	29.7	GSI_DA	IFAD ( 90% )	
Equipment support /a	LS	-	1	1	1	1	4	25,000	3,566	-	25.8	26.3	26.8	27.3	106.2	GSI_DA	IFAD ( 90% )	
Operating costs, supervision	LS	-	1	2	3	4	10	5,000	713	-	5.2	10.5	16.1	21.9	53.6	GSI_DA	IFAD ( 90% )	
Subtotal Product traceability system										2.5	40.7	46.8	53.1	56.8	199.9			
E. Improving climate information[and adoption advice]	LS	-	1	1	1	-	3	500,000	71,327	-	515.1	525.4	535.9	-	1,576.4	GSI_DA	IFAD ( 90% )	
Total										11,127.7	25,406.8	31,279.3	25,479.3	2,798.2	96,091.2			

<sup>a</sup> Such as bar-code printer, computer set, scanner, data hardware, fast-testing tools, etc

Table-4.2: Yunlong-Stimulating entrepreneurs/ attracting investors

China Y2RDP PDR Table 4.2. Yunlong: Stimulating entrepreneurship																	Other
Detailed Costs	Unit	Quantities					Unit Cost (CNY)	Unit Cost (US\$)	Totals Including Contingencies (CNY '000)						Disb.		
		2020	2021	2022	2023	2024			Total	2020	2021	2022	2023	2024	Total	Acct.	Fin. Rule
I. Investment Costs																	
A. Business incubation / Service centres	centre	1	-	-	-	-	1	250,000	35,663	252.5	-	-	-	-	252.5	GSI_DA	IFAD ( 90% )
B. Technical assistance to the service centre																	
TA support from the project	LS/year	1	1	1	1	1	5	660,000	94,151	666.6	679.9	693.5	707.4	721.5	3,469.0	TWC_DA	IFAD ( 100% )
C. Startup investments																	
Project support	each	-	1	1	1	1	4	500,000	71,327	-	515.1	525.4	535.9	546.6	2,123.0	GAS_DA	IFAD ( 100% )
Private sector support	each	-	1	1	1	1	4	500,000	71,327	-	515.1	525.4	535.9	546.6	2,123.0	GAS_DA	PRIVATE ( 100% )
Subtotal Startup investments																	
Total Investment Costs										919.1 1,710.1 1,744.3 1,779.2 1,814.8 7,967.6							
II. Recurrent Costs																	
A. Staff salary																	
Manager	pers/year	1	1	1	1	1	5	74,880	10,682	75.6	77.1	78.7	80.3	81.9	393.6	SAA_DA	IFAD ( 90% )
Administrator	pers/year	1	1	1	1	1	5	48,000	6,847	48.5	49.4	50.4	51.4	52.5	252.3	SAA_DA	IFAD ( 90% )
Subtotal Staff salary										124.1 126.6 129.1 131.7 134.3 645.9							
B. Other operating costs																	
Rental costs	per year	1	1	1	1	1	5	80,000	11,412	80.8	82.4	84.1	85.7	87.5	420.5	OPC_DA	GOVT
Other operating costs	per year	1	1	1	1	1	5	80,000	11,412	80.8	82.4	84.1	85.7	87.5	420.5	OPC_DA	IFAD ( 90% )
Subtotal Other operating costs										161.6 164.8 168.1 171.5 174.9 841.0							
Total Recurrent Costs										285.7 291.4 297.3 303.2 309.3 1,486.8							
Total										1,204.8 2,001.6 2,041.6 2,082.4 2,124.1 9,454.4							

Table-4.3: Yunlong-Improving access to finance

China Y2RDP PDR Table 4.3. Yunlong: Improving access to finance																		Other
Detailed Costs	Unit	Quantities						Unit Cost (CNY)	Unit Cost (US\$)	Totals Including Contingencies (CNY '000)						Disb.		
		2020	2021	2022	2023	2024	Total			2020	2021	2022	2023	2024	Total	Acct.	Fin. Rule	
I. Investment Costs																		
A. Improving access to finance																		
Strengthening financial capacity	LS	1	1	1	1	1	5	45,000	6,419	45.5	46.4	47.3	48.2	49.2	236.5	TWC_DA	IFAD ( 100% )	
Improving financial advisory services	LS	1	1	1	1	1	5	40,000	5,706	40.4	41.2	42.0	42.9	43.7	210.2	TWC_DA	IFAD ( 100% )	
Total										85.9	87.6	89.3	91.1	92.9	446.8			

Table-4.4: Yunlong-Improving infrastructure climate resilience

China Y2RDP PDR Table 4.4. Yunlong: Improving infrastructure climate resilience																	Other					
Detailed Costs	Unit	Quantities					Unit Cost (CNY)	Unit Cost (US\$)	Totals Including Contingencies (CNY '000)						Disb.							
		2020	2021	2022	2023	2024			Total	2020	2021	2022	2023	2024	Total	Acct.	Fin. Rule					
I. Investment Costs																						
A. Climate resilient infrastructure																						
Design and planning	lumpsum	1	1	1	1	-	4	125,000	17,832	126.3	128.8	131.4	134.0	-	520.4	SCW_DA	IFAD ( 90% )					
Pipeline	km	113	130	-	-	-	243	49,500	7,061	5,649.4	6,629.3	-	-	-	12,278.8	SCW_DA	IFAD ( 90% )					
Irrigation canal	km	14	20	23	-	-	57	167,400	23,880	2,367.0	3,449.1	4,045.8	-	-	9,862.0	SCW_DA	IFAD ( 90% )					
Domestic water supply unit	each	1	1	-	-	-	2	2,500,000	356,633	2,525.0	2,575.5	-	-	-	5,100.5	SCW_DA	IFAD ( 90% )					
Total Investment Costs										10,667.7	12,782.7	4,177.2	134.0	-	27,761.6							
II. Recurrent Costs																						
A. Operations and maintenance	lumpsum								-						108.8	241.4	288.8	295.9	934.9	OAM	BEN ( 100% )	
Total Recurrent Costs										-						108.8	241.4	288.8	295.9	934.9		
Total										10,667.7	12,891.5	4,418.5	422.8	295.9	28,696.5							



Table-4.5: Yunlong-Improving rural infrastructure system

China Y2RDP PDR Table 4.5. Yunlong: Improving rural infrastru																	Other
Detailed Costs																	
	Unit	Quantities					Unit Cost (CNY)	Unit Cost (US\$)	Totals Including Contingencies (CNY '000)						Disb.		
		2020	2021	2022	2023	2024			Total	2020	2021	2022	2023	2024	Total	Acct.	Fin. Rule
I. Investment Costs																	
A. Road design and management	per year	1	1	1	1	1	5	1,270,000	181,170	1,282.7	1,308.4	1,334.5	1,361.2	1,388.4	6,675.2	CK_DA	GOVT
B. Rural infrastructure																	
Farm road, transportable	km	15	15	15	15	-	60	572,000	81,598	8,665.8	8,839.1	9,015.9	9,196.2	-	35,717.0	CK_DA	GOVT
Water source development	lumpsum	-	1	-	-	-	1	2,759,400	393,638	-	2,842.7	-	-	-	2,842.7	CK_DA	GOVT
Irrigation canal	km	-	32	47	47	-	126	167,400	23,880	-	5,518.6	8,267.5	8,432.9	-	22,219.0	CK_DA	GOVT
Pipeline	km	-	89	89	-	-	178	49,500	7,061	-	4,538.5	4,629.3	-	-	9,167.9	CK_DA	GOVT
Subtotal Rural infrastructure										8,665.8	21,739.0	21,912.7	17,629.1	-	69,946.6		
Total Investment Costs										9,948.5	23,047.3	23,247.3	18,990.3	1,388.4	76,621.8		
II. Recurrent Costs																	
A. Operations and maintenance	lumpsum									-	101.5	338.6	582.5	787.8	1,810.4	OAM	BEN ( 100% )
Total Recurrent Costs										-	101.5	338.6	582.5	787.8	1,810.4		
Total										9,948.5	23,148.8	23,585.8	19,572.8	2,176.3	78,432.2		

Table-4.6: Yunlong-County Project management, M&amp;E, KM and Policy

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/a Such as computer, printers, photo copier, projector, laptops, digital and video cameras, etc

Table-4.7: Yunlong-Summary cost

China Y2RDP PDR Components by Financiers (US\$ '000)											
	Govt of China		IFAD		Private sector		Beneficiaries		Total		Duties & Taxes
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	
<b>D. Yunlong county</b>											
<b>1. Comp 1: Supporting inclusive rural development</b>											
Improving Chanye fupin models	2,268.4	16.5	6,059.6	44.2	5,379.8	39.2	-	-	13,707.7	5.8	41.6
Stimulating entrepreneurship	128.3	9.5	917.6	68.0	302.9	22.5	-	-	1,348.7	0.6	53.1
Improving access to finance	6.4	10.0	57.4	90.0	-	-	-	-	63.7	-	6.4
<b>Subtotal omp 1: Supporting inclusive rural development</b>	<b>2,403.0</b>	<b>15.9</b>	<b>7,034.5</b>	<b>46.5</b>	<b>5,682.6</b>	<b>37.6</b>	<b>-</b>	<b>-</b>	<b>15,120.2</b>	<b>6.4</b>	<b>101.0</b>
<b>2. Comp 2: Climate-proofed public infrastructure</b>											
Improving infrastructure climate resilience	396.0	9.7	3,564.3	87.1	-	-	133.4	3.3	4,093.7	1.7	396.0
Improving rural infrastructure	10,930.4	97.7	-	-	-	-	258.3	2.3	11,188.6	4.8	1,093.0
<b>Subtotal omp 2: Climate-proofed public infrastructure</b>	<b>11,326.4</b>	<b>74.1</b>	<b>3,564.3</b>	<b>23.3</b>	<b>-</b>	<b>-</b>	<b>391.6</b>	<b>2.6</b>	<b>15,282.3</b>	<b>6.5</b>	<b>1,489.1</b>
<b>3. Comp 3: Project management, KM, M&amp;E</b>											
County PMO	516.4	54.4	433.1	45.6	-	-	-	-	949.6	0.4	48.1
<b>Subtotal Yunlong county</b>	<b>14,245.9</b>	<b>45.4</b>	<b>11,031.9</b>	<b>35.2</b>	<b>5,682.6</b>	<b>18.1</b>	<b>391.6</b>	<b>1.2</b>	<b>31,352.0</b>	<b>13.4</b>	<b>1,638.2</b>

China Y2RDP PDR Project Components by Year -- Totals Including Contingencies (US\$ '000)						
	Totals Including Contingencies					
	2020	2021	2022	2023	2024	Total
<b>D. Yunlong county</b>						
<b>1. Comp 1: Supporting inclusive rural development</b>						
Improving Chanye fupin models		1,587.4	3,624.4	4,462.1	3,634.7	13,707.7
Stimulating entrepreneurship		171.9	285.5	291.2	297.1	1,348.7
Improving access to finance		12.2	12.5	12.7	13.0	63.7
<b>Subtotal omp 1: Supporting inclusive rural development</b>		<b>1,771.5</b>	<b>3,922.4</b>	<b>4,766.1</b>	<b>3,944.8</b>	<b>15,120.2</b>
<b>2. Comp 2: Climate-proofed public infrastructure</b>						
Improving infrastructure climate resilience		1,521.8	1,839.0	630.3	60.3	4,093.7
Improving rural infrastructure		1,419.2	3,302.3	3,364.6	2,792.1	11,188.6
<b>Subtotal omp 2: Climate-proofed public infrastructure</b>		<b>2,941.0</b>	<b>5,141.3</b>	<b>3,994.9</b>	<b>2,852.4</b>	<b>15,282.3</b>
<b>3. Comp 3: Project management, KM, M&amp;E</b>						
County PMO		202.4	191.1	206.7	188.8	949.6
<b>Subtotal Yunlong county</b>		<b>4,914.9</b>	<b>9,254.7</b>	<b>8,967.7</b>	<b>6,986.0</b>	<b>31,352.0</b>

Table 5.1: Lanping-Improving *Chanye fupin* models

China																	O
Y2RDP	PDR																
Table 5.1. Lanping: Improving Chanye fupin model																	
Detailed Costs																	
	Unit	Quantities					Unit Cost (CNY)	Unit Cost (US\$)	Totals Including Contingencies (CNY '000)						Disb. Acct.	Fin. Rule	
		2020	2021	2022	2023	2024	Total			2020	2021	2022	2023	2024	Total		
I. Investment Costs																	
A. Upgrading cooperative meeting operational standard																	
1. Payment to cooperative meeting operational standard	coop	-	2	3	-	-	5	200,000	28,531	-	412.1	630.5	-	-	1,042.6	TWC_DA	IFAD ( 100% )
2. Verification expenses																	
Verification agency	LS	1	1	1	1	-	4	15,000	2,140	15.2	15.5	15.8	16.1	-	62.4	TWC_DA	IFAD ( 100% )
MIS for RBL	LS	-	1	1	1	1	4	7,500	1,070	-	7.7	7.9	8.0	8.2	31.8	TWC_DA	IFAD ( 100% )
Subtotal Verification expenses										15.2	23.2	23.6	24.1	8.2	94.3		
3. Investment on pro-poor cooperatives																	
Project grant support	coop	-	-	1	2	1	4	1,500,000	213,980	-	-	1,576.2	3,215.5	1,639.9	6,431.6	GAS_DA	IFAD ( 100% )
Private investments	coop	-	-	1	2	1	4	1,000,000	142,653	-	-	1,050.8	2,143.6	1,093.3	4,287.7	GAS_DA	PRIVATE ( 100% )
Govt assistance	coop	-	-	1	2	1	4			-	-	-	-	-	-	GAS_DA	GOVT
Subtotal Investment on pro-poor cooperatives										-	-	2,627.0	5,359.1	2,733.1	10,719.3		
Subtotal Upgrading cooperative meeting operational standard										15.2	435.3	3,281.1	5,383.2	2,741.3	11,856.1		
B. Matching grant for cooperative co-investors																	
Project grant support	coop	-	3	4	3	-	10	1,200,000	171,184	-	3,708.7	5,043.9	3,858.6	-	12,611.1	GAS_DA	IFAD (100% )
Private investment	coop	-	3	4	3	-	10	1,200,000	171,184	-	3,708.7	5,043.9	3,858.6	-	12,611.1	GAS_DA	PRIVATE ( 100% )
Govt assistance	coop	-	3	4	3	-	10			-	-	-	-	-	-	GAS_DA	IFAD ( 100% )
Subtotal Matching grant for cooperative co-investors										-	7,417.4	10,087.7	7,717.1	-	25,222.3		
C. Company-cooperative-households models																	
1. Company-cooperative-household models																	
Project grant	model	2	3	3	-	-	8	1,500,000	213,980	3,030.0	4,635.9	4,728.6	-	-	12,394.5	GAS_DA	IFAD ( 100% )
Private sector participation	model	2	3	3	-	-	8	1,500,000	213,980	3,030.0	4,635.9	4,728.6	-	-	12,394.5	GAS_DA	PRIVATE ( 100% )
Support from Govt	model	2	3	3	-	-	8	1,000,000	142,653	2,020.0	3,090.6	3,152.4	-	-	8,263.0	GAS_DA	GOVT
Subtotal Company-cooperative-household models										8,080.0	12,362.4	12,609.6	-	-	33,052.0		
2. Other innovative models																	
Project support	model	2	3	3	2	-	10	500,000	71,327	1,010.0	1,545.3	1,576.2	1,071.8	-	5,203.3	GAS_DA	IFAD ( 100% )
Private sector	model	2	3	3	2	-	10	500,000	71,327	1,010.0	1,545.3	1,576.2	1,071.8	-	5,203.3	GAS_DA	PRIVATE ( 100% )
Govt assistance	model	2	3	3	2	-	10	500,000	71,327	1,010.0	1,545.3	1,576.2	1,071.8	-	5,203.3	GAS_DA	GOVT
Subtotal Other innovative models										3,030.0	4,635.9	4,728.6	3,215.5	-	15,610.0		
Subtotal Company-cooperative-households models										11,110.0	16,998.3	17,338.3	3,215.5	-	48,662.0		
D. Product traceability system																	
Promotion and user registration	LS	1	1	1	1	-	4	2,500	357	2.5	2.6	2.6	2.7	-	10.4	GSI_DA	IFAD ( 90% )
Training of Govt staff and agro-entity	LS	-	1	1	1	1	4	7,000	999	-	7.2	7.4	7.5	7.7	29.7	GSI_DA	IFAD ( 90% )
Equipment support /a	LS	-	1	1	1	1	4	25,000	3,566	-	25.8	26.3	26.8	27.3	106.2	GSI_DA	IFAD ( 90% )
Operating costs, supervision	LS	-	1	2	3	4	10	5,000	713	-	5.2	10.5	16.1	21.9	53.6	GSI_DA	IFAD ( 90% )
Subtotal Product traceability system										2.5	40.7	46.8	53.1	56.8	199.9		
E. Improving climate information and adoption advice	LS	-	1	1	1	-	3	500,000	71,327	-	515.1	525.4	535.9	-	1,576.4	GSI_DA	IFAD ( 90% )
Total										11,127.7	25,406.8	31,279.3	16,904.7	2,798.2	87,516.7		

<sup>a</sup> Such as bar-code printer, computer set, scanner, data hardware, fast-testing tools, etc

Table-5.2: Lanping-Stimulating entrepreneurs/ attracting investors

China																	Other
Y2RDP PDR																	
Table 5.2. Lanping: Stimulating entrepreneurship																	
Detailed Costs	Unit	Quantities					Unit Cost (CNY)	Unit Cost (US\$)	Totals Including Contingencies (CNY '000)						Disb.		
		2020	2021	2022	2023	2024			Total	2020	2021	2022	2023	2024	Total	Acct.	Fin. Rule
I. Investment Costs																	
A. Business incubation / Service centres	centre	1	-	-	-	-	1	250,000	35,663	252.5	-	-	-	-	252.5	GSI_DA	IFAD ( 90% )
B. Technical assistance to the service centre																	
TA support from the project	LS/year	1	1	1	1	1	5	660,000	94,151	666.6	679.9	693.5	707.4	721.5	3,469.0	TWC_DA	IFAD ( 100% )
C. Startup investments																	
Project support	each	-	1	1	1	1	4	500,000	71,327	-	515.1	525.4	535.9	546.6	2,123.0	GAS_DA	IFAD ( 100% )
Private sector support	each	-	1	1	1	1	4	500,000	71,327	-	515.1	525.4	535.9	546.6	2,123.0	GAS_DA	PRIVATE ( 100% )
Subtotal Startup investments										-	1,030.2	1,050.8	1,071.8	1,093.3	4,246.1		
Total Investment Costs										919.1	1,710.1	1,744.3	1,779.2	1,814.8	7,967.6		
II. Recurrent Costs																	
A. Staff salary																	
Manager	pers/year	1	1	1	1	1	5	74,880	10,682	75.6	77.1	78.7	80.3	81.9	393.6	SAA_DA	IFAD ( 90% )
Adminstrator	pers/year	1	1	1	1	1	5	48,000	6,847	48.5	49.4	50.4	51.4	52.5	252.3	SAA_DA	IFAD ( 90% )
Subtotal Staff salary										124.1	126.6	129.1	131.7	134.3	645.9		
B. Other operating costs																	
Rental costs	per year	1	1	1	1	1	5	80,000	11,412	80.8	82.4	84.1	85.7	87.5	420.5	OPC_DA	GOVT
Other operating costs	per year	1	1	1	1	1	5	80,000	11,412	80.8	82.4	84.1	85.7	87.5	420.5	OPC_DA	IFAD ( 90% )
Subtotal Other operating costs										161.6	164.8	168.1	171.5	174.9	841.0		
Total Recurrent Costs										285.7	291.4	297.3	303.2	309.3	1,486.8		
Total										1,204.8	2,001.6	2,041.6	2,082.4	2,124.1	9,454.4		

Table-5.3: **Lanping**—Improving access to finance

China Y2RDP PDR Table 5.3. Lanping: Improving access to financial services																		Other
Detailed Costs	Unit	Quantities						Unit Cost (CNY)	Unit Cost (US\$)	Totals Including Contingencies (CNY '000)						Disb.		Fin. Rule
		2020	2021	2022	2023	2024	Total			2020	2021	2022	2023	2024	Total	Acct.		
I. Investment Costs																		
A. Improving access to financial services																		
Strengthening financial capacity	LS	1	1	1	1	1	5	45,000	6,419	45.5	46.4	47.3	48.2	49.2	236.5	TWC_DA	IFAD ( 100% )	
Improving financial advisory services	LS	1	1	1	1	1	5	40,000	5,706	40.4	41.2	42.0	42.9	43.7	210.2	TWC_DA	IFAD ( 100% )	
Total										85.9	87.6	89.3	91.1	92.9	446.8			

Table-5.4: **Lanping**—Improving infrastructure climate resilience

China																	Other
Y2RDP PDR																	
Table 5.4. Lanping: Improving infrastructure climate resilience																	
Detailed Costs																	
	Unit	Quantities					Unit Cost (CNY)	Unit Cost (US\$)	Totals Including Contingencies (CNY '000)						Disb.		
		2020	2021	2022	2023	2024			Total	2020	2021	2022	2023	2024	Total	Acct.	Fin. Rule
I. Investment Costs																	
A. Climate resilient infrastructure																	
Design and planning	lumpsum	1	1	1	1	-	4	125,000	17,832	126.3	128.8	131.4	134.0	-	520.4	SCW_DA	IFAD ( 90% )
Pond	lumpsum	2	3	3	-	-	8	100,000	14,265	202.0	309.1	315.2	-	-	826.3	SCW_DA	IFAD ( 90% )
Storage reservoirs	each	8	10	10	-	-	28	100,000	14,265	808.0	1,030.2	1,050.8	-	-	2,889.0	SCW_DA	IFAD ( 90% )
Total Investment Costs										1,136.3	1,468.0	1,497.4	134.0	-	4,235.7		
II. Recurrent Costs																	
A. Annual maintenance	lumpsum									-	11.6	26.8	31.9	44.8	115.1	OAM	BEN ( 100% )
Total Recurrent Costs										-	11.6	26.8	31.9	44.8	115.1		
Total										1,136.3	1,479.6	1,524.2	165.9	44.8	4,350.8		

Table-5.5: Lanping-Improving rural infrastructure system

China Y2RRDP PDR Table 5.5. Lanping: Improving rural infrastructure																
Detailed Costs	Unit	Quantities					Unit Cost (CNY)	Unit Cost (US\$)	Totals Including Contingencies (CNY '000)						Disb.	
		2020	2021	2022	2023	2024	Total		2020	2021	2022	2023	2024	Total	Acct.	Fin. Rule
<b>I. Investment Costs</b>																
A. Road design and supervision	per year	1	1	1	1	-	4	1,000,000	142,653	1,010.0	1,030.2	1,050.8	1,071.8	-	4,162.8	CK_DA GOVT
<b>B. Rural infrastructure</b>																
Farm road, transportable	km	8	-	-	-	-	8	300,000	42,796	2,424.0	-	-	-	-	2,424.0	CK_DA GOVT
Land leveling	mu	110	150	150	100	-	510	38,000	5,421	4,221.8	5,872.1	5,989.6	4,072.9	-	20,156.4	CK_DA GOVT
Pipeline	km	24	35	32	24	-	115	320,000	45,649	7,756.8	11,538.2	10,760.2	8,231.6	-	38,286.9	CK_DA GOVT
Installations	LS	2	3	3	1	-	9	1,000,000	142,653	2,020.0	3,090.6	3,152.4	1,071.8	-	9,334.8	CK_DA GOVT
Unspecified	each	-	1	1	-	-	2	300,000	42,796	-	309.1	315.2	-	-	624.3	CK_DA GOVT
<b>Subtotal Rural infrastructure</b>										16,422.6	20,810.0	20,217.5	13,376.3	-	70,826.4	
<b>Total Investment Costs</b>										17,432.6	21,840.2	21,268.3	14,448.1	-	74,989.2	
<b>II. Recurrent Costs</b>																
A. Operations and maintenance																
Annual maintenance	lumpsum									-	177.2	404.1	629.2	789.1	1,999.6	OAM BEN ( 100% )
<b>Total Recurrent Costs</b>										-	177.2	404.1	629.2	789.1	1,999.6	
<b>Total</b>										17,432.6	22,017.4	21,672.4	15,077.3	789.1	76,988.9	



Table-5.6: Lanping-County Project management, M&amp;E, KM and Policy

China Y2RDP PDR Table 5.6. Lanping: County PMO																	On
Detailed Costs																	
	Unit	Quantities					Unit Cost (CNY)	Unit Cost (US\$)	Totals Including Contingencies (CNY '000)						Disb. Acct.	Fin. Rule	
		2020	2021	2022	2023	2024	Total			2020	2021	2022	2023	2024	Total		
I. Investment Costs																	
A. Office equipment /a	LS	1	-	-	-	-	1	155,000	22,111	156.6	-	-	-	-	156.6	EAM_DA	IFAD ( 90% )
B. Staff training																	
General management training	person	5	5	5	5	5	25	1,000	143	5.1	5.2	5.3	5.4	5.5	26.3	TWC_DA	IFAD ( 100% )
FM & procurement training	person	4	4	-	4	-	12	1,000	143	4.0	4.1	-	4.3	-	12.4	TWC_DA	IFAD ( 100% )
Social safe-guard training	person	1	1	-	1	-	3	1,000	143	1.0	1.0	-	1.1	-	3.1	TWC_DA	IFAD ( 100% )
Environmental safe-guard training	person	1	1	-	1	-	3	1,000	143	1.0	1.0	-	1.1	-	3.1	TWC_DA	IFAD ( 100% )
Other Technical training	person	10	10	10	10	10	50	500	71	5.1	5.2	5.3	5.4	5.5	26.3	TWC_DA	IFAD ( 100% )
Overseas training	team	-	1	1	-	-	2	50,000	7,133	-	51.5	52.5	-	-	104.1	TWC_DA	IFAD ( 100% )
Subtotal Staff training										16.2	68.0	63.0	17.1	10.9	175.3		
C. Study tours																	
Within the region	persons	13	13	13	13	13	65	2,500	357	32.8	33.5	34.2	34.8	35.5	170.8	TWC_DA	IFAD ( 100% )
Outside the region	LS/year	3	3	-	-	-	6	5,000	713	15.2	15.5	-	-	-	30.6	TWC_DA	IFAD ( 100% )
Overseas study tour	LS	-	-	2	-	-	2	50,000	7,133	-	-	105.1	-	-	105.1	TWC_DA	IFAD ( 100% )
Subtotal Study tours										48.0	48.9	139.2	34.8	35.5	306.5		
D. Consultants & short-term staff																	
Project planning and design	LS	1	1	1	1	-	4	200,000	28,531	202.0	206.0	210.2	214.4	-	832.6	TWC_DA	IFAD ( 100% )
Short-term staff	pers_month	2	2	2	2	2	10	36,000	5,136	72.7	74.2	75.7	77.2	78.7	378.4	TWC_DA	IFAD ( 100% )
Subtotal Consultants & short-term staff										274.7	280.2	285.8	291.5	78.7	1,211.0		
E. Workshops and meetings	Lumpsum	4	4	4	4	4	20	10,000	1,427	40.4	41.2	42.0	42.9	43.7	210.2	TWC_DA	IFAD ( 100% )
F. Monitoring and evaluation and KM	LS/year	1	1	1	1	1	5	250,000	35,663	252.5	257.6	262.7	268.0	273.3	1,314.0	GSI_DA	IFAD ( 90% )
Total Investment Costs										788.3	695.9	792.8	654.3	442.2	3,373.6		
II. Recurrent Costs																	
Staff salary (three staff)	per year	1	1	1	1	1	5	274,600	39,173	277.3	282.9	288.6	294.3	300.2	1,443.3	SAA_DA	GOVT
Vehicle hiring charges	per year	1	1	1	1	1	5	50,000	7,133	50.5	51.5	52.5	53.6	54.7	262.8	OPC_DA	GOVT
Office operating costs	per year	1	1	1	1	1	5	300,000	42,796	303.0	309.1	315.2	321.5	328.0	1,576.8	OPC_DA	GOVT
Total Recurrent Costs										630.8	643.5	656.3	669.5	682.8	3,282.9		
Total										1,419.2	1,339.4	1,449.2	1,323.8	1,125.1	6,656.6		

/a Such as computer, printers, photo copier, projector, laptops, digital and video cameras, etc

Table-5.7: Lanping-Summary cost

China Y2RRDP PDR Components by Financiers (US\$ '000)											
	Govt of China		IFAD		Private sector		Beneficiaries		Total		Duties & Taxes
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	
<b>E. Lanping county</b>											
<b>1. Comp 1: Supporting inclusive rural development</b>											
Improving Chanye fupin models	1,962.6	15.7	5,600.9	44.9	4,921.1	39.4	-	-	12,484.5	5.3	41.6
Stimulating entrepreneurship	128.3	9.5	917.6	68.0	302.9	22.5	-	-	1,348.7	0.6	53.1
Improving access to finance	6.4	10.0	57.4	90.0	-	-	-	-	63.7	-	6.4
<b>Subtotal omp 1: Supporting inclusive rural development</b>	2,097.2	15.1	6,575.8	47.3	5,223.9	37.6	-	-	13,897.0	5.9	101.0
<b>2. Comp 2: Climate-proofed public infrastructure</b>											
Improving infrastructure climate resilience	60.4	9.7	543.8	87.6	-	-	16.4	2.6	620.6	0.3	60.4
Improving rural infrastructure	10,697.5	97.4	-	-	-	-	285.3	2.6	10,982.7	4.7	1,069.7
<b>Subtotal omp 2: Climate-proofed public infrastructure</b>	10,757.9	92.7	543.8	4.7	-	-	301.7	2.6	11,603.4	4.9	1,130.2
<b>3. Comp 3: Project management, KM, M&amp;E</b>											
County PMO	516.4	54.4	433.1	45.6	-	-	-	-	949.6	0.4	48.1
<b>Subtotal Lanping county</b>	13,371.6	50.6	7,552.8	28.6	5,223.9	19.8	301.7	1.1	26,449.9	11.3	1,279.3

China						
Y2RDP PDR						
Project Components by Year -- Totals Including Contingencies						
(US\$ '000)						
	Totals Including Contingencies					
	2020	2021	2022	2023	2024	Total
E. Lanping county						
1. Comp 1: Supporting inclusive rural development						
Improving Chanye fupin models	1,587.4	3,624.4	4,462.1	2,411.5	399.2	12,484.5
Stimulating entrepreneurship	171.9	285.5	291.2	297.1	303.0	1,348.7
Improving access to finance	12.2	12.5	12.7	13.0	13.3	63.7
Subtotal omp 1: Supporting inclusive rural development	1,771.5	3,922.4	4,766.1	2,721.6	715.4	13,897.0
2. Comp 2: Climate-proofed public infrastructure						
Improving infrastructure climate resilience	162.1	211.1	217.4	23.7	6.4	620.6
Improving rural infrastructure	2,486.8	3,140.9	3,091.6	2,150.8	112.6	10,982.7
Subtotal omp 2: Climate-proofed public infrastructure	2,648.9	3,351.9	3,309.1	2,174.5	119.0	11,603.4
3. Comp 3: Project management, KM, M&E						
County PMO	202.4	191.1	206.7	188.8	160.5	949.6
Subtotal Lanping county	4,622.9	7,465.4	8,281.9	5,084.9	994.9	26,449.9

Table 6.1: Yongsheng-Improving *Chanye fupin* models

China Y2RDP PDR Table 6.1. Yongsheng: Improving Chanye fupin model																	O
Detailed Costs																	
	Unit	Quantities					Unit Cost (CNY)	Unit Cost (US\$)	Totals Including Contingencies (CNY '000)						Disb. Acct.	Fin. Rule	
		2020	2021	2022	2023	2024	Total			2020	2021	2022	2023	2024	Total		
I. Investment Costs																	
A. Upgrading cooperative meeting operational standard																	
1. Payment to cooperative meeting operational standard	coop	-	2	3	-	-	5	200,000	28,531	-	412.1	630.5	-	-	1,042.6	TWC_DA	IFAD ( 100% )
2. Verification expenses																	
Verification agency	LS	1	1	1	1	-	4	15,000	2,140	15.2	15.5	15.8	16.1	-	62.4	TWC_DA	IFAD ( 100% )
MIS for RBL	LS	-	1	1	1	1	4	7,500	1,070	-	7.7	7.9	8.0	8.2	31.8	TWC_DA	IFAD ( 100% )
Subtotal Verification expenses										15.2	23.2	23.6	24.1	8.2	94.3		
3. Investment on pro-poor cooperatives																	
Project grant support	coop	-	-	1	2	1	4	1,500,000	213,980	-	-	1,576.2	3,215.5	1,639.9	6,431.6	GAS_DA	IFAD ( 100% )
Private investments	coop	-	-	1	2	1	4	1,000,000	142,653	-	-	1,050.8	2,143.6	1,093.3	4,287.7	GAS_DA	PRIVATE ( 100% )
Govt assistance	coop	-	-	1	2	1	4			-	-	-	-	-	-	GAS_DA	GOVT
Subtotal Investment on pro-poor cooperatives										-	-	2,627.0	5,359.1	2,733.1	10,719.3		
Subtotal Upgrading cooperative meeting operational standard										15.2	435.3	3,281.1	5,383.2	2,741.3	11,856.1		
B. Matching grant for cooperative co-investors																	
Project grant support	coop	-	3	4	3	-	10	1,200,000	171,184	-	3,708.7	5,043.9	3,858.6	-	12,611.1	GAS_DA	IFAD (100% )
Private investment	coop	-	3	4	3	-	10	1,200,000	171,184	-	3,708.7	5,043.9	3,858.6	-	12,611.1	GAS_DA	PRIVATE ( 100% )
Govt assistance	coop	-	3	4	3	-	10			-	-	-	-	-	-	GAS_DA	IFAD ( 100% )
Subtotal Matching grant for cooperative co-investors										-	7,417.4	10,087.7	7,717.1	-	25,222.3		
C. Company-cooperative-households models																	
1. Company-cooperative-household models																	
Project grant	model	2	3	3	2	-	10	1,500,000	213,980	3,030.0	4,635.9	4,728.6	3,215.5	-	15,610.0	GAS_DA	IFAD ( 100% )
Private sector participation	model	2	3	3	2	-	10	1,500,000	213,980	3,030.0	4,635.9	4,728.6	3,215.5	-	15,610.0	GAS_DA	PRIVATE ( 100% )
Support from Govt	model	2	3	3	2	-	10	1,000,000	142,653	2,020.0	3,090.6	3,152.4	2,143.6	-	10,406.7	GAS_DA	GOVT
Subtotal Company-cooperative-household models										8,080.0	12,362.4	12,609.6	8,574.6	-	41,626.6		
2. Other innovative models																	
Project support	model	2	3	3	2	-	10	500,000	71,327	1,010.0	1,545.3	1,576.2	1,071.8	-	5,203.3	GAS_DA	IFAD ( 100% )
Private sector	model	2	3	3	2	-	10	500,000	71,327	1,010.0	1,545.3	1,576.2	1,071.8	-	5,203.3	GAS_DA	PRIVATE ( 100% )
Govt assistance	model	2	3	3	2	-	10	500,000	71,327	1,010.0	1,545.3	1,576.2	1,071.8	-	5,203.3	GAS_DA	GOVT
Subtotal Other innovative models										3,030.0	4,635.9	4,728.6	3,215.5	-	15,610.0		
Subtotal Company-cooperative-households models										11,110.0	16,998.3	17,338.3	11,790.0	-	57,236.6		
D. Product traceability system																	
Promotion and user registration	LS	1	1	1	1	-	4	2,500	357	2.5	2.6	2.6	2.7	-	10.4	GSI_DA	IFAD ( 90% )
Training of Govt staff and agro-entity	LS	-	1	1	1	1	4	7,000	999	-	7.2	7.4	7.5	7.7	29.7	GSI_DA	IFAD ( 90% )
Equipment support /a	LS	-	1	1	1	1	4	25,000	3,566	-	25.8	26.3	26.8	27.3	106.2	GSI_DA	IFAD ( 90% )
Operating costs, supervision	LS	-	1	2	3	4	10	5,000	713	-	5.2	10.5	16.1	21.9	53.6	GSI_DA	IFAD ( 90% )
Subtotal Product traceability system										2.5	40.7	46.8	53.1	56.8	199.9		
E. Improving climate information and adoption advice	LS	-	1	1	1	-	3	500,000	71,327	-	515.1	525.4	535.9	-	1,576.4	GSI_DA	IFAD ( 90% )
Total										11,127.7	25,406.8	31,279.3	25,479.3	2,798.2	96,091.2		
a Such as bar-code printer, computer set, scanner, data hardware, fast-testing tools, etc																	

<sup>a</sup> Such as bar-code printer, computer set, scanner, data hardware, fast-testing tools, etc

Table-6.2: Yongsheng –Stimulating entrepreneurs/ attracting investors

China Y2RDP PDR Table 6.2. Yongsheng: Stimulating entrepreneurshi																	Other	
Detailed Costs	Unit	Quantities					Unit Cost (CNY)	Unit Cost (US\$)	Totals Including Contingencies (CNY '000)						Disb. Acct.	Fin. Rule		
		2020	2021	2022	2023	2024	Total			2020	2021	2022	2023	2024	Total			
I. Investment Costs																		
A. Business incubation / Service centres	centre	1	-	-	-	-	1	250,000	35,663	252.5	-	-	-	-	252.5	GSI_DA	IFAD ( 90% )	
B. Technical assistance to the service centre																		
TA support from the project	LS/year	1	1	1	1	1	5	660,000	94,151	666.6	679.9	693.5	707.4	721.5	3,469.0	TWC_DA	IFAD ( 100% )	
C. Startup investments																		
Project support	each	-	1	1	1	1	4	500,000	71,327	-	515.1	525.4	535.9	546.6	2,123.0	GAS_DA	IFAD ( 100% )	
Private sector support	each	-	1	1	1	1	4	500,000	71,327	-	515.1	525.4	535.9	546.6	2,123.0	GAS_DA	PRIVATE ( 100% )	
Subtotal Startup investments																		
Total Investment Costs											919.1	1,710.1	1,744.3	1,779.2	1,814.8	7,967.6		
II. Recurrent Costs																		
A. Staff salary																		
Manager	pers/year	1	1	1	1	1	5	74,880	10,682	75.6	77.1	78.7	80.3	81.9	393.6	SAA_DA	IFAD ( 90% )	
Administrator	pers/year	1	1	1	1	1	5	48,000	6,847	48.5	49.4	50.4	51.4	52.5	252.3	SAA_DA	IFAD ( 90% )	
Subtotal Staff salary										124.1	126.6	129.1	131.7	134.3	645.9			
B. Other operating costs																		
Rental costs	per year	1	1	1	1	1	5	80,000	11,412	80.8	82.4	84.1	85.7	87.5	420.5	OPC_DA	GOVT	
Other operating costs	per year	1	1	1	1	1	5	80,000	11,412	80.8	82.4	84.1	85.7	87.5	420.5	OPC_DA	IFAD ( 90% )	
Subtotal Other operating costs										161.6	164.8	168.1	171.5	174.9	841.0			
Total Recurrent Costs										285.7	291.4	297.3	303.2	309.3	1,486.8			
Total										1,204.8	2,001.6	2,041.6	2,082.4	2,124.1	9,454.4			

Table-6.3: Yongsheng -Improving access to finance

China																	
Y2RDP PDR																	
Table 6.3. Yongsheng: Improving access to finance																	
Detailed Costs																	

Table-6.4: Yongsheng –Improving infrastructure climate resilience

China Y2RDP PDR Table 6.4. Yongsheng: Improving infrastructure climate resilience																	Other	
Detailed Costs																	Disb.	
	Unit	Quantities					Unit Cost (CNY)	Unit Cost (US\$)	Totals Including Contingencies (CNY '000)						Acct.	Fin. Rule		
		2020	2021	2022	2023	2024			Total	2020	2021	2022	2023	2024			Total	
I. Investment Costs																		
A. Climate resilient infrastructure																		
Design and planning	lumpsum	1	1	1	1	-	4	125,000	17,832	126.3	128.8	131.4	134.0	-	520.4	SCW_DA	IFAD ( 90% )	
Pipeline	km	30	36	38	-	-	104	400,000	57,061	12,120.0	14,834.9	15,972.2	-	-	42,927.1	SCW_DA	IFAD ( 90% )	
Irrigation system	each	-	-	-	-	-	-			-	-	-	-	-	-	SCW_DA	IFAD ( 90% )	
Total Investment Costs										12,246.3	14,963.7	16,103.6	134.0	-	43,447.5			
II. Recurrent Costs																		
A. Annual maintenance	lumpsum									-	124.9	280.0	449.9	460.3	1,315.1	OAM	BEN ( 100% )	
Total Recurrent Costs										-	124.9	280.0	449.9	460.3	1,315.1			
Total										12,246.3	15,088.6	16,383.6	583.9	460.3	44,762.6			

Table-6.5: Yongsheng -Improving rural infrastructure system

China Y2RDP PDR Table 6.5. Yongsheng: Improving rural infrastruc																	Ot
Detailed Costs																	
	Unit	Quantities						Unit Cost (CNY)	Unit Cost (US\$)	Totals Including Contingencies (CNY '000)						Disb.	
		2020	2021	2022	2023	2024	Total			2020	2021	2022	2023	2024	Total	Acct.	Fin. Rule
I. Investment Costs																	
A. Road design and supervision	per year	1	1	1	1	1	5	1,280,000	182,596	1,292.8	1,318.7	1,345.0	1,371.9	1,399.4	6,727.8	CK_DA	GOVT
B. Rural infrastructure																	
Farm road, transportable	km	10	15	5	-	-	30	300,000	42,796	3,030.0	4,635.9	1,576.2	-	-	9,242.1	CK_DA	GOVT
Pipe line	km	22	42	37	-	-	101			-	-	-	-	-	-	CK_DA	GOVT
Pond, 5000m3 capacity	lumpsum	2	1	-	-	-	3	5,146,500	734,165	10,395.9	5,301.9	-	-	-	15,697.9	CK_DA	GOVT
Pond 1000 m3 capacity	each	10	20	10	-	-	40	1,125,000	160,485	11,362.5	23,179.5	11,821.5	-	-	46,363.5	CK_DA	GOVT
Canal rehabilitation	km	20	35	30	-	-	85	400,000	57,061	8,080.0	14,422.8	12,609.6	-	-	35,112.4	CK_DA	GOVT
Subtotal Rural infrastructure										32,868.4	47,540.1	26,007.4	-	-	1,06,416.0		
Total Investment Costs										34,161.2	48,858.8	27,352.4	1,371.9	1,399.4	1,13,143.7		
II. Recurrent Costs																	
A. Operations and maintenance																	
Annual maintenance /a	lumpsum									-	177.2	404.1	629.2	789.1	1,999.6	OAM	BEN ( 100% )
Total Recurrent Costs										-	177.2	404.1	629.2	789.1	1,999.6		
Total										34,161.2	49,036.0	27,756.6	2,001.1	2,188.5	1,15,143.3		
/a assumed at 1% of total investment costs																	

Table-6.6: Yongsheng –County Project management, M&amp;E, KM and Policy

China Y2RDP PDR Table 6.6. Yongsheng: County PMO																	Other	
Detailed Costs		Quantities						Unit Cost (CNY)	Unit Cost (US\$)	Totals Including Contingencies (CNY '000)						Disb. Acct.	Fin. Rule	
	Unit	2020	2021	2022	2023	2024	Total			2020	2021	2022	2023	2024	Total			
I. Investment Costs																		
A. Office equipment /a	LS	1	-	-	-	-	1	155,000	22,111	156.6	-	-	-	-	156.6	EAM_DA	IFAD ( 90% )	
B. Staff training																		
General management training	person	5	5	5	5	5	25	1,000	143	5.1	5.2	5.3	5.4	5.5	26.3	TWC_DA	IFAD ( 100% )	
FM & procurement training	person	4	4	-	4	-	12	1,000	143	4.0	4.1	-	4.3	-	12.4	TWC_DA	IFAD ( 100% )	
Social safe-guard training	person	1	1	-	1	-	3	1,000	143	1.0	1.0	-	1.1	-	3.1	TWC_DA	IFAD ( 100% )	
Environmental safe-guard training	person	1	1	-	1	-	3	1,000	143	1.0	1.0	-	1.1	-	3.1	TWC_DA	IFAD ( 100% )	
Other Technical training	person	10	10	10	10	10	50	500	71	5.1	5.2	5.3	5.4	5.5	26.3	TWC_DA	IFAD ( 100% )	
Overseas training	team	-	1	1	-	-	2	50,000	7,133	-	51.5	52.5	-	-	104.1	TWC_DA	IFAD ( 100% )	
Subtotal Staff training											16.2	68.0	63.0	17.1	10.9	175.3		
C. Study tours																		
Within the region	persons	13	13	13	13	13	65	2,500	357	32.8	33.5	34.2	34.8	35.5	170.8	TWC_DA	IFAD ( 100% )	
Outside the region	LS/year	3	3	-	-	-	6	5,000	713	15.2	15.5	-	-	-	30.6	TWC_DA	IFAD ( 100% )	
Overseas study tour	LS	-	-	2	-	-	2	50,000	7,133	-	-	105.1	-	-	105.1	TWC_DA	IFAD ( 100% )	
Subtotal Study tours											48.0	48.9	139.2	34.8	35.5	306.5		
D. Consultants & short-term staff																		
Project planning and design	LS	1	1	1	1	-	4	200,000	28,531	202.0	206.0	210.2	214.4	-	832.6	TWC_DA	IFAD ( 100% )	
Short-term staff	pers_month	2	2	2	2	2	10	36,000	5,136	72.7	74.2	75.7	77.2	78.7	378.4	TWC_DA	IFAD ( 100% )	
Subtotal Consultants & short-term staff											274.7	280.2	285.8	291.5	78.7	1,211.0		
E. Workshops and meetings	Lumpsum	4	4	4	4	4	20	10,000	1,427	40.4	41.2	42.0	42.9	43.7	210.2	TWC_DA	IFAD ( 100% )	
F. Monitoring and evaluation and KM	LS/year	1	1	1	1	1	5	250,000	35,663	252.5	257.6	262.7	268.0	273.3	1,314.0	GSI_DA	IFAD ( 90% )	
Total Investment Costs											788.3	695.9	792.8	654.3	442.2	3,373.6		
II. Recurrent Costs																		
Staff salary (three staff)	per year	1	1	1	1	1	5	274,600	39,173	277.3	282.9	288.6	294.3	300.2	1,443.3	SAA_DA	GOVT	
Vehicle hiring charges	per year	1	1	1	1	1	5	50,000	7,133	50.5	51.5	52.5	53.6	54.7	262.8	OPC_DA	GOVT	
Office operating costs	per year	1	1	1	1	1	5	300,000	42,796	303.0	309.1	315.2	321.5	328.0	1,576.8	OPC_DA	GOVT	
Total Recurrent Costs											630.8	643.5	656.3	669.5	682.8	3,282.9		
Total											1,419.2	1,339.4	1,449.2	1,323.8	1,125.1	6,656.6		

/a Such as computer, printers, photo copier, projector, laptops, digital and video cameras, etc



Table-6.7: Yongsheng –Summary cost

China Y2RRDP PDR Components by Financiers (US\$ '000)											
	Govt of China		IFAD		Private sector		Beneficiaries		Total		Duties & Taxes
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	
<b>F. Yongsheng county</b>											
<b>1. Comp 1: Supporting inclusive rural development</b>											
Improving Chanye fupin models	2,268.4	16.5	6,059.6	44.2	5,379.8	39.2	-	-	13,707.7	5.8	41.6
Stimulating entrepreneurship	128.3	9.5	917.6	68.0	302.9	22.5	-	-	1,348.7	0.6	53.1
Improving access to finance	6.4	10.0	57.4	90.0	-	-	-	-	63.7	-	6.4
<b>Subtotal omp 1: Supporting inclusive rural development</b>	<b>2,403.0</b>	<b>15.9</b>	<b>7,034.5</b>	<b>46.5</b>	<b>5,682.6</b>	<b>37.6</b>	<b>-</b>	<b>-</b>	<b>15,120.2</b>	<b>6.4</b>	<b>101.0</b>
<b>2. Comp 2: Climate-proofed public infrastructure</b>											
Improving infrastructure climate resilience	619.8	9.7	5,578.1	87.4	-	-	187.6	2.9	6,385.5	2.7	619.8
Improving rural infrastructure	16,140.3	98.3	-	-	-	-	285.3	1.7	16,425.6	7.0	1,614.0
<b>Subtotal omp 2: Climate-proofed public infrastructure</b>	<b>16,760.1</b>	<b>73.5</b>	<b>5,578.1</b>	<b>24.5</b>	<b>-</b>	<b>-</b>	<b>472.9</b>	<b>2.1</b>	<b>22,811.1</b>	<b>9.7</b>	<b>2,233.8</b>
<b>3. Comp 3: Project management, KM, M&amp;E</b>											
County PMO	516.4	54.4	433.1	45.6	-	-	-	-	949.6	0.4	48.1
<b>Subtotal Yongsheng county</b>	<b>19,679.6</b>	<b>50.6</b>	<b>13,045.8</b>	<b>33.6</b>	<b>5,682.6</b>	<b>14.6</b>	<b>472.9</b>	<b>1.2</b>	<b>38,880.9</b>	<b>16.6</b>	<b>2,383.0</b>

China Y2RRDP PDR Project Components by Year -- Totals Including Contingencies (US\$ '000)						
	Totals Including Contingencies					Total
	2020	2021	2022	2023	2024	
<b>F. Yongsheng county</b>						
<b>1. Comp 1: Supporting inclusive rural development</b>						
Improving Chanye fupin models	1,587.4	3,624.4	4,462.1	3,634.7	399.2	13,707.7
Stimulating entrepreneurship	171.9	285.5	291.2	297.1	303.0	1,348.7
Improving access to finance	12.2	12.5	12.7	13.0	13.3	63.7
<b>Subtotal omp 1: Supporting inclusive rural development</b>	<b>1,771.5</b>	<b>3,922.4</b>	<b>4,766.1</b>	<b>3,944.8</b>	<b>715.4</b>	<b>15,120.2</b>
<b>2. Comp 2: Climate-proofed public infrastructure</b>						
Improving infrastructure climate resilience	1,747.0	2,152.4	2,337.2	83.3	65.7	6,385.5
Improving rural infrastructure	4,873.2	6,995.1	3,959.6	285.5	312.2	16,425.6
<b>Subtotal omp 2: Climate-proofed public infrastructure</b>	<b>6,620.2</b>	<b>9,147.6</b>	<b>6,296.7</b>	<b>368.8</b>	<b>377.9</b>	<b>22,811.1</b>
<b>3. Comp 3: Project management, KM, M&amp;E</b>						
County PMO	202.4	191.1	206.7	188.8	160.5	949.6
<b>Subtotal Yongsheng county</b>	<b>8,594.1</b>	<b>13,261.0</b>	<b>11,269.5</b>	<b>4,502.4</b>	<b>1,253.8</b>	<b>38,880.9</b>

Table 7.1: Huaping-Improving *Chanye fupin* models

China Y2RDP_PDR Table 7.1. Huaping: Improving Chanye fupin model																On	
Detailed Costs		Quantities						Unit Cost (CNY)	Unit Cost (US\$)	Totals Including Contingencies (CNY '000)						Disb. Acct.	Fin. Rule
	Unit	2020	2021	2022	2023	2024	Total			2020	2021	2022	2023	2024	Total		
I. Investment Costs																	
A. Upgrading cooperative meeting operational standard																	
1. Payment to cooperative meeting operational standard	coop	-	2	3	-	-	5	200,000	28,531	-	412.1	630.5	-	-	1,042.6	TWC_DA	IFAD ( 100% )
2. Verification expenses																	
Verification agency	LS	1	1	1	1	-	4	15,000	2,140	15.2	15.5	15.8	16.1	-	62.4	TWC_DA	IFAD ( 100% )
MIS for RBL	LS	-	1	1	1	1	4	7,500	1,070	-	7.7	7.9	8.0	8.2	31.8	TWC_DA	IFAD ( 100% )
Subtotal Verification expenses										15.2	23.2	23.6	24.1	8.2	94.3		
3. Investment on pro-poor cooperatives																	
Project grant support	coop	-	-	1	2	1	4	1,500,000	213,980	-	-	1,576.2	3,215.5	1,639.9	6,431.6	GAS_DA	IFAD ( 100% )
Private investments	coop	-	-	1	2	1	4	1,000,000	142,653	-	-	1,050.8	2,143.6	1,093.3	4,287.7	GAS_DA	PRIVATE ( 100% )
Govt assistance	coop	-	-	1	2	1	4			-	-	-	-	-	-	GAS_DA	GOVT
Subtotal Investment on pro-poor cooperatives										-	-	2,627.0	5,359.1	2,733.1	10,719.3		
Subtotal Upgrading cooperative meeting operational standard										15.2	435.3	3,281.1	5,383.2	2,741.3	11,856.1		
B. Matching grant for cooperative co-investors																	
Project grant support	coop	-	3	4	3	-	10	1,200,000	171,184	-	3,708.7	5,043.9	3,858.6	-	12,611.1	GAS_DA	IFAD ( 100% )
Private investment	coop	-	3	4	3	-	10	1,200,000	171,184	-	3,708.7	5,043.9	3,858.6	-	12,611.1	GAS_DA	PRIVATE ( 100% )
Govt assistance	coop	-	3	4	3	-	10			-	-	-	-	-	-	GAS_DA	IFAD ( 100% )
Subtotal Matching grant for cooperative co-investors										-	7,417.4	10,087.7	7,717.1	-	25,222.3		
C. Company-cooperative-households models																	
1. Company-cooperative-household models																	
Project grant	model	2	3	3	2	-	10	1,500,000	213,980	3,030.0	4,635.9	4,728.6	3,215.5	-	15,610.0	GAS_DA	IFAD ( 100% )
Private sector participation	model	2	3	3	2	-	10	1,500,000	213,980	3,030.0	4,635.9	4,728.6	3,215.5	-	15,610.0	GAS_DA	PRIVATE ( 100% )
Support from Govt	model	2	3	3	2	-	10	1,000,000	142,653	2,020.0	3,090.6	3,152.4	2,143.6	-	10,406.7	GAS_DA	GOVT
Subtotal Company-cooperative-household models										8,080.0	12,362.4	12,609.6	8,574.6	-	41,626.6		
2. Other innovative models																	
Project support	model	2	3	3	2	-	10	500,000	71,327	1,010.0	1,545.3	1,576.2	1,071.8	-	5,203.3	GAS_DA	IFAD ( 100% )
Private sector	model	2	3	3	2	-	10	500,000	71,327	1,010.0	1,545.3	1,576.2	1,071.8	-	5,203.3	GAS_DA	PRIVATE ( 100% )
Govt assistance	model	2	3	3	2	-	10	500,000	71,327	1,010.0	1,545.3	1,576.2	1,071.8	-	5,203.3	GAS_DA	GOVT
Subtotal Other innovative models										3,030.0	4,635.9	4,728.6	3,215.5	-	15,610.0		
Subtotal Company-cooperative-households models										11,110.0	16,998.3	17,338.3	11,790.0	-	57,236.6		
D. Product traceability system																	
Promotion and user registration	LS	1	1	1	1	-	4	2,500	357	2.5	2.6	2.6	2.7	-	10.4	GSI_DA	IFAD ( 90% )
Training of Govt staff and agro-entity	LS	-	1	1	1	1	4	7,000	999	-	7.2	7.4	7.5	7.7	29.7	GSI_DA	IFAD ( 90% )
Equipment support /a	LS	-	1	1	1	1	4	25,000	3,566	-	25.8	26.3	26.8	27.3	106.2	GSI_DA	IFAD ( 90% )
Operating costs, supervision	LS	-	1	2	3	4	10	5,000	713	-	5.2	10.5	16.1	21.9	53.6	GSI_DA	IFAD ( 90% )
Subtotal Product traceability system										2.5	40.7	46.8	53.1	56.8	199.9		
E. Improving climate information[and adoption advice]	LS	-	1	1	1	-	3	500,000	71,327	-	515.1	525.4	535.9	-	1,576.4	GSI_DA	IFAD ( 90% )
Total										11,127.7	25,406.8	31,279.3	25,479.3	2,798.2	96,091.2		

/a Such as bar-code printer, computer set, scanner, data hardware, fast-testing tools, etc

Table-7.2: **Huaping** -Stimulating entrepreneurs/ attracting investors

China Y2RDP PDR Table 7.2. Huaping: Stimulating entrepreneurship																	On	
Detailed Costs		Quantities						Unit Cost	Unit Cost	Totals Including Contingencies (CNY '000)						Disb.		
	Unit	2020	2021	2022	2023	2024	Total	(CNY)	(US\$)	2020	2021	2022	2023	2024	Total	Acct.	Fin. Rule	
I. Investment Costs																		
A. Business incubation / Service centres		centre	1	-	-	-	-	1	250,000	35,663	252.5	-	-	-	-	252.5	GSI_DA	IFAD ( 90% )
B. Technical assistance to the service centre																		
TA support from the project		LS/year	1	1	1	1	1	5	660,000	94,151	666.6	679.9	693.5	707.4	721.5	3,469.0	TWC_DA	IFAD ( 100% )
C. Startup investments																		
Project support		each	-	1	1	1	1	4	500,000	71,327	-	515.1	525.4	535.9	546.6	2,123.0	GAS_DA	IFAD ( 100% )
Private sector support		each	-	1	1	1	1	4	500,000	71,327	-	515.1	525.4	535.9	546.6	2,123.0	GAS_DA	PRIVATE ( 100% )
Subtotal Startup investments											-	1,030.2	1,050.8	1,071.8	1,093.3	4,246.1		
Total Investment Costs											919.1	1,710.1	1,744.3	1,779.2	1,814.8	7,967.6		
II. Recurrent Costs																		
A. Staff salary																		
Manager		pers/year	1	1	1	1	1	5	74,880	10,682	75.6	77.1	78.7	80.3	81.9	393.6	SAA_DA	IFAD ( 90% )
Adminstrator		pers/year	1	1	1	1	1	5	48,000	6,847	48.5	49.4	50.4	51.4	52.5	252.3	SAA_DA	IFAD ( 90% )
Subtotal Staff salary											124.1	126.6	129.1	131.7	134.3	645.9		
B. Other operating costs																		
Rental costs		per year	1	1	1	1	1	5	80,000	11,412	80.8	82.4	84.1	85.7	87.5	420.5	OPC_DA	GOVT
Other operating costs		per year	1	1	1	1	1	5	80,000	11,412	80.8	82.4	84.1	85.7	87.5	420.5	OPC_DA	IFAD ( 90% )
Subtotal Other operating costs											161.6	164.8	168.1	171.5	174.9	841.0		
Total Recurrent Costs											285.7	291.4	297.3	303.2	309.3	1,486.8		
Total											1,204.8	2,001.6	2,041.6	2,082.4	2,124.1	9,454.4		

Table-7.3: **Huaping** -Improving access to finance

China Y2RDP PDR Table 7.3. Huaping: Improving access to financial services																		
Detailed Costs	Unit	Quantities						Unit Cost (CNY)	Unit Cost (US\$)	Totals Including Contingencies (CNY '000)						Disb.		Other
		2020	2021	2022	2023	2024	Total			2020	2021	2022	2023	2024	Total	Acct.	Fin. Rule	
I. Investment Costs																		
A. Improving access to financial services																		
Strengthening financial capacity	LS	1	1	1	1	1	5	45,000	6,419	45.5	46.4	47.3	48.2	49.2	236.5	TWC_DA	IFAD ( 100% )	
Improving financial advisory services	LS	1	1	1	1	1	5	40,000	5,706	40.4	41.2	42.0	42.9	43.7	210.2	TWC_DA	IFAD ( 100% )	
Total										85.9	87.6	89.3	91.1	92.9	446.8			

Table-7.4: **Huaping** -Improving infrastructure climate resilience

China Y2RDP PDR Table 7.4. Huaping: Improving infrastructure climate re																	Other	
Detailed Costs																		
	Unit	Quantities					Unit Cost (CNY)	Unit Cost (US\$)	Totals Including Contingencies (CNY '000)						Disb. Acct.	Fin. Rule		
		2020	2021	2022	2023	2024	Total			2020	2021	2022	2023	2024	Total			
I. Investment Costs																		
A. Climate resilient infrastructure																		
Design and planning	lumpsum	1	1	1	1	-	4	15,000	2,140	15.2	15.5	15.8	16.1	-	62.4	SCW_DA	IFAD ( 90% )	
Pumping stations	each	2	2	1	-	-	5	2,706,000	386,020	5,466.1	5,575.4	2,843.5	-	-	13,885.0	SCW_DA	IFAD ( 90% )	
Total Investment Costs										5,481.3	5,590.9	2,859.2	16.1	-	13,947.5			
II. Recurrent Costs																		
A. Operations and maintenance																		
Annual maintenance /a	lumpsum									-	55.9	114.1	145.5	148.6	464.0	OAM	BEN ( 100% )	
Total Recurrent Costs										-	55.9	114.1	145.5	148.6	464.0			
Total										5,481.3	5,646.8	2,973.3	161.6	148.6	14,411.5			
/a assumed at 1% of total investment costs																		

/a assumed at 1% of total investment costs

Table-7.5: Huaping -Improving rural infrastructure system

China Y2RDP PDR Table 7.5. Huaping: Improving rural infrastructure system																	Other	
Detailed Costs	Unit	Quantities						Unit Cost (CNY)	Unit Cost (US\$)	Totals Including Contingencies (CNY '000)						Disb.		
		2020	2021	2022	2023	2024	Total			2020	2021	2022	2023	2024	Total	Acct.	Fin. Rule	
I. Investment Costs																		
A. Road design and supervision	per year	1	1	1	1	1	5	920,000	131,241	929.2	947.8	966.7	986.1	1,005.8	4,835.6	CK_DA	GOVT	
B. Rural infrastructure																		
Farm road	km	8	8	8	8	-	32	700,000	99,857	5,656.0	5,769.1	5,884.5	6,002.2	-	23,311.8	CK_DA	GOVT	
Sprinkler sets	mu	3,000	3,000	3,000	3,000	2,000	14,000	1,500	214	4,545.0	4,635.9	4,728.6	4,823.2	3,279.8	22,012.5	CK_DA	GOVT	
Pond	each	15	15	15	15	15	75	70,000	9,986	1,060.5	1,081.7	1,103.3	1,125.4	1,147.9	5,518.9	CK_DA	GOVT	
Storages	each	30	30	30	30	30	150	8,000	1,141	242.4	247.2	252.2	257.2	262.4	1,261.5	CK_DA	GOVT	
Pumping stations	each	1	2	-	-	-	3	2,601,000	371,041	2,627.0	5,359.1	-	-	-	7,986.1	CK_DA	GOVT	
Pipeline	km	10	10	10	10	12	52	200,000	28,531	2,020.0	2,060.4	2,101.6	2,143.6	2,623.8	10,949.5	CK_DA	GOVT	
Subtotal Rural infrastructure										16,150.9	19,153.5	14,070.3	14,351.7	7,313.9	71,040.2			
Total Investment Costs										17,080.1	20,101.3	15,037.0	15,337.7	8,319.7	75,875.8			
II. Recurrent Costs																		
A. Operations and maintenance																		
Annual maintenance /a	lumpsum									-	174.2	382.7	543.8	711.1	1,811.8	OAM	BEN ( 100% )	
Total Recurrent Costs										-	174.2	382.7	543.8	711.1	1,811.8			
Total										17,080.1	20,275.5	15,419.7	15,881.5	9,030.8	77,687.6			

la assumed at 1% of total investment costs

/a assumed at 1% of total investment costs

Table-7.6: Huaping-County Project management, M&amp;E, KM and Policy

China Y2RDP PDR Table 7.6. Huaping: County PMO																	Other
Detailed Costs																	
Unit	Quantities						Unit Cost (CNY)	Unit Cost (US\$)	Totals Including Contingencies (CNY '000)						Disb.		
	2020	2021	2022	2023	2024	Total			2020	2021	2022	2023	2024	Total	Acct.	Fin. Rule	
I. Investment Costs																	
A. Office equipment /a	LS	1	-	-	-	-	1	155,000	22,111	156.6	-	-	-	-	156.6	EAM_DA	IFAD ( 90% )
B. Staff training																	
General management training	person	5	5	5	5	5	25	1,000	143	5.1	5.2	5.3	5.4	5.5	26.3	TWC_DA	IFAD ( 100% )
FM & procurement training	person	4	4	-	4	-	12	1,000	143	4.0	4.1	-	4.3	-	12.4	TWC_DA	IFAD ( 100% )
Social safe-guard training	person	1	1	-	1	-	3	1,000	143	1.0	1.0	-	1.1	-	3.1	TWC_DA	IFAD ( 100% )
Environmental safe-guard training	person	1	1	-	1	-	3	1,000	143	1.0	1.0	-	1.1	-	3.1	TWC_DA	IFAD ( 100% )
Other Technical training	person	10	10	10	10	10	50	500	71	5.1	5.2	5.3	5.4	5.5	26.3	TWC_DA	IFAD ( 100% )
Overseas training	team	-	1	1	-	-	2	50,000	7,133	-	51.5	52.5	-	-	104.1	TWC_DA	IFAD ( 100% )
Subtotal Staff training										16.2	68.0	63.0	17.1	10.9	175.3		
C. Study tours																	
Within the region	persons	13	13	13	13	13	65	2,500	357	32.8	33.5	34.2	34.8	35.5	170.8	TWC_DA	IFAD ( 100% )
Outside the region	LS/year	3	3	-	-	-	6	5,000	713	15.2	15.5	-	-	-	30.6	TWC_DA	IFAD ( 100% )
Overseas study tour	LS	-	-	2	-	-	2	50,000	7,133	-	-	105.1	-	-	105.1	TWC_DA	IFAD ( 100% )
Subtotal Study tours										48.0	48.9	139.2	34.8	35.5	306.5		
D. Consultants & short-term staff																	
Project planning and design	LS	1	1	1	1	-	4	200,000	28,531	202.0	206.0	210.2	214.4	-	832.6	TWC_DA	IFAD ( 100% )
Short-term staff	pers_month	2	2	2	2	2	10	36,000	5,136	72.7	74.2	75.7	77.2	78.7	378.4	TWC_DA	IFAD ( 100% )
Subtotal Consultants & short-term staff										274.7	280.2	285.8	291.5	78.7	1,211.0		
E. Workshops and meetings	Lumpsum	4	4	4	4	4	20	10,000	1,427	40.4	41.2	42.0	42.9	43.7	210.2	TWC_DA	IFAD ( 100% )
F. Monitoring and evaluation and KM	LS/year	1	1	1	1	1	5	250,000	35,663	252.5	257.6	262.7	268.0	273.3	1,314.0	GSI_DA	IFAD ( 90% )
Total Investment Costs										788.3	695.9	792.8	654.3	442.2	3,373.6		
II. Recurrent Costs																	
Staff salary (three staff)	per year	1	1	1	1	1	5	274,600	39,173	277.3	282.9	288.6	294.3	300.2	1,443.3	SAA_DA	GOVT
Vehicle hiring charges	per year	1	1	1	1	1	5	50,000	7,133	50.5	51.5	52.5	53.6	54.7	262.8	OPC_DA	GOVT
Office operating costs	per year	1	1	1	1	1	5	300,000	42,796	303.0	309.1	315.2	321.5	328.0	1,576.8	OPC_DA	GOVT
Total Recurrent Costs										630.8	643.5	656.3	669.5	682.8	3,282.9		
Total										1,419.2	1,339.4	1,449.2	1,323.8	1,125.1	6,656.6		

/a Such as computer, printers, photo copier, projector, laptops, digital and video cameras, etc

Table-7.7: Huaping -Summary cost

China Y2RDP PDR Components by Financiers (US\$ '000)											
	Govt of China		IFAD		Private sector		Beneficiaries		Total		Duties & Taxes
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	
<b>G. Huaping county</b>											
<b>1. Comp 1: Supporting inclusive rural development</b>											
Improving Chanye fupin models	2,268.4	16.5	6,059.6	44.2	5,379.8	39.2	-	-	13,707.7	5.8	41.6
Stimulating entrepreneurship	128.3	9.5	917.6	68.0	302.9	22.5	-	-	1,348.7	0.6	53.1
Improving access to finance	6.4	10.0	57.4	90.0	-	-	-	-	63.7	-	6.4
<b>Subtotal omp 1: Supporting inclusive rural development</b>	<b>2,403.0</b>	<b>15.9</b>	<b>7,034.5</b>	<b>46.5</b>	<b>5,682.6</b>	<b>37.6</b>	<b>-</b>	<b>-</b>	<b>15,120.2</b>	<b>6.4</b>	<b>101.0</b>
<b>2. Comp 2: Climate-proofed public infrastructure</b>											
Improving infrastructure climate resilience	199.0	9.7	1,790.7	87.1	-	-	66.2	3.2	2,055.9	0.9	199.0
Improving rural infrastructure	10,823.9	97.7	-	-	-	-	258.5	2.3	11,082.4	4.7	1,082.4
<b>Subtotal omp 2: Climate-proofed public infrastructure</b>	<b>11,022.9</b>	<b>83.9</b>	<b>1,790.7</b>	<b>13.6</b>	<b>-</b>	<b>-</b>	<b>324.7</b>	<b>2.5</b>	<b>13,138.2</b>	<b>5.6</b>	<b>1,281.4</b>
<b>3. Comp 3: Project management, KM, M&amp;E</b>											
County PMO	516.4	54.4	433.1	45.6	-	-	-	-	949.6	0.4	48.1
<b>Subtotal Huaping county</b>	<b>13,942.4</b>	<b>47.7</b>	<b>9,258.3</b>	<b>31.7</b>	<b>5,682.6</b>	<b>19.5</b>	<b>324.7</b>	<b>1.1</b>	<b>29,208.0</b>	<b>12.4</b>	<b>1,430.5</b>

China Y2RDP PDR Project Components by Year -- Totals Including Contingencies (US\$ '000)						
	Totals Including Contingencies					
	2020	2021	2022	2023	2024	Total
<b>G. Huaping county</b>						
<b>1. Comp 1: Supporting inclusive rural development</b>						
Improving Chanye fupin models	1,587.4	3,624.4	4,462.1	3,634.7	399.2	13,707.7
Stimulating entrepreneurship	171.9	285.5	291.2	297.1	303.0	1,348.7
Improving access to finance	12.2	12.5	12.7	13.0	13.3	63.7
<b>Subtotal omp 1: Supporting inclusive rural development</b>	<b>1,771.5</b>	<b>3,922.4</b>	<b>4,766.1</b>	<b>3,944.8</b>	<b>715.4</b>	<b>15,120.2</b>
<b>2. Comp 2: Climate-proofed public infrastructure</b>						
Improving infrastructure climate resilience	781.9	805.5	424.2	23.0	21.2	2,055.9
Improving rural infrastructure	2,436.5	2,892.4	2,199.7	2,265.6	1,288.3	11,082.4
<b>Subtotal omp 2: Climate-proofed public infrastructure</b>	<b>3,218.5</b>	<b>3,697.9</b>	<b>2,623.8</b>	<b>2,288.6</b>	<b>1,309.5</b>	<b>13,138.2</b>
<b>3. Comp 3: Project management, KM, M&amp;E</b>						
County PMO	202.4	191.1	206.7	188.8	160.5	949.6
<b>Subtotal Huaping county</b>	<b>5,192.4</b>	<b>7,811.3</b>	<b>7,596.6</b>	<b>6,422.2</b>	<b>2,185.4</b>	<b>29,208.0</b>



Table-8.1: PREFECTURE PMOs (Total for 4 Prefectures)

China																	
Y2RDP PDR																	
Table 8.1. Prefecture management offices																	
Detailed Costs	Unit	Quantities						Unit Cost (CNY)	Unit Cost (US\$)	Totals Including Contingencies (CNY '000)						Disb. Acct.	Fin. Rule
		2020	2021	2022	2023	2024	Total			2020	2021	2022	2023	2024	Total		
I. Investment Costs																	
A. Equipment and materials (4 sets)	lumpsum	4	-	-	-	-	4	100,000	14,265	404.0	-	-	-	-	404.0	EAM_DA	GOVT
B. Workshop and training																	
Management workshop	lumpsum	4	4	4	4	4	20	5,000	713	20.2	20.6	21.0	21.4	21.9	105.1	TWC_DA	GOVT
M&E and KM workshops	prefecture	4	4	4	4	4	20	5,000	713	20.2	20.6	21.0	21.4	21.9	105.1	TWC_DA	GOVT
Subtotal Workshop and training										40.4	41.2	42.0	42.9	43.7	210.2		
C. Knowledge management events																	
National study tours	prefecture	4	4	4	4	4	20	5,000	713	20.2	20.6	21.0	21.4	21.9	105.1	TWC_DA	GOVT
Knowledge documents sharing	prefecture	4	4	4	4	4	20	5,000	713	20.2	20.6	21.0	21.4	21.9	105.1	TWC_DA	GOVT
Subtotal Knowledge management events										40.4	41.2	42.0	42.9	43.7	210.2		
Total Investment Costs										484.8	82.4	84.1	85.7	87.5	824.5		
II. Recurrent Costs																	
A. staff salary (4 staff from each Prefecture)	per year	20	20	20	20	20	100	30,000	4,280	606.0	618.1	630.5	643.1	656.0	3,153.6	SAA_DA	GOVT
B. Other operating costs																	
Travel costs	per year	4	4	4	4	4	20	25,000	3,566	101.0	103.0	105.1	107.2	109.3	525.6	OPC_DA	GOVT
Office operating costs	per year	4	4	4	4	4	20	25,000	3,566	101.0	103.0	105.1	107.2	109.3	525.6	OPC_DA	GOVT
Subtotal Other operating costs										202.0	206.0	210.2	214.4	218.7	1,051.2		
Total Recurrent Costs										808.0	824.2	840.6	857.5	874.6	4,204.9		
Total										1,292.8	906.6	924.7	943.2	962.1	5,029.4		

Table-9.1: PROVINCIAL PMO

China Y2RDP PDR Table 9.1. Provincial PMO																	Other
Detailed Costs	Unit	Quantities						Unit Cost (CNY)	Unit Cost (US\$)	Totals Including Contingencies (CNY '000)						Disb. Acct.	Fin. Rule
		2020	2021	2022	2023	2024	Total			2020	2021	2022	2023	2024	Total		
<b>I. Investment Costs</b>																	
A. Office equipment	lumpsum	1	-	-	-	-	1	500,000	71,327	505.0	-	-	-	-	505.0	EAM_DA	GOVT
<b>B. Staff training</b>																	
Management workshop & training	lumpsum	1	1	1	1	1	5	200,000	28,531	202.0	206.0	210.2	214.4	218.7	1,051.2	TWC_DA	GOVT
Gender focus training	lumpsum	1	-	1	-	-	2	60,000	8,559	60.6	-	63.0	-	-	123.6	TWC_DA	GOVT
M&E and KM training	lumpsum	1	1	1	1	1	5	100,000	14,265	101.0	103.0	105.1	107.2	109.3	525.6	TWC_DA	GOVT
<b>Subtotal Staff training</b>										363.6	309.1	378.3	321.5	328.0	1,700.5		
<b>C. Knowledge management</b>																	
Study tours	lumpsum	1	1	1	1	1	5	70,000	9,986	70.7	72.1	73.6	75.0	76.5	367.9	TWC_DA	GOVT
Knowledge documents & sharing	lumpsum	1	1	1	1	1	5	100,000	14,265	101.0	103.0	105.1	107.2	109.3	525.6	TWC_DA	GOVT
<b>Subtotal Knowledge management</b>										171.7	175.1	178.6	182.2	185.9	893.5		
<b>D. Women federation capacity building</b>																	
Capacity building	lumpsum	1	1	1	1	1	5	30,000	4,280	30.3	30.9	31.5	32.2	32.8	157.7	TWC_DA	GOVT
Knowledge document & sharing	lumpsum	1	1	1	1	1	5	50,000	7,133	50.5	51.5	52.5	53.6	54.7	262.8	TWC_DA	GOVT
<b>Subtotal Women federation capacity building</b>										80.8	82.4	84.1	85.7	87.5	420.5		
<b>E. Monitoring, evaluation and policy</b>																	
Baseline survey0,	lumpsum	1	-	1	1	-	3	300,000	42,796	303.0	-	315.2	321.5	-	939.8	GSI_DA	GOVT
MIS set up	lumpsum	1	-	-	-	-	1	700,000	99,857	707.0	-	-	-	-	707.0	GSI_DA	GOVT
Policy activities	lumpsum	-	1	1	1	1	4	50,000	7,133	-	51.5	52.5	53.6	54.7	212.3	GSI_DA	GOVT
<b>Subtotal Monitoring, evaluation and policy</b>										1,010.0	51.5	367.8	375.1	54.7	1,859.1		
<b>Total Investment Costs</b>										2,131.1	618.1	1,008.8	964.6	656.0	5,378.6		
<b>II. Recurrent Costs</b>																	
A. Staff salary ( 5 staff)	per year	1	1	1	1	1	5	600,000	85,592	606.0	618.1	630.5	643.1	656.0	3,153.6	SAA_DA	GOVT
<b>B. Other operating costs</b>																	
Travel	per year	1	1	1	1	1	5	500,000	71,327	505.0	515.1	525.4	535.9	546.6	2,628.0	OPC_DA	GOVT
Vehicle hiring	per year	1	1	1	1	1	5	400,000	57,061	404.0	412.1	420.3	428.7	437.3	2,102.4	OPC_DA	GOVT
Other operating costs	per year	1	1	1	1	1	5	400,000	57,061	404.0	412.1	420.3	428.7	437.3	2,102.4	OPC_DA	GOVT
<b>Subtotal Other operating costs</b>										1,313.0	1,339.3	1,366.0	1,393.4	1,421.2	6,832.9		
<b>Total Recurrent Costs</b>										1,919.0	1,957.4	1,996.5	2,036.5	2,077.2	9,986.6		
<b>Total</b>										4,050.1	2,575.5	3,005.3	3,001.1	2,733.1	15,365.1		

## **Chapter 8: Financial Management**

**Project: Yunnan Rural Revitalization Demonstration Project (Y2RDP)**

**IFAD Loan: xxxxxxxx**

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## **1.0 Introduction**

199. The following manual outlines the financial procedures to be followed by the Project Management Offices (PMOs) during the following stages of the project cycle: i) preparation and planning, ii) implementation and iii) completion of the project. The manual aims to describe in detail the necessary steps to be undertaken by the relevant project staff and the Finance Manager (FM) (interchangeably identified as the Finance Controller - FC) in particular, when undertaking actions related to a) planning and budgeting, b) accounting, c) records management, d) internal controls, e) flow of funds, f) withdrawal of financing proceeds, g) processing of payments, h) financial reporting, i) fixed asset management, j) audit arrangements, k) supervision by IFAD and l) project completion and loan closure.
200. This manual is to be considered a living document and it is to be reviewed and updated at least once a year. It is to be read together with the Project Implementation Manual, the Procurement Manual, and the HR-manual. It is also important to note this manual makes references to the following IFAD key documents: Financing Agreement, IFAD General Conditions, Letter to the Borrower, IFAD Handbook for Financial Reporting and Auditing of IFAD- Financed Projects as well as the Disbursement Handbook. Therefore, it is fundamental that the project staff, especially the PD and the FM master these documents before the implementation of the project begins. The generic IFAD documents listed above are available at <http://www.ifad.org/pub/basic/index.htm>.

**1.1 Project Overview**

*Project name:* **Yunnan Rural Revitalization Demonstration Project (Y2RDP)**

*Project loan number:* **XXXXXX**

*Effective date:* **XXXXXX**

*Completion date:* **XXXXXX**

*Closing date:* **XXXXXX**

*Project objectives:* (refer to Chapter 2 (2.1))

*Project Area and Selection Criteria:* (refer to Chapter 2 (2.2) )

*Project target group:* (refer to Chapter 2 (2.3) )

*Project beneficiaries:* (refer to Chapter 2 (2.3))

*Project components* (refer to Chapter 3 )

*Project costs:* The Borrower and IFAD have agreed within the Financing agreement (FA) to allocate the financing to categories of eligible expenditures shown in the Schedule 2 of the FA. The schedule 2 also specifies the percentages of such eligible expenditures to be financed by the Financing: 100% net of tax ( this will be updated after the loan negotiations)

<b>Category</b>	<b>IFAD loan</b>	<b>Total</b>	<b>Eligible expenditures (%) net of Tax</b>
<b>I. Works</b>	XXXXXX	XXXXXX	100%
<b>II. Consultancies /a</b>	XXXXXX	XXXXXX	100%
<b>III. Goods, Services and Inputs</b>		XXXXXX	100%
<b>IV. Grants and Subsidies /b</b>	XXXXXX	XXXXXX	100%
<b>V. Operating Costs</b>	XXXXXX	XXXXXX	100%
<b>VI. Training</b>	XXXXXX	XXXXXX	100%
<b>VII. Results Based Lending</b>		XXXXXX	
<b>Total</b>	XXXXXX	XXXXXX	

*(Table 1: Schedule 2 of the financing agreement - eligible expenditures by expenditure*



*category)*

201. In addition to IFAD financing the Project will also receive counterpart financing from the Government, equivalent to approximately **USD xxxx** million. The counterpart financing will include **xxxxxx million** in the form taxes and duties and **USD xxxxxx** million in cash from the Government's budget. The project beneficiaries will also contribute approximately **USD xx** million to the project

## **202. 193.1.2 Organizational Framework**

- (a) **Ministry of Finance.** As the authorised representative of the Borrower of IFAD loans, the Ministry of Finance (MOF) will receive and pass on the IFAD loan proceeds to the Department of Finance (DOF) of Yunan Province and subsequently to the Bureaux of Finance (BOFs) of the project counties for financing the project. MOF will carry out its oversight responsibilities through the DOF and BOFs.
- (b) The lead project agency is the Provincial Department of Agriculture and Rural Affairs (DARA) through the provincial project leading group (PLG) for the overall coordination and supervision of project activities.
- (c) **Project leading groups.** A Project Leading Group (PLG) are established at province, prefecture, and county levels where the project will be implemented, and where appropriate, to provide overall guidance and coordination of project implementation. Each PLG will be led by a senior official of government of the same level and composed of representatives from the related departments/bureaux and institutions, as appropriate. PLGs shall provide overall guidance and coordination support for project implementation at their respective levels. Their key responsibilities include: (i) overall supervision of the operations and project performance; (ii) coordination of counterpart funds for carrying out the project; (iii) review and approval of project Annual Work Plan and Budgets (AWP/Bs), and progress and financial reports; and (iv) coordination of implementing agencies in project implementation.
- (d) **Department/Bureaux of Finance.** The primary responsibilities of DOF/BOFs are as following: (i) assume the opening and management of the Project Accounts; (ii) administer the project resources including the IFAD loan and the counterpart funds; (iii) review and approve the financing needs for project implementation; (iv) oversee the use of project resources; (v) ensure the effective flow of funds for project implementation; (vi) provide appropriate training to the financial officers of the PMOs in terms of financial management; and (vii) prepare Withdrawal Applications (WAs) and reimburse eligible project expenditures on time.
- (e) **Project Management Offices (PMOs).** Department of Agriculture and Rural Affairs(DARA) as the Lead Project Agency (LPA), will have the overall accountability for the project, including fiduciary aspects. DARA would take lead responsibility for project design, management, supervision and evaluation, and will act as the Provincial Project Management Office (PPMO).The Project will establish a Provincial Project Management Offices (PPMO) in Kunming, county PMOs in the seven project counties, and where appropriate, a township PMO in each of the project areas. These are

dedicated structures located within existing offices of the Department of Agriculture and Rural Affairs, the Bureaux of Agriculture and Rural Affairs. The Provincial PMO (PPMO) and each county PMOs (CPMOs) will be staffed with qualified and full-time staff in adequate numbers, at a minimum comprising of a director, a deputy director, an accountant, a cashier, a planning officer, an M&E officer, an implementation coordinator, and a gender coordinator.

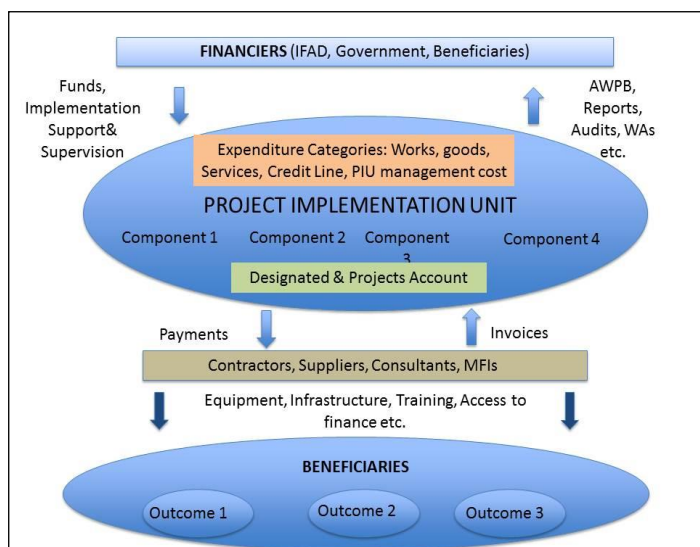
- (f) The **PPMO** will be responsible for coordinating project implementation across the 7 counties. Its responsibilities include, among others: (i) consolidation of AWPBs; (ii) establishment of a project M&E system; (iii) monitoring and supervision of project implementation; (iv) provision of appropriate training to CPMOs and implementing agencies (IAs) in terms of project implementation and management; (v) consolidation of Statements of Expenditures (SOEs) and the preparation of withdrawal applications (WAs) with a computerized accounting system; (vi) coordinate prior review procurement requests in NOTUS under the project; (vii) project reporting; (viii) organising project baseline and RIMS surveys; and (ix) promoting project knowledge management.
- (g) **CPMOs** will be responsible for coordinating project implementation at county level. Their responsibilities include, among others: (i) development of AWPBs through participatory approaches; (ii) monitoring and supervision of project implementation; (iii) provision of appropriate training to IAs, township PMOs (TPMOs) and village implementing groups (VIGs) in terms of project implementation; (iv) preparation of SOEs and claim documents; (v) transfer of project funds to implementing agencies (IAs) on time; (vi) organising of project procurement; (vii) project reporting; (viii) undertaking project RIMS surveys; and (ix) promoting project knowledge sharing.
- (h) **TPMOs** will be established within the local governments at township level, utilising existing facilities and staff on a part-time basis. Designated staff will provide support to the CPMO and IAs for implementation of project activities at village level on an as-required basis. Its key responsibilities are as follows: (i) oversee the works of VIGs; (ii) identify eligible villages that could participate in project activities; (iii) facilitate village-level participatory planning activities to determine what activities will be implemented in the villages; (iv) review village implementation work plans, (v) coordinate the township technical stations/centres in project implementation; (vi) consolidate the M&E data collected by VIGs and report to CPMOs; and (vii) facilitate the liaison with target villages.
- (i) **Village Committee (VC).** Before project villages are identified, VC is responsible for disseminating project information to the villagers, organizing villagers meeting or villagers' representatives meeting to make decision on application of project participation to the township government, and providing relevant information and data.
- (j) **Village Implementing Groups (VIGs).** VIGs will be set up at each of the targeted administrative village. The VIG will be headed by the director of the village committee

and composed of 8-10 people, including all the village committee members and 4-5 farmer representatives from different household categories of well-being. Farmer representatives will be elected by local farmers and they will be no less than 50% of total members of the VIG. Of the farmer representatives, women will be no less than 50% and at least two thirds will be from the poor and vulnerable households.

- (k) The VIGs' major responsibilities include: (i) a regular participatory perceived well-being ranking of households within the village; (ii) identifying project modules and activities prioritized by eligible groups through participatory approaches, and reporting to the PMOs for the development of AWPBs; (iii) organizing the poor and vulnerable households to participate in project activities; (iv) assisting PMOs monitor project implementation and collecting M&E data as required; and (v) organising the operation and maintenance of community infrastructure built by the project.
- (l) The project will (i) establish a control framework integrating periodic internal audits, independent external audits, and social safeguards to be adopted based on IFAD policies; (ii) adopt a good governance and mutual accountability framework to strengthen accountability and transparency in line with international best practices; (iii) outline the project specific financial management procedures and disbursement requirements in the PIM. (iv) establish a Management Information System (MIS) to support the core project management functions

### 1.3 Project Management Office

- 203. A dedicated provincial PMO (PPMO) shall be set up within the Farmland Enhancement Division, DARA. It will be responsible for project coordination, management support, monitoring and reporting, ensuring adherence to agreed standards, guidelines, and procedures, providing overall guidance on operational aspects to the various implementing units, and facilitating intra-knowledge transfer among project provinces and with external domestic and international agencies.
- 204. PMOs are staffed with officers who need to have experience in project management, financial management, procurement, and monitoring and evaluation. They will also be assisted by officers from the technical line bureaus of Water Resources, Agriculture, Forestry, and Finance at the corresponding level. PPMOs and CPMOs will be in charge of day to day management of project activities, overseeing project designs, implementing and supervising project activities, arranging for counterpart-funding and local labor contribution, preparing annual work plans, financial plans, procurement plans, monitoring and reporting on project progress, outputs, and outcomes.
- 205. To implement the project and its components, the project will receive funds from the financiers (IFAD, the government and beneficiaries), which will be channelled through designated project accounts to cover project expenditures, in accordance to the Annual Work Plan and Budget (AWPB) and the expenditure categories as per the schedule 2 of the FA.

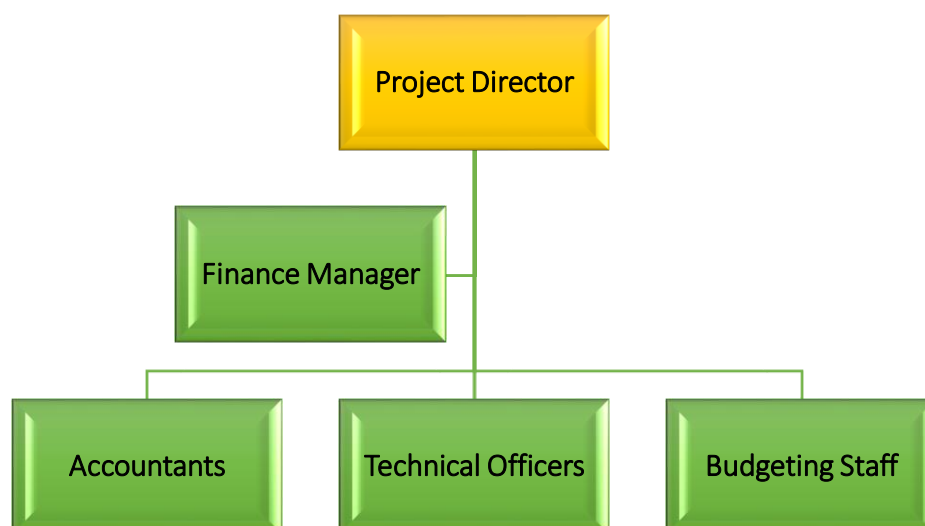


*(Chart 2: The Financial operations environment of the PMO)*

206. PMO and the CPMOs will assign financial staff and to support the Financial Division for the financial management of the project. The financial division at each level is composed of three or more professional staff (Finance Manager, released on a full-time basis, to be assisted by an Accountant and Accounts Assistants).
207. The PPMO organization structure is composed of the director who has overall responsibility and a Finance Manager who has financial responsibility overseeing an accountant and a cashier. The technical officers in the PMOs will have review and pre-approval functions, similarly in the counties PMOs.
208. Financial Manager (accountant in professional title) is responsible for the project financial management. The manager will be assigned who has accumulated rich experiences in managing projects of international cooperation in the years implementation of the World Bank and ADB projects.

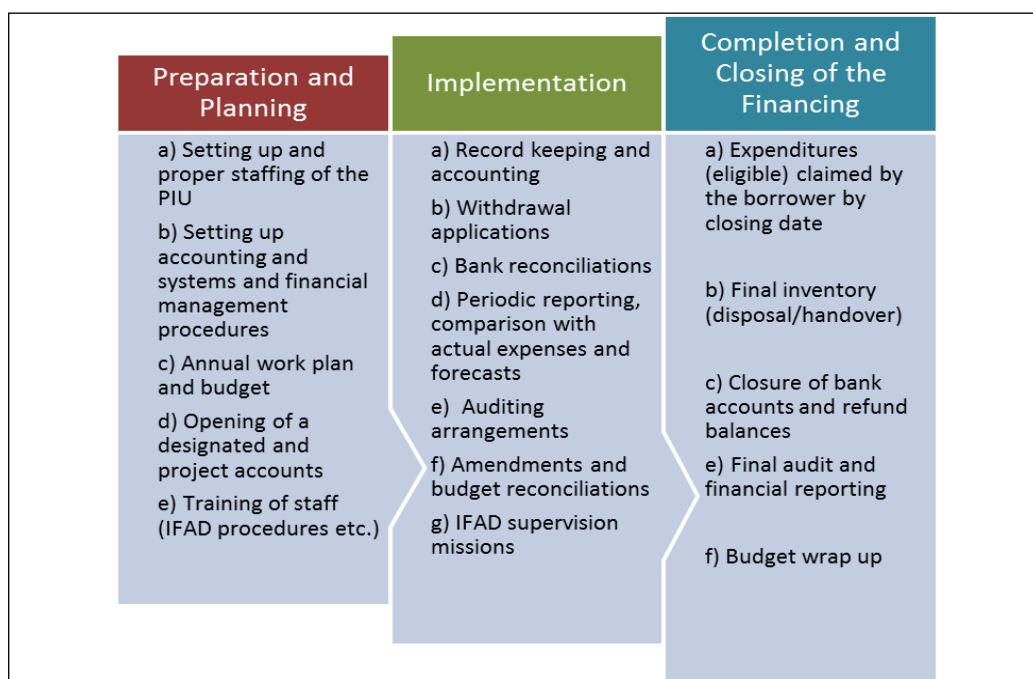
Budgeting staff are responsible for the allocation of project plan funds. procurement personnel, accountants are responsible for calculating and reviewing the fund inflow and disbursement

Financial accountants are personnel of state organisations, all of whom have been selected and recruited through examinations.




(Chart 3: Organogram of the staff involved in financial operations)

209. In order to ensure that the financing proceeds are used for the intended purpose and as efficiently as possible, it is essential that the FM sets up and maintains adequate financial management arrangements in each stage of the project cycle: i) preparation and planning, ii) implementation as well as iii) completion and closing, as illustrated in the chart below.



(Chart 4: Financial management arrangements in the different stages of the project cycle)

 **Sample Job descriptions** for the PD, Financial Manager, Deputy FM, Programme Assistant (Finance), Documentation Officer are provided in annex I. **A sample staff development plan is provided in annex II:** Table 6 of the AWPB.

#### 1.4 Anticorruption policy

210. The management of the project funds shall be sufficiently rigorous to safeguard against Fraud and Corruption. Fraud and corruption include, but are not limited to:

- corrupt practice - offering, giving, receiving, or soliciting, directly or indirectly, anything of value to influence improperly the actions of another party
- fraudulent practice - any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation
- collusive practice - an arrangement between two or more parties designed to achieve an improper purpose, including influencing improperly the actions of another party
- coercive practice - impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party

211. IFAD applies a zero-tolerance policy towards fraudulent, corrupt, collusive or coercive actions in projects financed through its loans and grants. ‘Zero tolerance’ means that IFAD will pursue all allegations falling under the scope of this policy and that appropriate sanctions will be applied where the allegations are substantiated. IFAD takes all possible actions to protect individuals who submit allegations of fraudulent or corrupt practices in its activities from reprisal. The IFAD anticorruption policy is available on IFAD website at [www.ifad.org/governance/anticorruption/index.htm](http://www.ifad.org/governance/anticorruption/index.htm)). The IFAD website also provides instructions on how to report any alleged wrongdoing to the Office of Audit and Oversight (<http://www.ifad.org/governance/anticorruption/how.htm>).

It is the PD’s and the Financial Manager’s responsibility to make sure that all staff including the financial department are aware of IFADs and the lead project agency’s anticorruption policy and whistle blowing procedures.

## **2.0 Budgeting and Planning**

212. China has undertaken extensive reforms to its budgeting system over the past 10 years. These have encompassed the entire budgeting cycle: formulation, approval, implementation and audit. The early challenge was fundamentally to create the institutional infrastructure for a modern budget process where none had previously existed. Under its budgeting system, provincial, and local government. All activities of the government are predetermined and are set out in plans and programs. The annual estimates of expenditure detail the financial commitment of the government for the next year’s program of activities.

213. The AWPB is expected to contain several key elements such as:

- i) Introduction and brief background;
- ii) Strategic focus and outputs;
- iii) Major risks and mitigation actions;
- iv) Budget and Financing plan;
- v) Procurement plan;
- vi) Training and technical assistance schedule and,

## vii) PMO staff development plan

214. The LPA should make adequate annual budgetary provisions for IFAD funds and Counterpart funds in the National Budget, based on the AWPB of the Project.

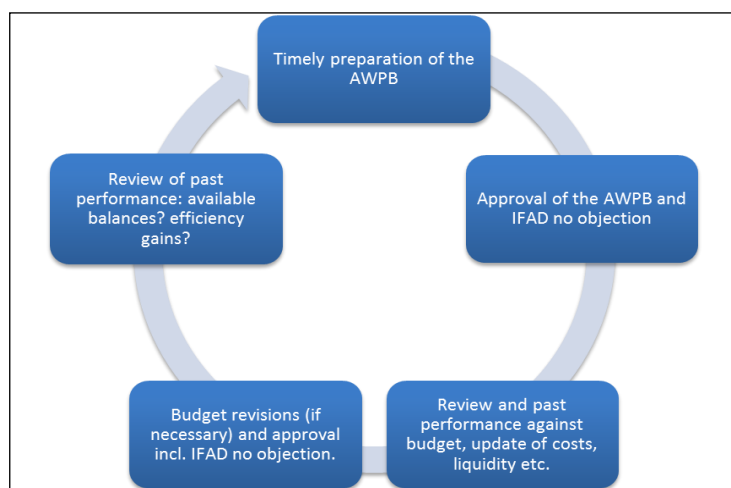
Counterpart funding will consist of allocations made by the project province and counties/districts. Government will ensure that counterpart funds are contained in the domestic fiscal allocations for the counties, and that they are released for the project on time. The counterpart funding maintain in the Treasury Accounts of the counties will be used to pre-finance the project expenditures as well.

Budget allocations will be made to enable the function of the provincial and county PMOs, to cover investment and recurrent expenses, office and training equipment, capacity building, M&E, knowledge management, and agribusiness facilitation services. Modest project support will also be reserved for function at township where existing government staff and facilities will be used. Recurrent costs for all PMOs will be ensured by government counterpart funding, which will cover staff salaries, travel costs, administrative costs, and operation and maintenance of vehicles etc..

215. The budget and financing plan can be described as a detailed statement of the expected resources available to the project and the planned use of those resources for the upcoming project year. The AWPB and especially the budget and financing plan is an important tool for managing the financial performance of the project and to ensure sufficient cash flow.

The budgeting and planning process comprises of the following parts:

- Preparation of annual, semi-annual, quarterly and even monthly financial plans including procurement, receipts, expenditures and cash flows.
- Review of past performance against budgets and the procurement plan, to promote an understanding of the project cost base;
- Identification of potential efficiency savings; and
- Review of the main expenditure headings in light of the project implementation plan, procurement plan, and expected variations in cost e.g. pay increases, inflation and other anticipated changes.



*(Chart 5: The project budget cycle)*

## **2.1 Development of the AWPB**

216. During the last quarter of the previous year - before the beginning of each fiscal year for the project, The PPMO, after consultations with project stakeholders, shall prepare its annual budget, linking all the planned activities to the cost categories outlined in Schedule II of the Financing Agreement; this exercise will take place in advance of the preparation of the national budget, to ensure that the required Government funds will be allocated and available on time. All financing contributions should be clearly stated in the budget to be submitted to internal for approval and to IFAD for non –objection.
217. The budget and financing plan should be prepared and presented on a quarterly basis. The data on the number of activities to be implemented in the coming year and the estimates of the total funds needed to finance them should be presented by component and sub-component, by expenditure category as well as by financier. The estimates should be based on the project's (up to date) cost tables. In addition to the financial information described above, the budget should also take into account the physical outreach of the project (number of farmer's to be trained etc.).
218. When preparing the AWPB the following aspects should be taken into consideration:
- Consistency with other financial reports: It is practical to prepare the budget and financing plan in the same format as the periodic (financial) progress reports and the project financial statements of the project.
  - Contingency provisions (physical and price) and allocation of funds from the unallocated expenditure category.
  - Post implementation activities e.g. arrangements for after life of project, disposal of project assets (computers, vehicles etc.), future repair and maintenance.
  - Availability for funds and arrangements for all audits.
219. After preparing the draft AWPB, the FM will send it to the PD and Steering Committee/LPA for review and clearance/approval before sending it to IFAD for no objection. In accordance with the FA, a draft AWPB has to be submitted to IFAD no later than 60 days before the beginning of the relevant fiscal year of the project. If required the /LPA could propose adjustments in the AWPB during the relevant project year, which would become effective after IFAD' approval.
220. The AWPB must be accompanied by a procurement plan prepared by the Procurement Officer. The first Procurement plan should cover the first 18 months of the project lifecycle while the subsequent procurement plans should cover 12 months of the project lifecycle.



A **sample of a budget and financing plan, procurement plan** as well as a staff development plan is provided in Annex II.

## **2.2 Review of the AWPB**

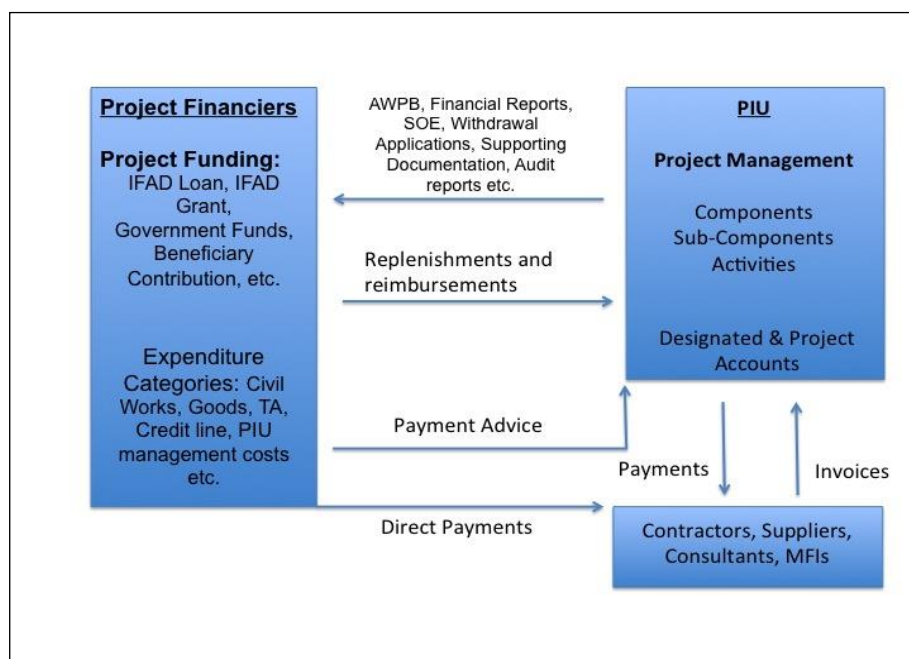
221. Every quarter, the FM should review the costs incurred during this time period. In case of differences between the planned and actual costs presented in the Annual Budget, the FM and the Programme Managers heading each component should collectively



identify the reasons for those differences and detail them in the periodic Financial Reports presented to IFAD. In case of internal problems identified during the costs review, the FM and Programme Managers should take the necessary steps to eliminate them. Otherwise, the budget for the next quarters should be readjusted to reflect the difference between actual and planned figures.

### **3.0 Accounting system**

222. The majority of project activities result in the receipt, commitment or expenditure of funds. The accounting system records, processes and organises this data in order to produce useful financial information in form of AWPB, Financial Reports, Withdrawal Applications, Financial Statements etc. needed by the Project Financiers (IFAD, Government, Co-financiers, Beneficiaries) as well as the management. The accounting system should reflect the project's needs and be designed to provide the financial information required by all interested parties (DOF/BOFs, PPMOs, CPMOs and IFAD). It should also fulfil all the legal and regulatory requirements of the borrower. The accounting system is a critical part of the project's financial management system and its design.



*(Chart 6: The operating environment of the project accounting system)*

The FM is responsible for the following key areas related to the accounting system of the project:

- Designing the accounting system of the project
- Selection and maintenance of an accounting software.
- Development of an accounting manual

### 3.1 Designing the project accounting system.

223. When designing the accounting system of the project the FM must undertake the following steps:

**Step one:** Identify the different kind of reports the system is expected to generate, based on the different stakeholders requirements. - What information and in what format needs to be produced by the PMU? As a minimum requirement the Accounting system will need to produce the following reports:

- Statement of cash receipts and payments (by category and by financier),
- Statement of cash receipts and payments (by component),
- Statement of comparative budget and actual amount by component,
- Statement of Special Account movements,
- Statement of Special Account Reconciliations,
- SOE-Withdrawal Application Statement.

**Step two:** List the transactions and activities, which the system must account for. As a minimum requirement the accounting system must include:

- a) Purchase orders, receipts, check books and other similar documents evidencing receipt, commitment or expenditure of funds.
- b) A journal for primary entry of all transactions, including adjustments, destined to be posted to the ledger.
- c) A petty cash book (PCB) for small cash expenditures below a certain low threshold. The credit side of the PCB should be analyzed into columns, one for each project component, The totals to be posted to ledger accounts monthly.
- d) A bank cash book (one for each source of financing). The credit side should also be analyzed into columns, one for each project component (like PCB). Total of these columns should be posted to their respective ledger accounts monthly.
- e) A ledger containing separate ledger accounts for each project component. The debit side of each ledger account should be analyzed into the expenditure categories defined in the IFAD Financing Agreement (Civil Works, Equipment, Goods and vehicles, Technical Assistance and Studies, Training and Workshops, Credit Line, PMU Management cost). The ledger accounts should be closed and trial balance prepared at the end of each month.
- f) Fixed asset register to record location, price and date of acquisition (or completion) of all buildings, vehicles, computers, printers, major equipment and furniture. There register should have a separate section for each type of fixed asset.

**Step Three:** Design the specific accounting books, including a chart of accounts and records to be maintained, the transactions to be recorded therein and the precise accounting entries on the occasion of each transaction.

**Step Four:** Incorporate the systemic accounting issues as agreed with IFAD and the government including the used accounting standards and valuation criteria. - In accordance with the project design document, all project accounts will be kept on a double entry system and the used accounting standards will be IPSAS Cash.

**Step Five:** Resolve accounting issues (if any) rising from the fact that the project is being implemented and expenditures are being incurred in different locations (HQ vs. field office). - The field office is to provide monthly reports and to HQ by electronically by using the internet connection or by hand carrying a USB-stick.

**Step Six:** Determine a tentative list of users and user rights for each staff member in line with their terms of reference in order to maintain a proper level of security.

**Step Seven:** In the light of steps 1-5 decide, select and procure the accounting software that is able to satisfy the needs of the project. The FM needs to have an answer to steps from 1 to 5 before approaching a software company.

**Step Eight:** Incorporate all decisions of the previous seven steps in an accounting manual. This manual will need to be reviewed and updated once a year.

### 3.2 The Selection of an Accounting Software

224. The accounting software of the Project is an important tool for collecting, analysing, storing, and disseminating information that is vital for decision making. In addition, it enhances transparency and accountability of the project activities, provides timely reports, helps detecting errors and shortfalls during project implementation and indicates necessary corrections.

When choosing an accounting software the FM should ensure that the software is able to meet the following criteria:

- Reflect project needs and be designed to provide the minimum financial information required by all interested parties (PPMO/CPMOs, LPA, IFAD) including the provision of accurate, timely, complete, reliable and consistent information and reports as well as fulfil the legal and regulatory requirements of MOF/MOA;
- The accounting software should be configured as a modular solution and the different modules should be suitably integrated. The software should contain the following modules: i) general ledger module, ii) accounting module incl. petty cash, iii) budget module, iv) fixed asset module, v) contract management and procurement management module. - The integration of budgeting module accounting module/system is important to enable comparison of the actual performance with budgets/targets (quarterly, annual, and cumulative for the Project).
- Ability to account under different bases of accounting (cash, modified accrual, accrual)
- Use the double-entry system of transactions;
- Have multi-currency and multi-lingual capabilities and reporting;
- Allow for multi-period and multi-user processing and reports;

- Able to output financial reports in a variety of formats including hard copy printouts, as an excel spread sheet and as an HTML file;
- Provide adequate documentation and complete audit trail to facilitate audit.
- Have security settings and different access levels for different users
- Be user friendly. Technical support, training and installation & configuration should be offered by the supplier and be easily accessible during project implementation.
- For procurement needs, the accounting software should capture and report on the following: Prior review thresholds; Procurement methods thresholds; Procurement reference; Activity description; Component (as per the description schedule of the Loan); Category (as per disbursement schedule); Estimated amount; Procurement method used; Prior/Post review; Date of issuance of advertisement; Bank no objection on bidding documents (Goods/works) or RFP (consultants); Date of bid (Goods/works) or RFP (consultants) submission; Bid opening date (goods/works) or Financial Proposal opening date(consultants); Bank No objection to evaluation report; Bank no objection to contract draft; Date of submission to the Fund of the Copy of signed contract; Contract related data (date of signature, date of completion, contract amount, contract amendments and payments terms).

225. In the installation phase of the accounting system, FM will need to determine the following:

- access level and different user rights e.g. (i) active use for inputting/editing of data for different modules; (ii) read-only use; or (iii) no-access.
- Information storage and back-up
- Design of the chart of accounts and the detailed list ledger accounts required to account for transactions under the project.
- Design the detailed formats of various accounting books, records, and statements (e.g., cash and bank books, journals, various ledgers, trial balance, voucher formats, etc.).



A sample of a TORs for an accounting software is provided in annex IV

### 3.3 Accounting Manual

226. The Accounting Manual is an integral part of the financial management manual of the project. It is to be prepared by the FM and the DFM and will become effective after it has been approved by the Steering Committee of the project. The accounting manual is to be reviewed and updated once a year.

227. When developing the accounting manual, it is essential that the FM and the DFM are familiar with the following:

- National legislation and IFAD Financing agreement including the reporting requirements

- International Public Sector Accounting Standards (IPAS)- accrual basis
- The features and user manual of the procured accounting software.

228. The accounting manual should as a minimum address the following subtopics:

Used accounting standards:

International Public Sector Accounting Standards (IPAS)- accrual basis

Chart of Accounts

The Chart of Accounts is used to: (i) capture the financial data under the appropriate headings and (ii) classify and group financial data for the various financial reports. The structure of the Chart of Accounts caters data to be captured by: (i) the Project components, sub-components, activities (ii) expenditure items under each component and sub-component, (iii) The IFAD expenditures categories for the Project, and (iv) sources of funding. Expenditure categories may also be recorded by using “cost centre” functionality which is commonly available in accounting software’s.

The structure of the Chart of Accounts should conform closely to the project cost tables (as presented in the project design report) to enable comparison of actual project costs during implementation with those estimated during the project preparation.

Budgeting and budgetary control

The project budget will be recorded in the budget module of the accounting software. Budgeting is discussed more in detail in section 2 of this manual

**Recording and processing of transactions**

229. Whenever a transaction takes place under the Project, it should be recorded and processed using the accounting software that meets the project’s specific accounting requirements. Processing of payments is discussed in detail in section 8 of this manual.

The recording of transactions under the Project follows the Cash basis of accounting with allows for the recognition of cash inflows in the period they are received and the reporting of expenses in the period those expenditures are paid.

Individual records of transactions are treated as source documents. For the project accounting purposes, the following source documents are considered:

- Purchase orders/ Contracts
- Purchase invoices
- Service invoices
- Consultants/engineers’ reports

230. All transactions occurred should be registered in the accounting software in accordance with the date of occurrence and under the form of journals. The journal should contain sufficient and detailed information about the date of the transaction, its type, amount and reference to the source document. All the transactions should be entered on the accounting software using the principle of double entry, which means that each transaction

should be recorded twice, once on the debit side of the transaction and once on the credit side of the transaction. The accounting software will automatically process those transactions and post them to the ledger accounts, which are accounts where all transactions of similar type are recorded. This processing of transactions also allows for the production of timely reports.

231. The DFM should reconcile the project accounts on a monthly basis. In case certain adjustments of entries in the accounting process have to be made, the DFM should produce a memorandum in which the reasons and the way in which the adjustment has been made is explained. The memorandum will be authorized by the PD after being cleared by the FM.

#### Petty cash management ( not applicable if the project will not use petty cash)

The DFM will manage and periodically reconcile the petty cash account. The petty cash account is discussed more in detail in the section 6.2 of this manual.

#### Bank account reconciliations

The DFM will need to perform monthly bank account reconciliations between the different accounts. The reconciliation is discussed more in detail in section 6.3 of this manual.

#### Withdrawal of funds

The DFM will be responsible for preparing withdrawal applications to be submitted to IFAD. The necessary procedures are explained in section 7 of this manual and in the IFAD disbursement Handbook.

#### Financial reporting:

The DFM is not only in charge for recording the financial transactions on a daily basis but also for summing up the expenditures made under each component and sub-component and for each activity under those and posting the data on accounting/financial reports on a periodic basis during the reporting periods specified in the Letter to the Borrower and in the Financing Agreement. The DFM will also need to keep track and report on the availability of project funds in the different accounts (Designated accounts, project accounts and petty cash) as well as the commitments made by the PMU. The produced reports will be approved by the PD after being cleared by the FM. The different financial reports are discussed more in detail in section 9 of this manual.

#### Fixed asset register

The DFM needs to maintain a fixed asset register recording all fixed assets in the fixed asset module of the accounting software. Fixed asset management is discussed more in detail in section 8 of this manual.

#### Period for which records are to be kept

The DFM needs to file the original records in an organised way to be maintained by the PMU/LPA for a minimum 10 years after the project completion. Record management is discussed more in detail in section 4 of this manual.

#### Access Levels

The access to the accounting system should be governed by the privileged metrics defining the levels of access by different users: (i) active use for inputting/editing of data; (ii) read-only use; or (iii) no-access. This would allow a separated and controlled access to the Accounting module (i.e. Journal recording, posting to the General Ledger). Each accounting transaction records the user's ID, preventing unauthorized access to the system and an adequate level of protection against the input of false data or the destruction of the records. At the same time, the data-sharing nature of the system involves a strict coordination and active data exchange among its

various users (primarily the PMU). In this respect the system should ensure the reliability in information storage and fast data processing.

#### Revision of accounting manual

The accounting manual is to be reviewed and updated once a year.

### **4.0 Records Management**

232. Financial records must be created and preserved for every financial transaction performed under the project. Financial records are defined as any financial information including written, computer data, internal forms, e-mails, or any other form of storage information originated from the PMU such as internal forms, journal vouchers financial reports (Monthly & quarterly) copies of checks and withdrawal applications etc. or received by the PMU such as supplier invoices and receipts, bank statements, IFAD documents etc. within the framework of the project's official activities. The objective of this procedure is to preserve the financial records and files for further official use by the LPA, for financial audit and for review by the Fund during the supervision missions. The projects financial records are the property of the LPA/MoF and cannot be removed or destroyed.



It is important to note that in accordance with the IFAD general conditions, the recipient/borrower has to maintain the original records for a minimum 10 years after the project completion.

#### **4.1 Filing of the financial records**

233. The DFM is responsible for filing the financial records created or received by the project. To fulfil this responsibility, the DFM must maintain chronological files in which the financial documents have to be filed for future reference. Filing should be performed daily to prevent the accumulation of papers and to ensure that the financial records are maintained in an up-to-date manner at all times. Each financial record should be filed under its code in a chronological order, with a sequential number assigned to every document. Any kind of additions or amendments to the financial document should be filed in a chronological order immediately following the principal document.

#### **4.2 Storage of financial records**

234. The financial records of the project should be stored in the PMU office, at the LPA for a minimum 10 years after the project completion. The data should be stored within the accounting software, as paper copies, as scanned copies and as computer disc copies. The Financial Officer should allocate an appropriate storage area for the financial records in paper format and maintain them in locked cabinets, safe from water and fire, to which access is controlled and limited. The Financial Officer should also classify the financial records as "Confidential", or "General". All important correspondences should be filed.

#### **4.3 Archiving of financial records**

235. In order to prevent an unnecessary pile-up of files in a limited office space, the FM should make sure that the financial records are archived on a regularly basis. Once a year, the FM should make sure that the completed or inactive files are archived in a

manner that will allow for easy retrieval of the files in case they are required at some future date.

#### 4.4 Back- up procedures

236. To avoid the loss or damage of financial data, the information should be kept in two copies: i) at the computer server of the PMU/LPA and ii) in the locked cabinets of the PMU office. Only the PD, the FM and the DFM are allowed to access the financial records without authorization. The access of external persons is prohibited except for the auditors & IFAD staff.

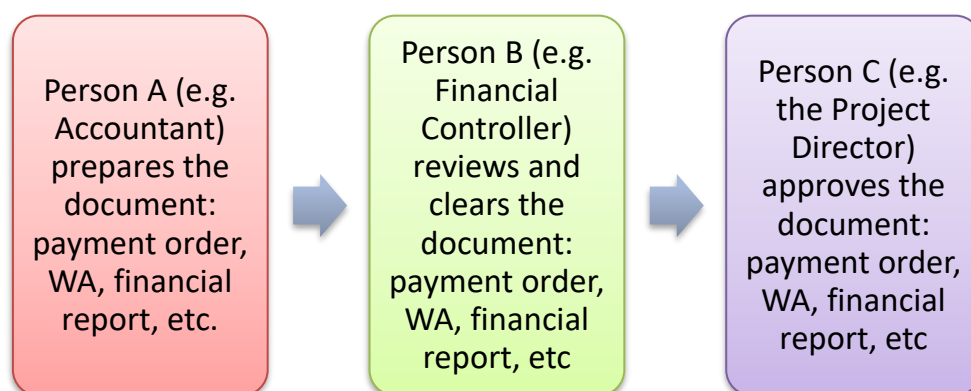
### 5.0 Internal controls

237. Designing, Installing, and maintaining a system of internal financial control is an integral part of the Financial management function. Internal financial controls aim to ensure) efficiency, ii) reliability, of financial reports and iii) compliance with applicable laws and regulations including the conditions set forth in the financing agreement. The key features of the internal control system are summarised below:

- Segregation of duties;
- Authorization;
- Reconciliations and checks;
- Restricted access; and
- Monitoring and review.

#### 5.1 Segregation of duties

238. An important element in any control system is the separation of those duties which would, if combined, enable one individual to record and process a complete transaction. It is the FM's responsibility to ensure that the following duties are segregated under the project: preparation, authorisation, execution, custody, recording and the and operation of systems.



*(Chart 7: Example of Segregation of duties)*



## 5.2. Authorization

239. Authorization controls require the certification that a transaction or event is acceptable for further processing. Several types of authorization are in effect at the project, mainly in the procurement cycle, payment cycle, bank and cash management cycle including reconciliation. The FM should ensure that the authorizations of PMU staff ensure efficient implementation while keeping the risk as low as possible. The authorization of project staff should be in line with their respective job descriptions.

## 5.3 Reconciliations and Checks

240. Reconciliations between independent, corresponding sources of data are a key control for identifying errors and discrepancies in balances. The FM should perform the following reconciliations each month:

- Bank reconciliation
- Reconciliation between system and special account receipts and payments statement
- Any reconciling or balancing amounts should be promptly cleared. Unusual or long outstanding reconciling items must be brought to the attention of the financial officer. The financial officer will review and sign all reconciliations as evidence of his review.

In addition physical checks should be performed on assets held and on petty cash.

## 5.4 Restricted Access

241. All data, records and assets should be kept in a physically secure environment. This should cover safe keeping of finance records such as official order forms and bank details. In addition, any petty cash should be kept securely. Financial data and other records should also be protected in the form of back up procedures. All work should be regularly backed up and copy records stored securely off site

## 5.5 Monitoring and Review

242. As detailed in financial reporting section 9, periodic financial reports must be prepared and submitted to the fund. For the purposes of internal control the same information should be prepared and monitored by the PD on a monthly/quarterly basis. The reports should be prepared on a timely basis and should normally be available for distribution two weeks after the end of the reporting period to which they relate. The periodic reports should be reviewed by the finance officer and the PD as a minimum. Where necessary, corrective action should be taken to ensure the authorized budget and procurement plan is not exceeded.

## **6.0 Flow of funds, cash and bank account management**

243. The IFAD **Loan** will be disbursed over project duration of **xx** years. The Loan Closing Date is the **xx** anniversary of the date when the project was declared effective. IFAD disbursement procedures and the accompanied forms are outlined in detail in the Letter to the Borrower and the Disbursement handbook which should be read in parallel with this manual. Please refer to section 7 of this manual for more detailed information on the IFAD Disbursement procedures.

## 6.1 Flow of Funds, opening of special accounts and project accounts

244. In accordance with the section 4.04(d) of the General Conditions, immediately after entry into force of the Financing Agreement, there shall be a Designated Account (DA) for the IFAD Loan denominated in the currency of the loan (USD/EURO) to be opened, through which IFAD funding shall be channelled. The DA is to be set up at and managed by DOF. DOF will be directly responsible for the management, maintenance and reconciliation of the DA activities. Supporting documents required for IFAD disbursements will be prepared and submitted by CPMOs through PPMO for review and verification before sending to DOF for further disbursement processing.

245. The PPMO and county CPMOs are responsible for reviewing the Disbursement Request as well as the supporting documentation required for IFAD disbursements. Disbursement Requests will be prepared and submitted by CPMOs to PPMOs for review and verification before sending the Disbursement Request to DOF for further disbursement processing. Once approved, project resources will be channeled directly from provincial level to county level .

In accordance with Section 3.1 of the LDH, the Designated Account will be administered following Imprest Account arrangements. Advances from this Financing must be segregated from other funds for the Project .

**246. Additional general conditions precedent to withdrawal:** The following are designated as additional general conditions precedent to withdrawal

(a) The Provincial Project Management Office (PPMO”) and at least one County PMO, the respective key Project staff shall have been selected;

(b) The Borrower, through the Lead Project Agency, shall have submitted, and the Fund shall have received, an official document confirming the availability of adequate counterpart funds for the first Project Year;

(c) The Designated Account shall have been duly opened : Documentation evidencing the opening of the Designated Account, with details of the names and titles of the persons authorized to operate the DA, must reach IFAD before withdrawal from the loan account can begin.

(d) the designated representative a letter designating the names of officials authorized to sign withdrawal applications which includes their authenticated specimen signature(s). The project is eligible and authorised to use the IFAD Client Portal (ICP), the applicable form is included in LTB.

(e) A draft PIM shall have been prepared and is acceptable to the Fund and

(f) A computerized accounting system acceptable to the Fund shall have been identified and selected by the Provincial PMO.

247. Upon fulfilment of conditions precedent to withdrawal and the Borrower’s request, the Fund will make one (or more) withdrawal(s) of up to the ceiling USD'/EURO xxxx million for the loan ( will determine after the project costs are provided) , and deposit such amount(s) into the Designated Account; DOF shall submit withdrawal applications to replenish the Designated Account from time to time, based on expenditures, provided that the amount claimed is not less than 20% of the initial deposit. All withdrawals must be in line with projected expenditures as detailed in the approved AWPBs.

The following are the SOE thresholds that apply for withdrawal application under procedure (i) "Advance Withdrawal" and under procedure (iii) "Reimbursement": USD 300,000 for all expenditures categories.

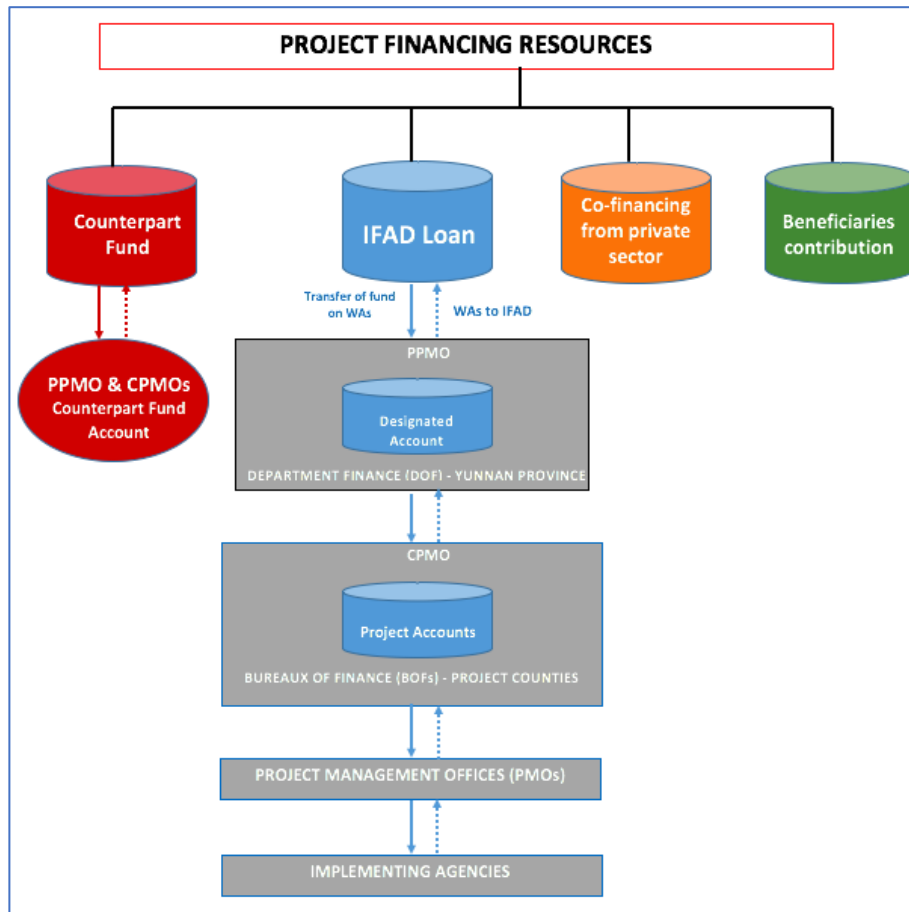
248. PMOs and IAs shall maintain Implementation ledger Accounts in local currency in the Treasury System or commercial banks to receive the proceeds of the IFAD financing and/or the counterpart funding respectively. The County PMOs and BOFs will ensure that funds received at each level are transferred without delay. Separate bookkeeping is maintained by each of the IAs where Project activities will be implemented.
249. Y2RDP will pilot a result-based Lending/disbursement (RBL) in selected sub-components. Replication at larger scale could be considered at mid-term on the basis of the positive results and lessons generated during implementation. The disbursement under RBL will be conditional to the achievement of agreed and independently verifiable targets or milestones. Detailed disbursement linked indicators need to be identified and verified by an assigned independent agency following agreed verification protocols.
250. FM procedures for the annual audit, verification on missions are still as part of the annual process. Project needs to ensure that verification on the funds used for the intended purpose, for efficiency, social equity, basically value added principles.

In accordance with Section 3.1 of the LDH, the Designated Account will be administered following Imprest Account arrangements. Advances from this Financing must be segregated from other funds for the Project .

251. **Retroactive financing** As an exception to the General Conditions for Agricultural Development Financing, IFAD will be seeking IFAD Executive Board approval that for retroactive financing from the loan up to a maximum of 10% of the total IFAD financing ( i.e US\$7.5 million) for eligible expenditures incurred as from the date which the design document got approval by Quality assurance group to the date of the entry in force of the financing agreement. Eligible expenditures for retroactive financing are considered those incurred to finance the start-up and preparation project activities such as : (i) purchase of essential items (including equipment and procurement of MIS system) for the PMOs; (ii) recruitment of project staff; (iii) costs related to tendering, selection, and recruitment of service providers; (iv) costs related to the finalization of the program implementation manual, customization of accounting software to fit IFAD requirement and license fees, start-up trainings and workshops; (v) establishment of the M&E system, including carrying-out of the baseline survey and development of MIS; (vi) exposure visits for knowledge and experiences sharing; (vii) surveys and feasibility studies; (viii) training and technical assistance for cooperatives, including recruitment of service providers, cooperative support field officers, technical advisors for business plans development, brokers/facilitators for linkages with supermarkets; and value-chain officers and monitoring & evaluation officers; and (ix) business plans.

252. **Financing of taxes:** In order to improve the efficiency of funds flow and better support project implementation, IFAD's funds may be used to finance taxes that are not "excessive, discriminatory or otherwise unreasonable". In case the Government intends to

use IFAD financing to finance taxes that is impossible or impractical to exempt, the Government would need to formalize such request in writing. The amount of IFAD's financing to be used to finance taxes will be further confirmed upon finalisation of project costs and taxes.



(Chart 8: Flow of funds of the project)

### 6.3 Bank reconciliation

253.

The FM must perform monthly reconciliations between the designated account(s) balance recorded on bank statements and local cash book balance, recorded on the system. Performance of the monthly reconciliation should follow the following steps:

- i) Designate Account balance recorded on bank statement on reconciliation date is taken as starting figure;
- ii) Add reimbursements/replenishments/other deposits that have been processed and are due to designated account, but not yet recorded on bank statements;
- iii) Subtract undelivered cheques. Any long-outstanding cheques should be identified and investigated

- iv) Following these adjustments, the bank statement and local finance system cash totals should agree. Any remaining difference should be reported and investigated;
- v) The completed bank reconciliation statement should be signed by the FM; and
- vi) The reconciliation should be reviewed and countersigned by independent finance team member who understands the reconciliation process.

Periodic designated account reconciliations will be submitted IFAD as part of periodic progress report as outlined in section 9.



Please refer to annex XII (also form 104 of the Disbursement handbook) for a standard Designated Account Reconciliation Statement

## **7.0 IFAD Disbursement Procedures**

254. The IFAD disbursement procedures are governed by the Letter to the Borrower (LTB) and the Disbursement Handbook, which will be sent the PMU/LPA upon the project effectiveness. The handbook is also available on the IFAD site <http://www.ifad.org/pub/basic/index.htm>.

As stated in the LTB and the LDH, four standard disbursement procedures may be used for withdrawal of financing:

### **Procedure I**

255. Advance withdrawal (using imprest accounts or revolving funds with replenishment to a bank account(s) designated to receive financing resources in advance). This modality is used to advance and/or replenish funds to a bank account as designated by the borrower. The Fund may place a limit on the amount to be advanced and/or replenished. Relevant details on the modality – which is project specific – are agreed between the borrower and the Fund, and detailed in the LTB.

### **Procedure II**

Direct payment. This modality is used for eligible project expenditures to be paid directly by IFAD, generally for large contracts, to suppliers, contractors, consultants or third parties, as authorized by

### **Procedure III**

Reimbursement. This is applicable when eligible project expenditures, reimbursable under the financing, have been pre-financed by the borrower. Such reimbursements are expected to be claimed no later than 90 calendar days from the date of payment by the borrower.

## **7.1 Evidence of Authority to Sign Withdrawal Applications**

256. The Fund requires the borrower's (or recipient's) representative, as designated in the financing agreement, to furnish satisfactory evidence of the authority and authenticated specimen signatures of the individuals who will sign WAs on behalf of the borrower. This evidence must reach the Fund before the first WA is presented by the borrower and should be the original (photocopies, facsimiles or other means of transmission are not acceptable). A sample template is provided in annex 1 of the disbursement handbook. Each WA should be signed by such duly authorized individuals, and the Fund must be notified of any change in the signatories authorized to withdraw funds from the loan/grant account.

The Fund must also be notified of the designated signatories for operating any designated and/or programme or other accounts, including changes thereto, whether or not these authorized signatories are included in the financing agreement. Such changes, as effected during the life of the project, must be communicated promptly to the Fund. The borrower, guided by the sample in annex 1 of the disbursement handbook, should provide the names and specimen signatures of the newly appointed signatories and include the date when such change is to take effect. The original of such changed documentary evidence is to be provided to the Fund.

## **7.2 The Designated Account**

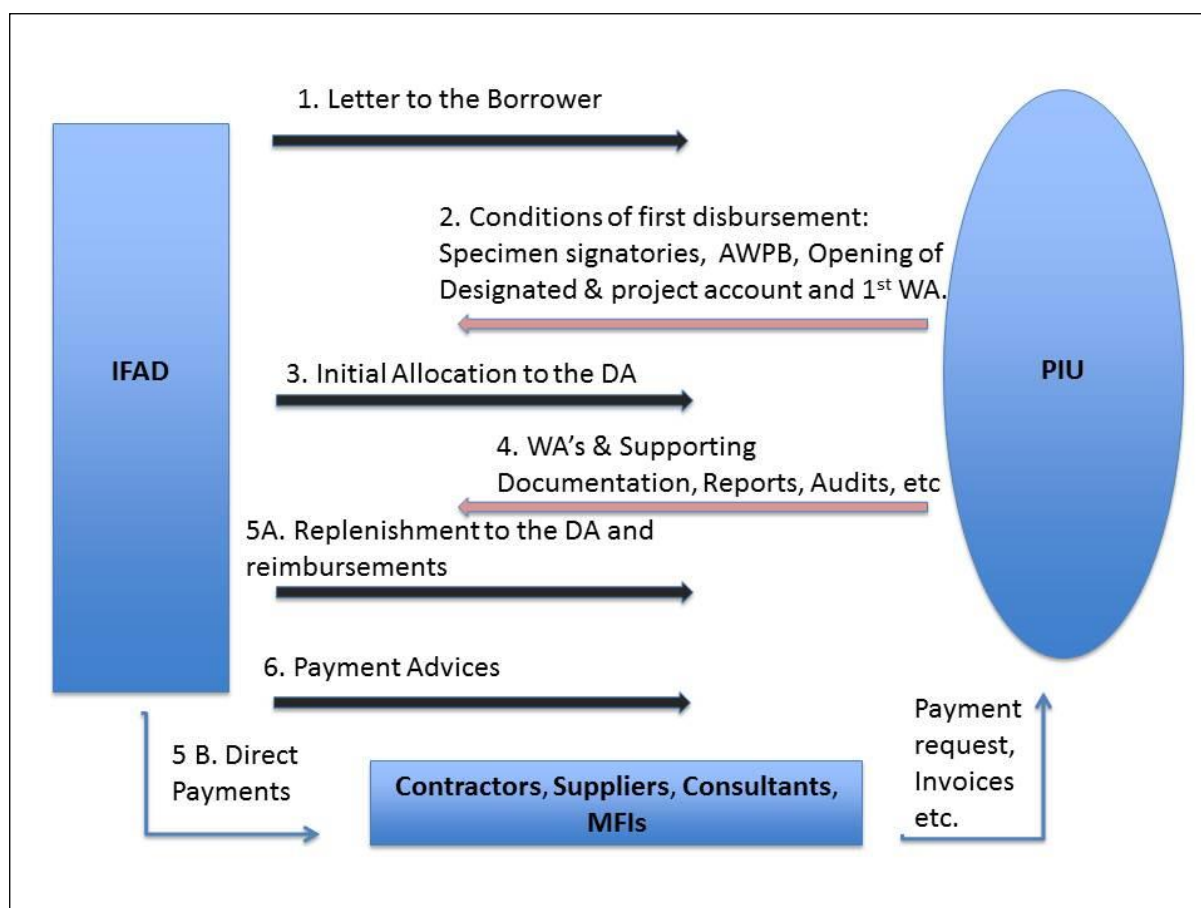
257. The flow of funds for the Project starts with the opening of the project Designated Account (DA), denominated in the currency of the loan (USD/EURO) through which IFAD funding shall be channelled. The DA is to be set up at and managed by DOF. The FM is responsible for opening and managing the Designated Account including receiving on a monthly basis the DA Statement of Account from the bank and reconciling it against PPMO records. Disbursements from the DA should be recorded in the PPMO account records as of the date they are made, that is when the checks are issued.

## **7.3 Withdrawal of Financing Proceeds and Supporting Documentation**

258. Based on the Letter to the Borrower and the Disbursement Handbook, the withdrawal of all Project financing proceeds (direct payments to contractors from IFAD, and to reimbursements and replenishments to the designated account) is done through the use of Withdrawal Applications (WA) -form 100 in the disbursement handbook.

259. It is the FMs and the DFM's responsibility to make sure that the WAs are correctly prepared, the documentation is complete and submitted to IFAD in a timely manner. The necessary forms and supporting documentation to be attached to the WA (form 100) are outlined in detail for each disbursement method in section 3 of the Disbursement Handbook

260. Upon Project entry into force and after sending to IFAD, the letter designating the two officials authorized to sign Withdrawal Applications (WA) with their names and specimen signatures, the FM will prepare the first Withdrawal application together with the necessary supporting documentation requesting the IFAD to transfer an initial advance to the designated account up to a ceiling of USD xxxxxxxxxxxxxx. Disbursement from the DA may then start for eligible expenditures under the Project.



(Chart 10: Withdrawal of IFAD Funds)

261. For the subsequent WAs, prepared by the DFM, the financial must ensure that the right supporting documentation is attached to the WAs before providing clearance. When submitted supporting documentation to IFAD should be copies the while the original documentation is to be retained by the PMU/LPA and securely located to enable inspection by IFAD representatives and auditors for a period of at least 10 after the project completion date in accordance with the IFAD General conditions.

262. As specified in chapter 3 of the IFAD disbursement handbook, for all payments (Works, goods, consultants' and other services) the following supporting documentation is required:

- The signed contract or confirmed purchase order (Showing the specified amount that is due paid. If this has been sent earlier to the fund a reference to the accompanying letter or document should be given in a footnote to the relevant Application summary Sheet –form 100)
- The bank guarantee for advance payment, as specified in the contract documents
- The bank guarantee for performance, as specified in the contract documents
- Copies of communications sent by the IFAD country programme manager to the lead project agency (LPA) providing the IFAD's no objection (post or Prior) to the contract award, and
- Evidence of payment.

For payments of goods, in addition to a-e:

- Supplier's invoice duly certified for payment by the PD – specifying the goods, their quantities and prices



- g) Bills of lading or similar documents; and
- h) As appropriate, the certificate of delivery (to include condition of goods to delivery)

For Payments of Consultants' and other services, in addition to a-e:

- i) The supplier's or consultant's claim, duly certified for payment by the PD and showing sufficient detail. If such Services relate to the importation of goods (for example, freight and insurance payments), adequate reference should be given to enable IFAD to relate each of these items to specific goods whose cost has been or is to be financed by the financing closing date; and
- j) As appropriate, a certificate of delivery of satisfactory services

For progress and retention payments of civil works in addition a-e:

- k) the claim if the contractor, including a financial progress report, stating the work performed and the amount due;
- l) A certificate signed by the project consultants or owner's representative, if any, or by the borrower's chief engineering officer or resident supervising engineer assigned to the project, to the effect that the work performed is satisfactory and the payment claimed is due in accordance with the terms of the contract, and
- m) A copy of the contract payment monitoring form signed in original by the certifying officer.

263. Together with each WA received for replenishment to the designated account, the project must submit the designated account reconciliation Statement, prepared by the DFM for the same reporting period in which the eligible expenditures are being claimed. This form needs to be accompanied by bank statements of the designated account and that of any other operating, district, project accounts ensuring that the closing bank balances for all these accounts correspond to the balances at the end of the same reporting period as indicated in the WA period.

In order to minimize transaction costs, the FM must make sure that withdrawals from the loan and/or grant account shall be made in amounts of no less than US\$ **xxxxxxx** or its equivalent, or such other amount as IFAD may designate in an advice to the borrower from time to time.

#### **7.4 Use of Statements of Expenditures (SOE) and SEO Thresholds**

264. The statement of expenditure (SOE) procedure is normally used for those expenditure types where it is impracticable or unduly burdensome to require submission of full documentation. However, the supporting documentations for the Statements Of Expenditures must be maintained by the PMO/LPA and made available for review by IFAD supervision missions upon request and to external auditors during their annual review of project accounts to enable issuing of an independent audit opinion.

Details regarding the use of the Statement of Expenditure (SOE) are provided in section 4 of the disbursement handbook. In accordance with the Letter to the Borrower the SOE threshold applies for all project expenditures up to a threshold of USD 300 000.

The SOE thresholds above may be amended by the Fund during the course of project implementation.

### **8.0 Processing of payments**

265. The Project will mainly finance, small works (rural roads, irrigation infrastructure etc.), consultants' services (design, supervision and studies), goods (office supplies, computers, cars), microfinance in the form of grants and credit as well as PMU operating costs (salaries, travel expenditures etc.). Last section outlined how the PMU will receive funds from IFAD to cover the incurred expenditures related. This section will outline the



different steps involved in the outflow of funds from the PMU to the Contractors, Suppliers, and Consultants etc. The procurement process of these items, including the hiring process for consultants is detailed in the project procurement manual.

### 8.1 General instructions

266. For all payments, the FM should ensure that the following steps are performed:

- i) Preparation of Payment request voucher. A payment request voucher should be prepared for each payment.
- ii) Validation of invoice. The following validation checks should be performed by the FM on invoice:
  - Invoice arithmetically correct; and
  - Quantity and price recorded on invoice should be checked back to contract, order, certification of completion/delivery

If there is any discrepancy identified, it should be raised with the vendor prior to proceeding with invoice processing,

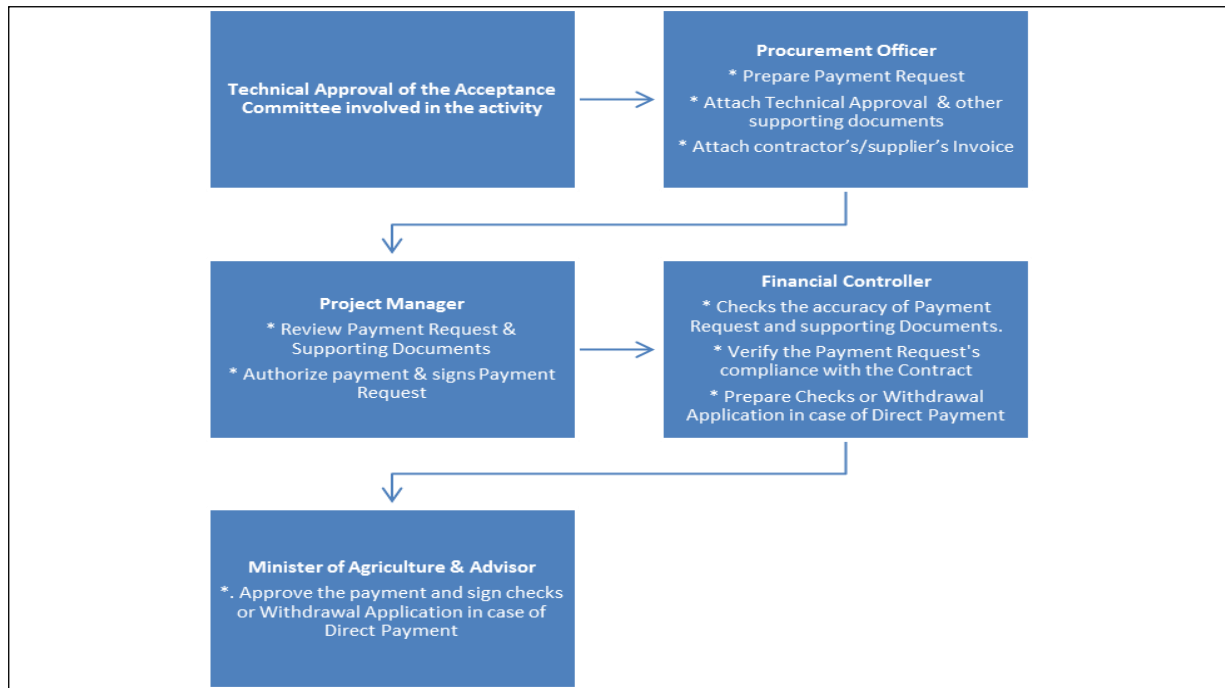
- iii) Supporting documentation: the following documents should be attached to the payment voucher to support validation:
  - Copy of invoice;
  - Copy of letter of approval from technical committee or the specialist, minister;
  - Copy of purchase order, goods received note and contract if applicable; and
  - Copy of required guarantees

All vouchers are authorized by the Minister after signatures of the FM, PD the and Director General of the LPA

### 8.2 Processing of payments for Civil Works and Goods

**267. Project will incur expenditures related to works under Component 1; Climate sensitive investments and capacity building in the form of rural roads, irrigation infrastructure etc. and goods under components 01, Sub-component 1.2. Investing in climate resilient infrastructure 3 (Project Management) in the form of fixed assets.**

The Expenditure Cycle for works and goods is detailed in the following chart:



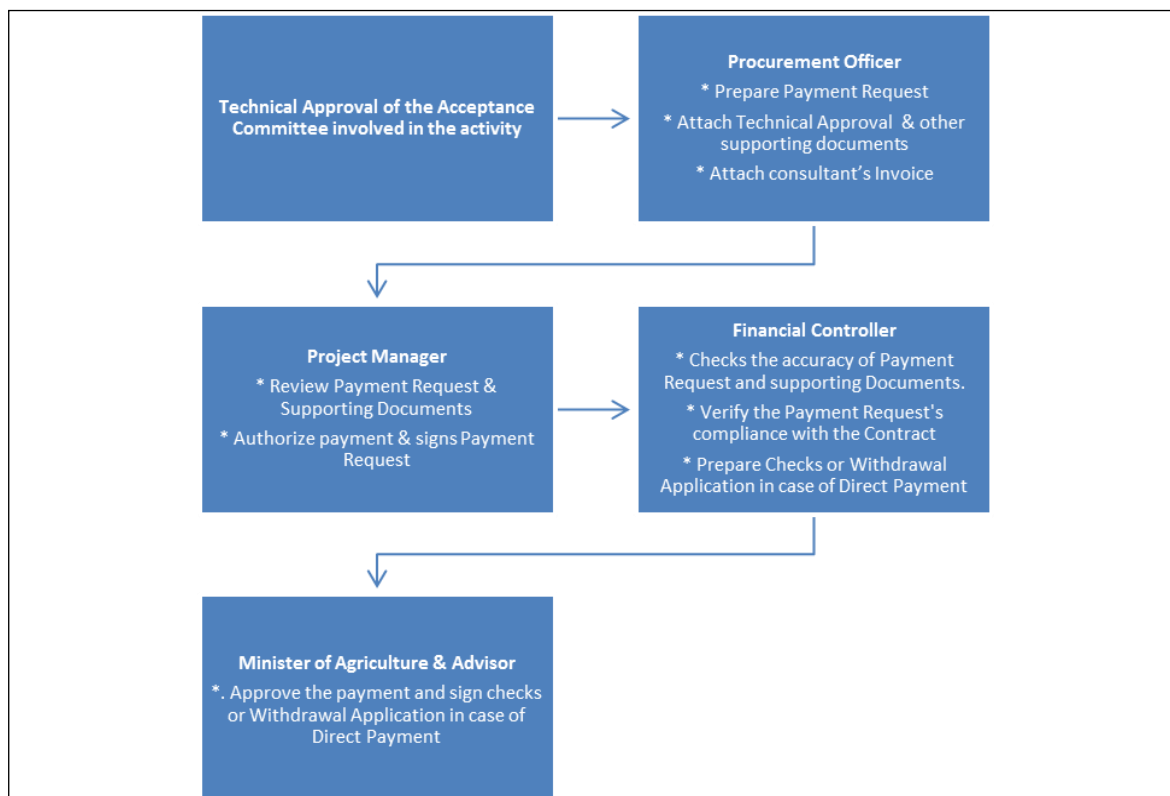
*(Chart 12: Processing of payments for Works and Goods)*

268. Before releasing the payment to the contractor or supplier, the FM will make sure the following processes are followed:

- A. The quantity of goods is checked back to the purchase order and to contract and bid award letter (if applicable). The committee members, assigned by steering committee/LPA after being assured that quality of goods is compliant with the contract conditions deliver an accepted delivery sheet or a compliant report to the Procurement Officer. The FM will ensure that the Procurement Officer provides all the necessary documents including the invoice and the acceptance/compliant report before proceeding with the payment.
- B. The condition of the goods are reviewed for any damage or impairments. Damaged goods are to be identified and returned to the supplier/replaced. If any goods are rejected or returned to the supplier because they are not as ordered or are of sub-standard quality, the FM should be notified. FM must keep a central record of all goods returned to suppliers and maintain a separate record of all goods and equipment delivered by suppliers by contracts funded by the IFAD financing.
- C. All the works, are to be monitored by an architect or engineer. It is good practise to assign the architect/engineer responsible for the design to monitor and assess the works of the contractor. The architect or engineer is responsible for sending compliant reports/certificate of completion to the Procurement Officer in the PMU which includes the percentage of completion of the construction and if the construction materials are compliant with the contract conditions and specifications. A request for payment is prepared by the Procurement Officer to be send to the FM. The FM will ensure that the payment request includes all the necessary documents including the invoice and the compliant reports/certificate of completion before proceeding with the payment to the contractor for the completed phase.

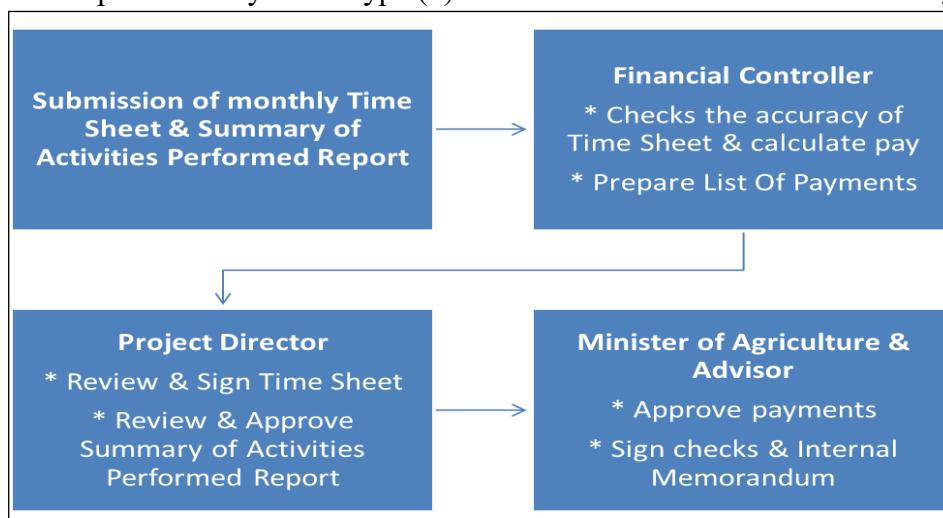
### 8.3 Processing of payments for Consultants' Services

269. Under the Project there are two types of consultants' services; a) Consultants with a lump sum contract, and b) Consultants with a time based contract. For type (a) consultants, payments will be made against the delivery of outputs as detailed in their contracts. For type (b) consultants, payments will be made against the submission of a time sheet and a summary of activities performed. PMU members will be paid against the submission of a monthly time sheet. The Expenditure Cycle for type (a) consultants is detailed in the following chart:



*(Chart 13: Processing of Payments for consultants - type A)*

The Expenditure Cycle for type (b) consultants is detailed in the following chart:



*(Chart 14: Processing of Payments for consultants - type B)*

270. Before releasing the payment to the consultant (firms), the FM will undertake the following steps:

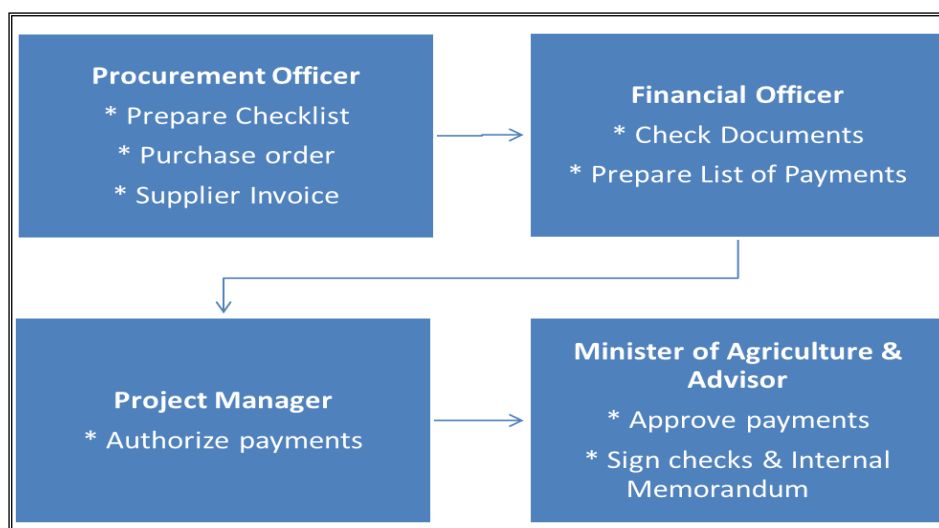
- A) The consulting services reports are monitored by technical committees, assigned by the steering committee/LPA for the purpose of evaluating the deliverables submitted by the consultant (firms). Therefore the FM will ensure that no payment to the consultant is prepared unless an approved committee report or letter of approval received from the committee assures that the deliverable submitted by the consultant is compliant with the contract conditions, these documents should be passed first through the Procurement Officer.
- B) The consulting services reports are monitored by the specialist responsible for the activity for the purpose of evaluating the deliverables submitted by the consultant (Individual Consultant). Therefore the FM will ensure that no payment to the consultant is prepared unless an approved report received from the specialist assures that this report is compliant with the contract terms and conditions, these documents should be passed first through the procurement officer.

All Supporting Documents and Internal Forms must be retained at the PMU Office in the LPA and must be maintained and archived in accordance with the maintenance of records section of this manual.

#### **8.4 Processing of Payments for Office Supplies and Other Operating Costs**

271. The payment for office supplies and operating cost will be against the preparation by the procurement officer of a serially numbered checklist evidencing the receipt of office supplies, and the presentation of the Purchase order and supplier invoice. The FM will compare the information on the checklist to the purchase order and supplier invoice, then sign the checklist. The payment for services is against the presentation by the supplier performing the service of a service invoice.

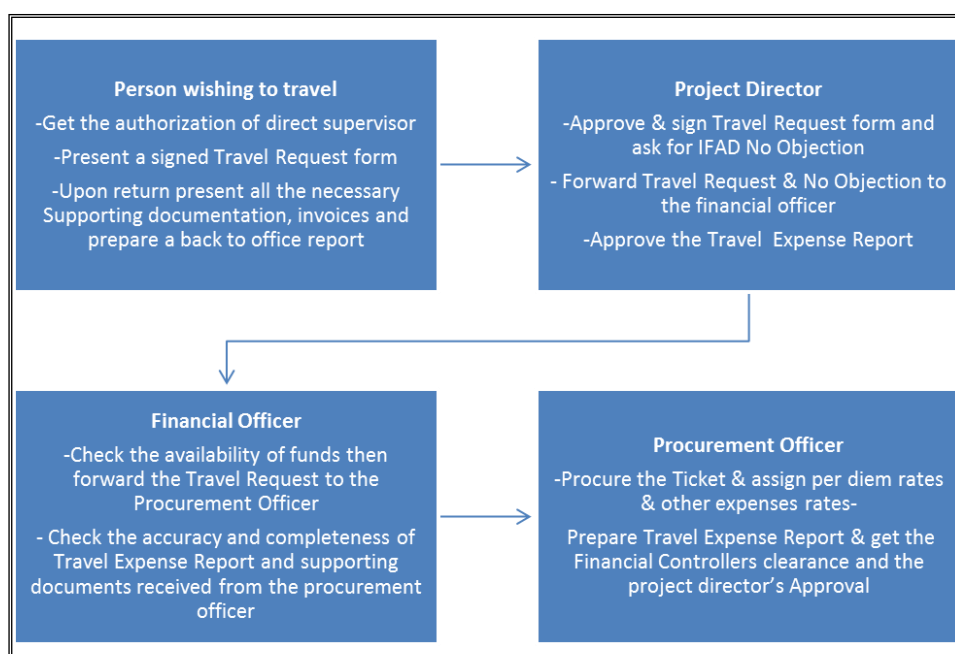
At the end of each month, the FM will prepare a serially numbered "List of Payments" that detail all the incurred costs for office supplies and operating costs during the month and present it to the PD for review and authorization. After the PD's authorization of the payments, the FM will prepare the checks and send them to the PD who will prepare an "Internal Memorandum" detailing the check numbers, amounts, suppliers and explanation of payments. The "Internal Memorandum" and the checks will be presented to the Minister of Finance and his Advisor to approve the payments and sign the checks. The following chart summarizes the process detailed above:



(Chart 15: Processing of Payments for Office supplies and operating costs)

## 8.6 Travel Arrangements & Processing of Travel Related Expenditures

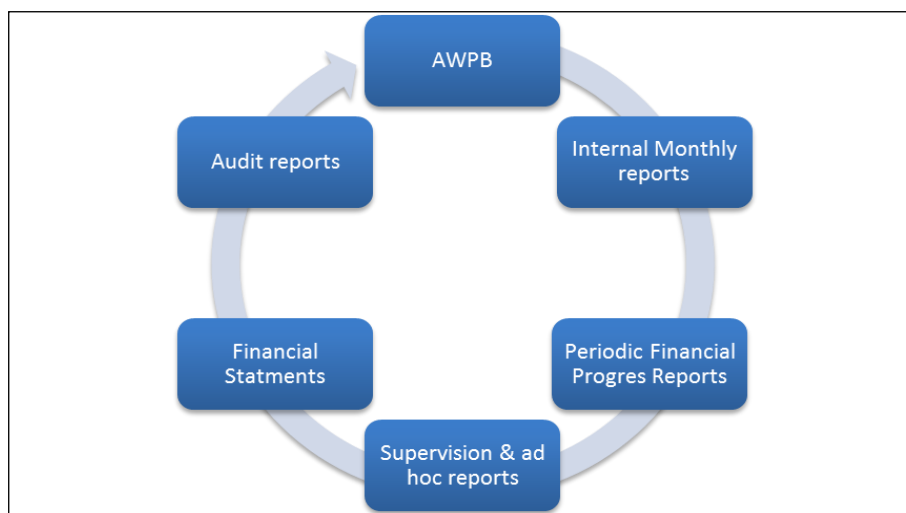
272. Under the Project there is a budget allocated for workshops and study tours as well as staff training courses. The following chart summarizes the transaction cycle that should be followed to get approval for the travel and the expenditures related to it:



(Chart 16: Processing of Payments for Travel and Training)

## 9.0 Financial Reporting

273. Periodic financial progress reports are a formal requirement of the IFAD Financing Agreement. Sufficient information must be made available about what money is spent on, how much is spent and what the results are. The major financial reports include the following: AWPB, monthly financial reports, periodic financial progress reports, supervision reports, annual financial statements and audit reports.



*(Chart 17: Project Financial reporting cycle)*

In addition to the AWPB, supervision reports and audit reports (discussed in detail in section 2, 11 and 12 of this manual), the FM will ensure that the following financial reports are prepared in a timely manner and submitted to IFAD in due time (applicable to reports 2-4 only):

1. Monthly financial reports for PPMO internal use only. These reports will be verified during IFAD supervision missions.
2. Periodic (semi-annual) progress reports, to be provided to IFAD within 45 days after the reporting period
3. Annual financial statements, to be provided to IFAD within 4 months after the end of the project fiscal year.
4. Annual financial statements audited by an independent auditor acceptable to the Fund and in accordance with internationally accepted auditing standards and terms of reference cleared by IFAD, to be provided to IFAD within 6 months after the project fiscal year (explained in detail in section 11).

## 9.1 Monthly Reports

274. In accordance with best practises, the FM will prepare monthly financial reports based on the accounting system to aid management decision and control. The monthly management accounts will include the following.

- Monthly Budget Execution Report, summarising the budget-actual comparison of the expenditures incurred, component-wise and category-wise. The report will also include a list of commitments entered into and still to be paid, by component and by category.
- Bank Reconciliation Statement (please refer to annex XIII or form 104 of the Disbursement handbook)
- Petty Cash reconciliation form



Please see a sample of the above mentioned report in annex V

## 9.2 Periodic Progress Reports

275. Semi-annual progress reports should be submitted to IFAD no later than 45 days after the end of reporting period during the programme implementation period.

The importance of the periodic progress reports lies in the fact that they provide IFAD with sufficient information to determine whether the funds disbursed to the project are being used as intended, the project implementation is on track and the budgeted costs will not be exceeded. The financial information should be linked to the information on physical progress and procurement to give assurance that the financial and physical progress are consistent.

The Periodic Progress Reports include the following:

- **Project Statement of Cash Receipts and Payments by Category:** This report summarizes the sources of project financing, with the uses of funds in accordance with the disbursement categories foreseen in the Financing agreement with the Fund. This report also states the cumulative expenditures from the start of the project until the date of the report as well as the cash flow forecast for the following semi-annual period. The automated accounting system has been tailor made to generate the report with all required details.



The standard format for the presentation of this report is provided in Annex VI: Table 1.

- **Uses of Funds by Project category:** This report details the project expenditures by each expenditure category or sub category and by financier.



A sample of a Uses of Funds by Project category is provided in Annex VI: Table 2

- **Uses of Funds by Project Activity:** This report details the project expenditures by each component or sub-component consistent with those foreseen in the Financing Agreement. The total planned, actual and cumulative expenditures in this report should correspond to those mentioned in the uses of funds section of the “Sources and Uses of Funds” report presented above.



A sample format for this report is provided in Annex VI: Table 3

- **Cash flow forecast:** This report summarizes the cash inflow and outflow for the following semi-annual period and is explained in detail in section 9.3.



A sample of a Cash Flow Forecast is provided in Annex VI: Table 4

- **Designated Account Reconciliation Statement**



Please refer to annex XIII (also form 104 of the Disbursement handbook) for a standard Designated Account Reconciliation Statement.

- **SOE-Withdrawal Application Statement:** This report summarizes the claimed and received WA from IFAD during the reporting period.



A sample of a SOE-WA statement is provided in Annex VI: Table 5

- **Contract Expenditures:** This report details all the contracts signed and amounts paid during the quarter by category.



A sample format for this report is provided in Annex VI: Table 6

- **Physical progress report:** This report summarizes the quantitative physical progress made in achieving overall objectives and links them to project expenditures by component and by category. This report should also contain a narrative part on the strategic direction for the next planning cycle as well as the main financial problems encountered.



A sample format for this report is provided in Annex VI: Table 7

### 9.3 Cash Flow Forecast

276. Preparing periodic cash flow forecasts is essential to ensure the project has sufficient funds to meet its commitments (expenditures to contractors, service providers, suppliers of goods, salaries of the PMU staff, operating and maintenance cost of the PMU such as rent, electricity, internet etc.) as they fall due. It is the FMs responsibility to prepare periodic cash flow forecasts by undertaking the following steps:

1. Determining the opening balance of the time period
2. Determine (as accurately as possible) all the cash inflow already secured from different sources during the time period on a monthly basis.
3. Determine (as accurately as possible) all the payments due during the time period on a monthly basis.
4. Based on the calculation (steps 1-3) determine the estimated cash need for time period in question.

When preparing the cash-flow analysis, key sources for information include the AWPB (up-to-date), the procurement plan (up-to-date), disbursement timetable of all signed contracts and historic expense reports for PMU management costs as these can be assumed to stay relatively constant over the implementation period.

Based on the estimated cash flow needs, the FM in consultation with the PD will prepare an submit for approval the required withdrawal applications in a timely manner in order to ensure sufficient liquidity and avoid any delays to the project implementation.



**Sample of a cash flow forecast is provided in annex VI, Table 4.**

### 9.4 Annual Financial Statements and Audit Reports

277. IFAD requires that the financial statements are prepared in accordance with IFRS/IPSAS or IPSAS cash. (National Standards are also acceptable as long as they meet the minimum requirements) and that the annual statements are provided to IFAD within four months after the end of the fiscal year. In accordance with the Project Design Report, the project will prepare it financial statements in accordance with IPSAS cash.

The project financial statements should include the following information:

- Project Information and performance,
  - Statement of project management responsibilities,
  - Statement of cash receipts and payments (by category and by financier),



- Statement of cash receipts and payments (by component),
- Statement of comparative budget and actual amount,
- Statement of Special Account movements,
- Statement of Special Account Reconciliations,
- SOE-Withdrawal Application Statement and Notes to the Financial Statements.



A sample of financial statements are provided in annex XV .

It is important to note that IFAD financing proceeds should be disclosed separately from the other financiers (donors, government, beneficiaries etc.). It is also important to note that where the project consists of more than one entity the lead-PMU must provide consolidated financial statements.

## **10.0 Fixed Asset Management**

278. Fixed asset management is an important process that seeks to track fixed assets for the purposes of financial accounting and to ensure preventive maintenance, and theft deterrence. Adequate Fixed asset maintenance also increases the sustainability of the project.

There are three elements in fixed asset management that require the attention of the FM

- Purchase of equipment
- Setting up and maintaining an asset register including verification
- Setting up a plan for disposal and/or handover of the asset once the project is completed

### **10.1 Purchase of Equipment**

279. All procurement and payments for project equipment will be processed in line with the guidance provided in the procurement section of the PIM. The DFM financial officer should assign a unique, sequential asset number to all furniture and equipment items purchased (excluding minor items such as stationary). This must be clearly labelled on each item. Each item of equipment must be recorded in the fixed asset register

### **10.2 Asset Register**

280. The DFM must maintain a register of all (material) project equipment. This will be recorded on the asset management module of the accounting software. The asset register should record the following information for each individual piece of equipment: 1) Asset description, 2) Asset number, 3) Serial number of the item, 4) Officer responsible for asset, 5) Funding of asset (IFAD, government etc.), 6) Location; Date of purchase; and 7) Estimated life. The



A sample of a fixed asset register is provided in annex VII.

### 10.3 Asset Verification Review

281. The FM must ensure that a verification count of all equipment recorded in the fixed asset register is performed at least once a year. This should include the following checks:

- Verify that all equipment is still held in the location recorded on the register; and
- Check that equipment is still in a reasonable state of repair.
- Discrepancies between the verification exercise and the fixed asset register should be investigated. Where assets are missing or seriously damaged, they should be removed from the asset register. The removal should be formally documented and approved by the financial officer and by the LPA.

The verification review must be performed by different staff from those who use the equipment, to ensure adequate segregation of duty.

### 10.4 Vehicle Maintenance and Fuel

282. The drivers are required to record all trips and fuel refills in a logbook and collect all the supporting documentation (invoices etc.). The vehicle logbook provides control over the use of the cars as well as fuel consumption. Fuel distribution is handled by the DFM. Fuel is purchased on an as-needed basis by giving coupons to the drivers who must use the selected fuel station. The PMU is billed by the station twice a month. Unused coupons are kept in the office safe in the custody of the DFM. For official missions, a special cash provision is given to mission leaders to allow them to purchase fuel (at reputable gas stations) during the trip.

The safety of cars is the responsibility of the recipient staff members and drivers assigned to the vehicles. Consequently, they must ensure that the cars are parked in a secure area when not in use or outside working hours. The drivers are required to monitor the maintenance of their assigned vehicles under the supervision of the PMU. The drivers must notify the PMU of maintenance needs so that the cars can be serviced on a timely basis. The cars must always be taken to the selected PMU garage for repairs and maintenance.

The DFM should on a monthly basis review the mileage and fuel usage as well as any undertaken service as reported in the log book of each car and compare these with the official invoices and travel authorizations etc. to make sure the numbers are accurate.

An insurance policy must be taken by the PMU to ensure all cars and passengers against all risks, including damage, theft, fire, as well as injury and property damage to third parties. The insurance must also cover the same risks when the cars are used by the recipient staff members outside of normal working hours.



**A sample of a vehicle log and vehicle history record log is provided in annex IX A & B.**

## **11.0 Audit Arrangements**

283. The project audit is an ex-post review of financial statements, records of transactions & financial systems; It examines the adequacy of accounting systems & procedures, capacity to maintain appropriate accounts & documentation of the project/grant expenditures. The objective of the project audit is to provide credibility and assurance of accountability.

The auditing is conducted by the DAO which is constituted as an independent body under the National Audit Office (NAO) and responsible for the audit for all IFIs projects in China. The Provincial Audit Office will be delegated to be responsible for auditing the project. PAO has rich experiences with WB, ADB and IFAD project auditing. The audited financial statements and a detailed audit report along with a Management Letter not later than six months after the end of each financial year.

IFAD will publicly disclose project financial statements and audit reports of projects financed by IFAD. In line with the standards of the International Aid Transparency Initiative, the government is encouraged to publish relevant financial information on their own websites, for increased accountability. The audit TORs shall explicitly mention the right of the borrower/recipient and of IFAD to publish the audit report, with no limitation-of-use clause.

The Audited financial statements need to be sent to IFAD no later than 6 months after the end of the fiscal year. The detailed instruction regarding project audit are outlined in the IFAD guidelines for project audits available at <http://www.ifad.org/pub/basic/index.htm>

### **11.1 The Audit Cycle and Appointing the Auditor**

284. The complete audit cycle can be divided into the three main roles carried out by the FM/PPMO, the Auditor and IFAD.

The PPMO and the financial officer will:

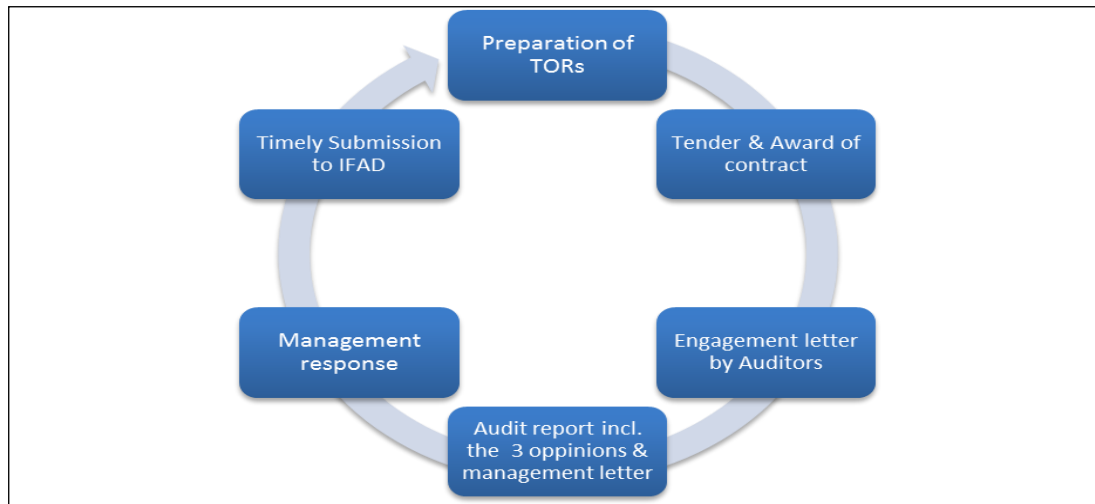
- Timely prepare TORs of the Audit and submit these to the Fund for no objection,
- manage the selection process of the auditor (if relevant)
- and appoints the auditor.
- Prepare the financial statements for reporting period
- Make available all the financial information necessary to the auditors.
- should respond to the audit findings and recommendations.
- Submit the audit report to the fund no later than 6 months after the end of the project fiscal year.

The Auditor will:

- perform the audit work including the the audit opinion
- Indicate any ineligible expenditures
- Provide a management letter

The Fund will:

- Provide a non objection to the auditors TORs
- Monitor timely submission and review of audit reports
- Follow up on remedial action\apply sanction and /or remedies if relevant including suspension of disbursement and or cancellation of loan balance (Legal Notice is sent to the LPA after 3 months of delay. Suspension of disbursement to the project after 6 months delay.)



(Chart 18: Project Audit cycle)

285. When appointing the auditor the financial officer will need to ensure that the following steps are followed:

- a) Financial Officer/PPMO prepares TORs for the auditor and sends it to IFAD for review and no-objection.
- b) IFAD communicates “no objection” to borrower.
- c) Financial Officer/ PPMO r initiates the procurement process using the agreed TORs.
- d) Financial Officer/ PPMO informs IFAD of the name of proposed auditor and the procurement process followed for the selection.
- e) IFAD communicates “no objection” to borrower on the selection of proposed auditor upon performance of the necessary due diligence.
- f) Financial Officer/ PPMO appoints the auditor.
- g) The auditor appointed normally issues a formal engagement letter

## 11.2. TORs of the Auditors and the Engagement letter

286. When preparing auditors TORs the financial officer should address the point outlined below:

- a) Description of the employing project authority or entity;
- b) Term of the auditor’s engagement, namely whether it is for a fiscal year or some
- c) other period;
- d) Description and the timing of the financial statements and other material to be provided by project management for the audit;
- e) Terms for delivery of the audit report;
- f) Specification that the audit be carried out in accordance with internationally accepted auditing standards;
- g) Provision of a management letter;
- h) Statement of access to project records, documents and personnel available to the auditor;
- i) Details regarding submission of a proposal and work plan by the auditor.

Furthermore, the contents of the TORS should include:

- a) A description in the TORs of the entity engaging the auditor and whether it is acting on behalf of or is a constituent part of a larger entity
- b) Legal and general descriptions of the project and the LPA, in sufficient detail to enable the auditor to understand their nature, objectives and activities.

287. The following additional information should also be considered:

- c) Organizational charts;
- d) Names and titles of senior managers;
- e) Names and qualifications of officers responsible for financial management, accounting and internal audit;
- f) name and address of any existing external auditor, if a change is made;
- g) Description of information technology facilities and computer systems in use;
- h) and
- i) Copies of the latest financial statements, financing agreement, minutes of financing negotiations, project design document, and annual work programme and budget, if it is available.

The auditors are required to provide a formal engagement letter confirming their acceptance of the appointment and outlining the methodology, scope and responsibilities under the audit. The borrower's representative will sign and return a copy of the letter to the auditor.



A sample of an engagement letter is provided in annex V of the IFAF guidelines for project audits.

### **11.3 The Audit Report**

288. The Audit Report must include the following elements which should also be reflected in the auditor's TORs:

- An opinion on the Project's financial statements
- In addition to the audit report, the independent auditor will prepare a management letter. This will include comment and recommendations on the adequacy of the financial management system, and on the system of internal control. The management letter should also include a follow up section on the status of implementation of previous years recommendations

## **12.0 IFAD Supervision**

289. The project will be subject to extensive supervision from IFAD during the whole implementation period to ensure that the PMU fiduciary requirements are completed on time and to minimise the project's fiduciary risk.

If financial arrangements of the PMU are deemed acceptable, IFAD will rely on them to provide assurance that the financing proceeds are being used for the intended purposes. In the case that IFAD identifies weaknesses in the financial arrangements, it will require the

PMU/LPA to take the appropriate measures to mitigate those risks e.g. changing the design and operation of internal control processes or modifying the disbursement arrangements for an operation.

The IFAD supervision of the project includes the following measures:

- Monitor of timely submission of audit reports and review of these reports
- Verify compliance to audit recommendations and recommendations made by past supervision missions.
- Monitor the submission of timely periodic financial reports and review of these reports
- Monitor disbursements rate and the quality of the received Withdrawal Applications
- Annual or semi-annual financial management supervision missions.

## 12.1 Supervision missions by the Fund

290. Throughout project implementation, IFAD will conduct annual financial supervisory missions to develop financial management ratings and ensure compliance with the IFAD's requirements. During the supervisory missions, IFAD will assess and monitor the adequacy of the PMU/LPA financial management arrangements such as accounting, budgeting, internal controls, flow of funds, financial reporting and the auditing practices. The key findings and recommendations of the mission will be captured in the Aid Memoire.

291. When preparing for and during an IFAD supervisions mission, the necessary supporting actions by the FM will include the following:

- Update and make available for the mission, the project financial information and especially the incurred expenditures by component, by category and by financier as of the last day of the preceding month.



Please refer to annex XI for the financial tables required for the aid memoire

- Update and make available reports on the status of counterpart funding (has the Borrower/Lead Project Agency made available financing proceeds to the Project as planned?)
- Provide a walkthrough of the existing accounting system including its main modules, budgeting, accounting, financial reports, fixed asset register as well as the security settings in use.
- Facilitate checking of the internal controls, by system "walk through" to ensure that approved procedures are consistently being followed.

- Make available Withdrawal Applications, Statement of Expenditures and all supporting documentation regarding expenditures claimed under the SOE thresholds to facilitate the verifying of adequacy, completeness and validity of claims.
- Make available evidence of qualifications and educational background of the financial staff including, organogram of the PMU, CVs, TORs of each position and PMU training plan.
- Update and make available a complete a fixed asset register and facilitate sample test check of physical existence of the asset.
- Make available written procedures regarding financial operations such as processing of transactions, financial administration manual, accounting manual, fixed asset maintenance and records management as well as the lead project agency's anticorruption policy and whistle blowing procedures.
- Prepare and make available the updated bank account reconciliation statement and bank account statements for all designated and project accounts.
- Arrange meeting with the auditors and any other selected party requested by the mission.
- Make available all necessary documentation and contracts regarding procurement not subject to prior review.
- Provide an update on the actions taken regarding past audit recommendations as well as action points outlined in the past aide memoires.
- Make available the most recent AWPBs, annual and semi-annual reports
- Participate in report writing if necessary.

### **13.0 Loan completion and Closing**

292. The closing of the loan/grant is due six months after the project completion date. Both the completion and the closing date of the loan have financial implications on the project management such as: development and submission of a recovery plan, ensuring eligibility of expenditures and submission of the necessary documents outlined below. Please also refer to section 1.3 of the Disbursement Handbook.

#### **13.1 Recovery plan**

293. To ensure that the designated account is completely and timely justified, the financial officer/PMU has to develop and submit to the Fund a so called recovery plan outlining the percentages per withdrawal application that will recovered and paid respectively. The recovery plan should be submitted to the fund around 6 months before the completion date or when the outstanding balance (amount still undisbursed by IFAD is less than the double of the authorized allocation.



Please refer to annex XII for a sample recovery plan.

### 13.2 Loan Completion

294. As defined in the Financing agreement the completion date of the loan its 6<sup>th</sup> anniversary; that is six years after it entered into force. By the completion date all the project activities must have been finalised. The payments can be done also after the completion date, as long as the commitments/ contracts are signed prior to the completion date. Activities that have continued after the completion date are not considered as ineligible expenditures and can therefore not be financed by the IFAD funds.

295. After the completion date but no later than the closing date (six months after the completion date) the PMU can still incur expenditures related to so called winding up expenditures e.g. Final Audit, Project completion report, Project staff salaries involved in the winding up activities, PMU maintenance cost, project completion workshop.

### 13.3 Loan Closure

296. The Fund requires the following to be provided by the PMU in order to close the loan:

- Confirmation of last withdrawal application
- Submission of final audit report
- Submission of project completion report



The Final Audit Report has to cover, the final project year up to the final expenditures and it can be paid from the loan available balance by using for example direct payment or Reimbursement of pre financed expenditures.

#### **Annexes:**

Annex I: Sample Job descriptions related to Financial Management and Administration

Annex II: Sample Annual Work Plan and Budget

Annex III: Sample chart of account

Annex IV: Sample TORs for an accounting software

Annex V: Sample Monthly Budget Execution Report

Annex VI: Sample Periodic Financial Progress Report

Table 1: Sample Statement of Cash Receipts and Payments by Category

Table 2: Financial performance per expenditure category and financier

Table 3: Financial performance per component and per financier

Table 4: Project Cash Flow Forecast

Table 5: SOE-Withdrawal Application Statement.

Table 6: Signed Contract Listing

Table 7: Physical Progress Report

Annex VII: Fixed asset register

Annex VIII A: Petty Cash Request Form

Annex VIII B: Petty Cash Reconciliation Form

Annex IX A: Vehicle Log



Annex IX B: Vehicle History Record

Annex X : Sample Terms of Reference for the Audit of Project

Annex XI: Required Aide Memoire tables for IFAD Supervision missions

Table 1: Cumulative expenditures by component and Financier -

Table 2: Budgeted Expenditures and Performance against previous year's AWPB

Table 3A: Financial performance by financier

Table 3 B. Financial performance by financier by component

Table 3 C: Expenditures by category

Annex XII: Sample recovery plan

Annex XIII: Designated account reconciliation statement (Imprest account )

Annex XIV: Checklist for Withdrawal Application

Annex XV: Sample of financial statements

## **Annex I: Sample Job descriptions related to Financial Management and Administration**

### **A. PD**

297. Responsible for all aspects of IFAD projects implementation under direct supervision of the Steering Committee and the Lead Project Agency. Specific duties:

- Plan, organize and coordinate project implementation in line with rules and regulations and provisions of the loan/grant agreements.
- Elaborate and review project documents as well as IFAD standard procurement and disbursement documents.
- Organize, coordinate, monitor, and control the work plan, budget and procurement plan to ensure delivery of project outputs.
- Ensure the efficient management of project resources in a transparent manner.
- Supervise project disbursement, accounting and financial management and ensure eligibility of funds use in accordance with the loan/grant agreements.
- Ensure that procurement of goods, services and works is carried out according to project design and IFAD procedures.
- Manage the PMU staff to ensure efficiency, including appraising their performance annually.
- Communicate the projects' objectives and components, to target groups including stakeholders to ensure sustainability and ownership of the project.
- Assess qualifications and pre-qualifications of implementing partners, consultants, and contractors that may be selected for project implementation.
- Negotiate contractual arrangements with various implementing partners and contractors.
- Evaluate performance of implementation by governmental and non-governmental implementing partners, consultants and contractors.
- Prepare agreements with beneficiaries, stipulating the conditions of their participation.
- Ensure a close cooperation and coordination with other national and international development partners at national and district level.
- Update the Project Implementation Manual if and when necessary,
- Prepare quarterly and annual reports to IFAD, the steering committee and LPA as well as other stakeholders (if any).
- Develop and maintain a M&E and MIS to monitor project progress and performance.
- Ensure full compliance with directives issued by the Project Steering Committee and the LPA .

## **B. FM**

298. Under the direct supervision of the PD , and within the framework of projects appraisal reports and loan/grant agreements, responsible for the financial and administrative management of the PMU , including Accounting, Budgeting , financial reporting, internal controls, auditing arrangement, flow of funds and the efficient management of projects resources. Specific duties:

- Prepare together with the PD the Annual work plan and budget and the budget and financing plan in particular.
- Master IFAD key documents such as, the disbursement handbook, procurement guidelines and handbook, IFAD guidelines for project audits, the Financing Agreement (FA) and the Letter to the Borrower (LTB).
- Develop and maintain an efficient accounting system and reliable internal control procedures and guidelines for financial reporting and recordkeeping.
- Responsible for the preparation, review and monitoring of projects budgets including financing plan, procurement plan (together with the Procurement Officer), and staff development plan (together with the training focal point)
- Prepare/verify all withdrawal applications for submission to IFAD, and ensure the availability of funds for all planned activities. Manage the projects bank accounts, approve and co-signs all payments.
- Responsible for all project procurement, either directly or by delegation.
- Prepare and provide financial reports including the sources and uses of funds statement, incurred expenditures by component, expenditure category and financier, designated account reconciliation statement, fixed asset list and cash flow forecast etc. for submission to the Project steering committee, LPA and IFAD on a semi and annual basis, and maintain all records in a form appropriate for audit.
- Lead the process of contracting an external audit firm to conduct an independent audit of the annual project accounts, ensuring that annual audits are carried out within the specified timeframe.
- Develop and maintain a system of financial control over all expenditure incurred by implementing partners.
- Responsible for developing and managing an effective and performance based human resources management system.
- Supervise and coordinate the work of staff placed under his/her direct authority.
- Review and regularly update the Financial and Administrative Manual of the PMU.
- Develop together with the Financial DFM the Accounting manual of the PMU.
- Responsible for the organization and supervision of the PMU office, assets, logistics, and all administrative matters.
- Undertake any other activities assigned by the PD.

## **C. DFM**

299. Under the direct supervision of the FM; specific duties include:

- Assist the FM in the implementation of a sound financial management system.
- Prepare financial reports, including monthly funds reconciliation, and monthly, quarterly, semi-annual and annual expenditure statements;

- Prepare transaction vouchers, and input all transactions into the PMU accounting system before submission to the FM for approval;
- Process all payments, ensuring that PMU procedures are strictly adhered to;
- Process monthly payroll, payment of salaries to staff and project contributions;
- Manage and report on the use of Petty Cash in accordance with the approved procedures;
- Assist the FM in the preparation of withdrawal applications;
- Prepare cash flow forecasts as required;
- Monitor financial returns from Implementing Partners, including periodic visits to their offices;
- Assist in the preparation and monitoring of annual operational budgets
- Functional supervision and training of Accounts & Administrative Assistants in PMU.
- Maintenance of a well organized and up-to-date filing system for accounting and financial records as well as an fixed asset tagging system;
- Perform physical inventory of project assets each year;
- Assist the FM in the preparation of the accounting manual of the PMU
- Provide assistance to the external auditors as required;
- Undertake any other activities assigned by PMU management.

#### **D. Administrative Assistant**

300. Under the direct supervision of the FM. Specific duties include:

- Assist the Financial DFM in the implementation of a sound financial management system.
- Assist the Financial DFM in preparing financial reports, including monthly funds reconciliation, and monthly expenditure statements;
- Assist the FA in prepare transaction vouchers, and input all transactions into the PMU accounting system before submission to the FM for approval;
- Assist the FA in process all payments, ensuring that PMU procedures are strictly adhered to;
- Assist the FA in process monthly payroll, payment of salaries to staff and Project contributions;
- Assist the Financial DFM and FM in the preparation of withdrawal applications;
- Assist the FA and FC in prepare cash flow forecasts as required;
- Assist in reviewing and monitor financial returns from Implementing Partners, including periodic visits to their offices;
- Assist in the preparation and monitoring of annual operational budgets
- Collate data received from colleagues into the system.
- Manage a well organized and up-to-date filing system for accounting and financial records;
- Assist in providing assistance to the external auditors as required;
- Undertake any other activities assigned by PMU management.
- Supervise the driver(s) and office attendant.
- Perform secretarial duties, including maintenance of a well organized filing system.
- Collect and review financial reports from implementing partners at district level.

**Annex II: Sample Annual Work Plan and Budget****Table 1-4: Sample Budget and Financing Plan**

<b>Summary table 1: Planned Project Expenditures by Component and Financier</b>							
	<b>Total</b>		<b>Financing Source</b>				
<b>Component</b>	<b>Local</b>	<b>USD</b>	<b>IFAD Loan</b>	<b>IFAD Grant</b>	<b>Government (Budget)</b>	<b>Government (Tax)</b>	<b>Beneficiaries</b>
1. Rural Market Development							
1 a. Rural Market innovation strategy							
1b. Rural Market infrastructure							
1c. Women Capacity Building							
2. Irrigation Infrastructure							
3. Rural Finance							
4. Programme Management							
Total							

**Summary table 2: Planned Project Expenditures by Expenditure Category and Financier**

	<b>Total</b>		<b>Financing Source</b>				
<b>Category</b>	<b>Local</b>	<b>USD</b>	<b>IFAD Loan</b>	<b>IFAD Grant</b>	<b>Government (Budget)</b>	<b>Government (Tax)</b>	<b>Beneficiaries</b>
I. Civil Works							
II. Equipment, Goods and vehicles							
III. Technical assistance and Studies							
IV. Training and Workshops							
V. Credit line							
VI. Incremental Operating Costs							
<b>Total</b>							

<b>Summary table 3: Planned Project Expenditures by Component and Expenditure Category</b>								
<b>Component</b>	<b>1. Rural Market Development</b>	<b>1 a. Rural Market innovation strategy</b>	<b>1b. Rural Market infrastructure</b>	<b>1c. Women Capacity Building</b>	<b>2. Irrigation Infrastructure</b>	<b>3. Rural Finance</b>	<b>4. Programme Management</b>	
<b>Category</b>								<b>Total</b>
I. Civil Works								
II. Equipment, Goods and vehicles								
III. Technical assistance and Studies								
IV. Training and Workshops								
V. Credit line								
VI. Incremental Operating Costs								
<b>Total</b>								

**Table 4: Detailed Tables per Component, Expenditure Category and Financier**

Table 1: Detailed Tables for Component, Expenditure Category, and Finance																
		Items					Timeline					Financing Source				
Category	Description of activity by Component/subcomponent	Unit	Unit cost	Quantity	Total	Physical Outreach	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Total	IF AD Loan	IFA D Grant	Gov. (Budget)	Gov. (Tax)	Benef.
III. Technical assistance and Studies	1. Rural Market Development															
	1 a. Rural Market innovation strategy															
	value chain expert															
		consultant	30 000	1	3000 0											
	Awareness building Workshop	works hop	4 000	12	48 000											
	Baseline study		500		1500											
		Study	0	3	0											
	Local Market survey		120		1200											
		report	000	1	0											
	Seminar	Seminar	21 000	3	6300 0											
	Publications and booklets				7500 0											
			15	5000	0											

	<b>1b. Rural Market infrastructure</b>				
III. Technical assistance and Studies	Feasibility study	10 000	1		
	Awareness building seminar	20 000	4		
	Publications	20	200		
I. Civil Works	Rural roads	KM	4000	#### ###	



**Table 5: Sample Procurement Plan**

Table 5: Procurement plan																						
									Preparation of Tendering Process		Bidding Process					Evaluation Process				Contract		
Component	Subcomponent/Activity	Item	Unit	Quantity	Unit cost estimate (USD)	Total cost estimate (USD)	Financing Source	Procurement Method	Bid Document	IFAD no objection	Publication (date)	EOI	Response Time	Closing Date	Opening Session	Bid/quote evaluation (date)	Prior review required	Final report	No Obj	Notification of Award	Signature	End Date
WORKS																						
item1																						
item2																						
GOODS																						
item3																						
SERVICES																						
item4																						

**Table 6: Sample Staff Development Plan**

Table 6: Staff Development Plan

Category	Component	Name and description of person(s)	Description of training activity	Proposed trainer/training institution	Loaction of the training activity	Estimated cost of the training activity (USD)	Additional costs (e.g. travel, accomondation. DSA)	Financing source
IV. Training and Workshops	4. Programme Management	Financial controller of the PIU	Financial Management Course	ITC/ILO	Turin Italy	4 000	3 500	IFAD Loan
IV. Training and Workshops	4. Programme Management	Administrative assistant of the PIU	advanced course in English	Professional Language Institute	Local	2000	na	IFAD Loan

**Annex III: Sample chart of account (This will be adjusted once the cost tabs are finalized)**

**Chart of Accounts**

<b><u>Account code</u></b>	<b><u>Account name</u></b>
<b>1-00-0-0</b>	<b>Establishment of a Macro-Fiscal Analysis Unit</b>
<b>1-01-0-0</b>	<b>International Advisory Services</b>
1-01-0-1	Macroeconomic Analysis & Modeling Advisor
<b>1-02-0-0</b>	<b>Local Advisory Services</b>
1-02-0-1	Full-Time Macroeconomic Analysis & Modeling Advisor
1-02-0-2	Fiscal Team Support Advisor
1-02-0-3	Public Enterprise Coverage Advisor
<b>2-00-0-0</b>	<b>Public Expenditure Management</b>
<b>2-10-0-0</b>	<b>Cross-Cutting Issues</b>
<b>2-11-0-0</b>	<b>International Advisory Services</b>
2-11-0-1	Legal Consistency Advisor
2-11-0-1	Senior Advisor PIP/ Loi-Programme
<b>2-20-0-0</b>	<b>Expenditure Planning &amp; Budget Formulation</b>
<b>2-21-0-0</b>	<b>International Advisory Services</b>
2-21-0-1	Resident Budget Planning Advisor
2-21-0-2	Visiting Budget/ Sectoral MTEF Advisor
2-21-0-3	High-Level Review of BC / CoA Advisor
<b>2-22-0-0</b>	<b>Local Advisory Services</b>
2-22-0-1	Budget Preparation Advisor
2-22-0-2	Sectoral Economist A
2-22-0-3	Sectoral Economist B
2-22-0-4	Review of BC / CoA Advisor
<b>2-30-0-0</b>	<b>Budget Execution, Monitoring &amp; Audit</b>
<b>2-31-0-0</b>	<b>International Advisory Services</b>
2-31-0-1	Senior Public Audit Expert
2-31-0-2	Treasury Management Strengthening Advisor
2-31-0-3	Budget Execution System Diagnostic & Solutions Advisor
<b>2-32-0-0</b>	<b>Local Advisory Services</b>
2-32-0-1	Treasury Management Strengthening Advisor
2-32-0-2	Development of a Cash Forecasting Tool (Software Development)
2-32-0-3	Budget Execution System Diagnostic Advisor
<b>3-00-0-0</b>	<b>Debt Management</b>
<b>3-01-0-0</b>	<b>International Advisory Services</b>
3-01-0-1	Debt Strategy Formulation Advisor
3-01-0-2	Cost Risk Analysis Advisor
3-01-0-3	Debt Strategy Implementation Advisor
3-01-0-4	Data & Debt Recording Advisor
<b>3-02-0-0</b>	<b>Local Advisory Services</b>
3-02-0-1	Debt Management Advisor
3-02-0-2	Legal Advisor
<b>4-00-0-0</b>	<b>Aid Coordination &amp; Management</b>
<b>4-01-0-0</b>	<b>International Advisory Services</b>
4-01-0-1	Resident Aid Coordination & Management Advisor
<b>4-02-0-0</b>	<b>Local Advisory Services</b>
4-02-0-1	Aid Coordination & Management Advisor
<b>4-03-0-0</b>	<b>Miscellaneous Expenses</b>

4-03-0-1	Representation at Donor Meetings
<b>5-00-0-0</b>	<b>Training &amp; Capacity Building</b>
<b>5-01-0-0</b>	<b>International Advisory Services</b>
5-01-0-1	Training Design & Implementation Advisor
<b>5-02-0-0</b>	<b>Local Advisory Services</b>
5-02-0-1	Training Coordinator
<b>5-03-0-0</b>	<b>Miscellaneous Expenses</b>
5-03-0-1	Workshops
5-03-0-2	Study Tours
<b>6-00-0-0</b>	<b>Project Management</b>
<b>6-01-0-0</b>	<b>Local Advisory Services</b>
6-01-0-1	Project Manager
6-01-0-2	Financial Management Specialist
6-01-0-3	Procurement Specialist
<b>6-02-0-0</b>	<b>Miscellaneous Expenses</b>
<b>6-02-1-0</b>	<b>Operating Costs</b>
6-02-1-1	Accounting Software
6-02-1-2	Office Equipment
6-02-1-3	Office Equipment Maintenance Expense
6-02-1-4	Stationary & Office Supplies
6-02-1-5	Advertising Expense
6-02-1-6	Post Expense
6-02-1-7	Translation Expense
6-02-1-8	Printing Expense
6-02-1-9	Bank Charges
<b>6-02-2-0</b>	<b>Project Audit</b>
<b>7-00-0-0</b>	<b>A/C Payables</b>
<b>8-00-0-0</b>	<b>Bank &amp; Related Accounts</b>
8-01-0-0	BDL Designated Account
8-02-0-0	IFAD Account
8-03-0-0	Foreign Exchange Difference

## **Annex IV: Sample TORs for an accounting software**

### **IFAD Project XXXX**

#### **Accounting Information System**

##### **A. Background**

The LPA is currently in the process of implementing an IFAD Project XXXX. The project is implemented through a project implementation unit (PMU) within the LPA. In order to comply with IFAD's reporting requirements the LPA will need to procure an Accounting Software to be used by the PMU for the Project for the following purposes:

- 1) to collect, analyze, store, and distribute information that is useful for decision making
- 2) to provide transparency and accountability of the project activities,
- 3) to provide timely reports, help detect errors and deficits during project implementation and indicate necessary corrections, and
- 4) to prepare and present progress reports to the PMU, LPA and IFAD.

The project will be managed from the PMU/LPA located in the Capital and four regional offices situated in the districts of CC,BB, and BB where the project will be implemented. The main functions will be run from the PMU in the capital but accounting entries will also be executed from the regional offices in the three districts.

##### **B. Specifications of the Software**

##### **General features**

1. The Accounting software should be configured as a modular solution and the different modules should be suitably integrated, the following are the basic modules:
  - a. Chart of Account
  - b. Accounting
  - c. Financial Reporting
  - d. Budget
  - e. Assets
  - f. Withdrawal Application
  - g. Contract Management, and integrating other modules if needed.
2. classifying the levels of the Chart of account into four levels;
  - a. Type (Assets – Liabilities – Expenses)
  - b. General Ledger Account
  - c. Subsidiary Accounts
  - d. Subsidiary -1 Accounts, to end up with auxiliary accounts.
3. Handling all the financial transactions of the Project according to the chart of account, that is used to:
  - a. Capture the financial data under the appropriate headings
  - b. Classify and group financial data for the various financial reports. The structure of the Chart of Accounts caters data to be captured by:
    - i. the Project components and sub-components
    - ii. expenditure items under each component and sub-component
    - iii. The IFAD disbursement category for the Project
    - iv. Sources of funding
4. All vouchers used in the system are based on double entries.
5. Ability to account under different bases of accounting (cash,modified accrual, Accrual)

6. using adjusting entry when needed
7. Handling the definition of various currencies used by the system
8. Holding multi – donor’s information, with notification that no contract will have more than two donors.
9. recording the daily currency rates for all the predefined currencies, if reports can be demanded by Lebanese Government currency
10. Recording the loan number and source of fund.
11. Capacity to customize reports by e.g. exporting data to excel.

### **Financial reporting**

12. Produce the periodic Financial Reports as requested by IFAD:
  - a. Statement of Cash Receipts and Payments per Project components showing quarterly, yearly and cumulative balances for the quarter and cumulative;
  - b. Statement of Cash Receipts and Payments per Project categories showing quarterly, yearly and cumulative balances for the quarter and cumulative;
  - c. Statement of Designated Account reconciling period-opening and end balances;
  - d. Statement of Project commitments, i.e., the unpaid balances under the Project’s signed contracts;
  - e. Statement of fixed assets,
  - f. Statement of Cash Payments using SOE.
13. produce other financial statements on a quarterly and annually basis, which are as follows;
  - a. Journal and Payment Vouchers
  - b. Statement of Special Accounts
  - c. Cost Center Statements
14. Progress report (physical) and not financial by contract, component and category (all projects). This request will involve:
  - a. A function will be designed and developed to allow the user to define the planned (estimated) physical % completion on each period (year, Quarter).
  - b. A function will be designed and developed to allow the user to enter/modify the actual reported on physical % completion on each period (year, Quarter).
  - c. An Inquiry function to display physical progress on each contract
  - d. A report showing detailed physical progress reporting per period
  - e. A report showing up-to-date physical progress reporting per period
15. .Consolidated report (financial report) of all projects managed under the software.
16. Recording the budget of all the activities of the project, and enable comparison of the actual performance with budgets/targets (quarterly, annual, and cumulative for the Project).
17. a fixed assets listing report indicating all relevant information (such as description, location, quantity, serial number, etc.) which needs to be updated and include any discrepancies between the regular physical inspection and the accounting records
18. Enhancement on the Withdrawal Application report to include the SOE and Summary sheet

### **Procurement**

19. Keeping detailed records for all the contractors and consultants (ID number, Name, Nationality, Address, Phone, Fax, e-mail, contact name “position, phone number, fax, bank account bank address” and other information needed, and the accounting system should afford information regarding the procurement cycle that took place before contract signature and report on the following:
  - a. Prior review thresholds;

- b. Procurement methods thresholds;
- c. Procurement reference;
- d. Activity description;
- e. Component (as per the description schedule of the Loan);
- f. Category (as per disbursement schedule);
- g. Estimated amount;
- h. Procurement method used;
- i. Prior/Post review;
- j. Date of issuance of advertisement;
- k. Bank no objection on bidding documents (Goods/works) or RFP (consultants);
- l. Date of bid (Goods/works) or RFP (consultants) submission;
- m. Bid opening date (goods/works) or Financial Proposal opening date(consultants);
- n. Bank No objection to evaluation report;
- o. Bank no objection to contract draft;
- p. Date of submission to the Bank of the Copy of signed contract;
- q. Contract related data (date of signature, date of completion, contract amount, and contract amendments and payments terms).

#### **Security**

- 20. Handling the required security according to predefined system security and privileges.
- 21. The program has adequate security features including password protection , not possible to delete a posted transaction, controlled access
- 22. Includes proper backup and system maintenance procedures.

#### **Training and support**

- 23. Training of the Financial officer and head DFM and four regional DFMs on all features of the software.
- 24. Provide a complete and a user friendly manual
- 25. Configuration and Full installation of the software in seven computers, three in the capital four in the different regional offices.

### **C. Delivery time table**

The commencement of services for this assignment is expected to be no later than the forth week of March 2012.

The main objective of the firm is to deliver a well designed software, that facilitates reflection of project needs and be designed to provide the financial information required by all interested parties (the LPA, Ministry of Finance and IFAD) and fulfil the legal and regulatory requirements of the Ministry Of Education.

The firm is expected to deliver the system during the phase mentioned below:

<b>Ref</b>	<b>Deliverable's Title</b>	<b>Duration</b>
Deliverable 1 :	install the present system	1 week
Deliverable 2 :	needed modifications should be applied on the system	3 weeks
Deliverable 3 :	Training sessions on the system	1 week.

**Annex V: Sample Monthly Budget Execution Report**

6. Monthly Budget Execution Report												
			ACTUAL			Planned/Budgeted			Variance			Commitments Entered (not paid) To - Date
			Current Quarter	Year-To Date	Cumulative To-Date	Current Quarter	Year-To Date	Cumulative To-Date	Current Quarter	Year-To Date	Cumulative To-Date	
Cash Payments per Component												
1-	Component 1											
		Sub Component 1.1										
		Sub Component 1.2										
		Sub Component 1.3										
2-	Component 2											
3-	Component 3											
4-	Component 4											
Total												
Cash Payments per Expenditure category												
	Category 1:Works											
	Cactegory 2: Goods											
	Category 3: Consultancy Services											
	Category 4: Credit line											
	Category 5: PIU cost											
Total												



**Annex VI: Sample Periodic Financial Progress Report****1 . Statement of Cash Receipts and Payments by Category (all financiers)**

	<b>Reporting Period (Quarterly/Semi-annually)</b>	<b>Cumulative</b>	<b>Forecast: next 6 months</b>
	<b>US\$</b>	<b>US\$</b>	<b>US\$</b>
<b>Receipts</b>			
IFAD Loan Designated Account	<b>R</b>	<b>R<sup>^</sup></b>	<b>R*</b>
IFAD Loan Direct payments	<b>S</b>	<b>S<sup>^</sup></b>	<b>S*</b>
IFAD Grant Designated Account	<b>T</b>	<b>T<sup>^</sup></b>	<b>T*</b>
IFAD Direct payment	<b>U</b>	<b>U<sup>^</sup></b>	<b>U*</b>
Government Funds	<b>V</b>	<b>V<sup>^</sup></b>	<b>V*</b>
Beneficiary Funds	<b>Y</b>	<b>Y<sup>^</sup></b>	<b>Y*</b>
<b>Total Receipts</b>	<b>P=R+S+T+U+Z+V+Y</b>	<b>P<sup>^</sup>=R<sup>^</sup>+S<sup>^</sup>+T<sup>^</sup>+U<sup>^</sup>+Z<sup>^</sup>+V<sup>^</sup>+Y<sup>^</sup></b>	<b>P*=R*+S*+T*+U*+Z*+V*+Y*</b>
I. Civil Works	a	a <sup>^</sup>	e
II. Equipment, Goods and vehicles	b	b <sup>^</sup>	f
III. Technical assistance and Studies	c	c <sup>^</sup>	g
IV. Training and Workshops	d	d <sup>^</sup>	h
V. Credit line	f	f <sup>^</sup>	j
VI. Incremental Operating Costs	g	g <sup>^</sup>	k
<b>Total Payments</b>	<b>O=a+b+c+d+f+g</b>	<b>O<sup>^</sup>=a<sup>^</sup>+b<sup>^</sup>+c<sup>^</sup>+d<sup>^</sup>+f<sup>^</sup>+g<sup>^</sup></b>	<b>W=e+f+g+h+j+k</b>
<b>Foreign Exchange difference</b>	<b>X</b>	<b>X<sup>^</sup></b>	
<b>Receipts less Expenditures</b>	<b>=P-O+X</b>	<b>=P<sup>^</sup>-O<sup>^</sup>+X<sup>^</sup></b>	<b>"=P*-W"</b>
<b>Opening Cash Balance</b> Comprising IFAD Loan Designated Account IFAD Loan Direct payments	<b>L</b>	<b>L<sup>^</sup></b>	<b>G</b>

IFAD Grant Designated Account			
IFAD Direct payment Project Account			
Counterpart Accounts (for government and beneficiary funds)			
<b>Closing Cash Balances</b>	<b>=L+P-O+X</b>	<b>=L<sup>^</sup>+P<sup>^</sup>-O<sup>^</sup></b>	<b>=G+P*-W</b>

**Table 1: Sample Statement of Cash Receipts and Payments by Category**

**Table 2: Financial performance per expenditure category and financier**

<b>2. Summary of Expenditures by Loan Categories and By Financiers (USD)</b>													
<b>Loan Category</b>	<b>Description of category</b>	<b>Financing Source (USD)</b>											
		<b>IFAD Loan</b>		<b>IFAD Grant</b>		<b>Government (budget)</b>		<b>Government (Tax)</b>		<b>Beneficiaries</b>		<b>Total</b>	
		<b>Reporting period</b>	<b>Cumulative</b>	<b>Reporting period</b>	<b>Cumulative</b>	<b>Reporting period</b>	<b>Cumulative</b>	<b>Reporting period</b>	<b>Cumulative</b>	<b>Reporting period</b>	<b>Cumulative</b>	<b>Reporting period</b>	<b>Cumulative</b>
I	Civil Works												
II	Equipment, Goods and vehicles												
III	Technical assistance and Studies												
IV	Training and Workshops												
V	Credit line												
VI	Incremental Operating Costs												
<b>Total</b>													

**Table 3: Financial performance per component and per financier**

3. Financial performance by financier by component (USD '000)																																
	IFAD loan						IFAD grant						Government (Budget & tax)						Beneficiaries						Total						Total Allocation per design report	Revised allocation
Component	Reporting period			Cumulative			Reporting period			Cumulative			Reporting period			Cumulative			Reporting period			Cumulative			Reporting period			Cumulative				
	Planned	Actual	Variance	Planned	Actual	Variance	Planned	Actual	Variance	Planned	Actual	Variance	Planned	Actual	Variance	Planned	Actual	Variance	Planned	Actual	Variance	Planned	Actual	Variance	Planned	Actual	Variance	Planned	Actual	Variance		
Component 1																																
Sub-component 1																																
Sub-component 2																																
Sub-component 3																																
Component 2																																
Component 3																																
Component 4																																
Total																																

**Table 4: Project Cash Flow Forecast****5. Semi-annual cash flow forecast**

	<b>Month 1</b>	<b>Month 2</b>	<b>Month 3</b>	<b>Month 4</b>	<b>Month 5</b>	<b>Month 6</b>
<b>Cash Inflow</b>						
IFAD Loan						
IFAD Grant						
Government						
Beneficiary						
Other Sources						
<b>Total Cash Inflow</b>	0	0	0	0	0	0
<b>Cash Outflow</b>						
<b>Category 1: Works</b>						
<b>Category 2: Equipment, Goods and vehicles</b>						
<b>Category 3: Technical assistance and Studies</b>						
<b>Category 4: Training and Workshops</b>						
<b>Category 5: PMU cost</b>						
Salaries						
Rent						
stationary						
etc.						
<b>Total Cash Outflow</b>						
<b>Net Cash flow</b>						
<b>Opening Balance</b>						
<b>Funds Available</b>						

**Table 5: SOE-Withdrawal Application Statement**

5. Statement Of Expenditures Withdrawal Application Statement						
		By category of Expenditures in Local Currency				
WA submitted to IFAD		WA n..	WA n..	WA n..	WA n..	Total
Category	Category Description					
1	AAAA	xx	xx	xx	xx	xx
2	BBBB	xx	xx	xx	xx	xx
3	CCCC	xx	xx	xx	xx	xx
Total		xx	xx	xx	xx	
In USD equiv/		xx	xx	xx	xx	
Rejected from IFAD		xx	xx	xx	xx	
Net Reimbursed		xx	xx	xx	xx	
WA pending submission to IFAD						
		WA n..	WA n..	WA n..	WA n..	
Category	Category Description					
1	AAAA	xx	xx	xx	xx	
2	BBBB	xx	xx	xx	xx	
3	CCCC	xx	xx	xx	xx	
Total		xx	xx	xx	xx	

Withdrawal applications are submitted for reimbursement to IFAD using the historical

exchange rate of the transfers to the Operating Account.

Expenditures partially or totally rejected by IFAD (if any) should be detailed here.

This statement should be reconciled with the Statement of Receipts and Payments



**Table 6: Signed Contract Listing**

<b>6. Signed Contract Listing</b>									
<b>Reporting period:</b>		<b>Contract Information</b>							
<b>Disbursement Category</b>	<b>Contract Description</b>	<b>Contract Start</b>	<b>Contract End</b>	<b>Supplier/ Contractor Name</b>	<b>Contract No.</b>	<b>Total Contract Value</b>	<b>Total Contract Amount Invoiced to date</b>	<b>Total Disbursed on Contract</b>	<b>Total Undisbursed Amount</b>
Category 1: Works									
Category 2: Equipment, goods And Vehicles									
Category 3: Consultancy services									
Category 4									
<b>Total</b>									



**Table 7: Physical Progress Report****Table 7: Physical Progress Report**

Description of activities		Progress and Cost					Plan to completion			
Category	Project activity by component/Sub-component	Physical Progress to date		Cost to date			Revised		Original	
		Actual	Planned	Actual	Planned	Actual as % of Plan	Total cost	Completion date	Total cost	Completion date
<b>1. Works</b>	<b>2. Irrigation Infrastructure</b> Road infrastructure Road works Design Civil works -site clearance Civil works - construction Civil works finishing									
<b>3. Consultancy services</b>	<b>1 a. Rural Market innovation strategy</b> feasibility studies market survey									
<b>4. Training and Technical assistance</b>	<b>1c. Women Capacity Building</b> Workshops Training courses									
<b>5. Credit line</b>	<b>3. Rural Finance</b> Micro Credit									

	Grants				
--	--------	--	--	--	--

Annex VII: Fixed Asset Register

4. Fixed Asset Register													
ASSET REF. NO.	ASSET DESCRIPTION	COMPONENT	FINANCING SOURCE	BENEFICIARY AGENCY	LOCATION	ASSIGNED TO	TAG NUMBER	SUPPLIER NAME	PMT/IN V. REFERENCE	DATE OF PURCHASE	DATE OF RECEIPT	PURCHASE VALUE	REMARKS

PIM Y2RRDP

Total													

## Annex VIII A: Petty Cash Request Form

Date: \_\_\_\_\_ Requested by : \_\_\_\_\_  
Name

Mode of payment \_\_\_\_\_  
Signature

- ☐ Reimbursement  
☐ Advance

Description of purchases (goods/services)	Unit price	Quantit y	Total cost**	Budget/ Activity code	Explanation / Comments
<b>TOTAL AMOUNT*</b>					

\_\_\_\_\_  
Approved by      Processed by      Payment received by  
FM DFM

\* Total amount cannot exceed xxxxx.

\*\* Attach supporting document (invoice, receipt, etc.).

**Annex VIII B: Petty Cash Reconciliation Form**

Project \_\_\_\_\_ Date of reconciliation \_\_\_\_\_

**Part i. Petty cash reconciliation**

Petty cash balance brought forward (a) \_\_\_\_\_

Replenishments during the current month (b) \_\_\_\_\_

Total petty cash balance (c = a + b) \_\_\_\_\_

Disbursements during the current month (d) \_\_\_\_\_

Petty cash book balance (e = c – d) \_\_\_\_\_

Cash count balance (f) – see part ii. below \_\_\_\_\_

Difference (G = E – F) \_\_\_\_\_

**Explanation Of Difference****Part ii - Cash Count**

Description	Quantity	Total amount
bank notes		
500		
1 000		
2 000		
coins		
10		
20		
50		
<b>total in local currency</b>		

Counted/reconciled by (DFM) \_\_\_\_\_ Reviewed by (FC) \_\_\_\_\_

Date \_\_\_\_\_

## Annex IX A: Vehicle Log

**Vehicle registration number** \_\_\_\_\_

Assigned driver \_\_\_\_\_

[illegible]

**Annex IX B: Vehicle History Record**

Vehicle registration number \_\_\_\_\_  
 driver \_\_\_\_\_

Assigned \_\_\_\_\_

Date	Repairs			Service & maintenance			Insurance			Fitness tests	
	Description of repair	Garage	Cost	Description of service	Garage	Cost	Type	Period covered	Cost	Checked by	Cost

**Report accidents in the space below, providing all relevant details for each occurrence:**

Date:

Place:

Name of driver:

Circumstances:

Damage to PMU vehicle:

Damage to other vehicles:

Injuries (indicate name of victims and describe injuries):

Insurance settlement:

## **Annex X : Sample Terms of Reference for the Audit of Project **XXXX****

The following are the terms of reference ('ToR') on which **the LPA** agrees to engage **audit firm** 'the Auditor' to perform an Audit and to report in connection with the Agreement with the International Fund for Agricultural Development (IFAD) concerning **the project XXX** where in these ToRs the 'Contracting Authority' is mentioned this refers to **IFAD** which has signed the Agreement with the **Recipient/Borrower** and finances the services. The Contracting Authority is not a party to this engagement.

### **TERMS OF REFERENCE FOR THE FINANCIAL AUDIT AND FACTUAL FINDINGS OF *[TITLE OF THE PROJECT]***

#### **1. Background**

The International Fund for Agricultural Development (IFAD) is aiding the borrower/recipient in the form of loan(s) [and/or grant(s)].

A financing [and /or grant] agreement or agreements has/have been signed between IFAD and the borrower/[recipient]; refer to appendix 1.

[Insert for private auditor]: IFAD requires the borrower/recipient to appoint an independent auditor to audit the accounts related to the project, in accordance with the IFAD Handbook on Financial Reporting and Auditing.

The reporting entity is [xxx].

The entity prepares its financial statements in accordance with [applicable accounting standard].

The auditor conducts its audit in terms of [applicable auditing standard].

[Insert any other information that may be relevant to the auditor].

#### **2. Objective**

The objective of this audit is to enable the auditor to express an opinion on whether the financial statements (including additional disclosures as outlined in section 5) present fairly, in all material respects, the financial position of the reporting entity as at [insert year-end date], and/or the results of its operations and its cash flows for the years then ended, in conformity with the [applicable accounting standards].



### **3. Responsibilities of the borrower/[recipient]**

#### **i. General**

Provide financial statements for the activities financed by the loan/[grant] that are reconcilable to its records and accounts.

Provide the auditor with access to all legal documents and correspondence with consultants, contractors and other persons or firms engaged by the project, and any other information associated with the project and deemed necessary by the auditor.

Ensure that the accounting policies are consistently applied and disclosed.

Ensure that appropriate internal controls are implemented to prevent misstatements and susceptibility to fraud.

Ensure compliance with all relevant laws and regulations that pertain to the entity, as well as with the financing agreement between the borrower/[recipient] and IFAD.

Provide the financial statements to the auditor within a reasonable time and be available for any queries that the auditor may have.

**ii. Financial statements**

The borrower/[recipient] shall:

Prepare financial statements covering the reporting period [date] to [date], in accordance with [IPSAS/IPSAS “Financial Reporting under the Cash Basis of Accounting” standards]. In addition, the following specific disclosures will be included in the financial statements:

Withdrawal application summary – appendix 1 to the IFAD Handbook on Financial Reporting and Auditing of IFAD-financed Projects;

Sources and uses of funds statement – appendix 2 to the IFAD Handbook on Financial Reporting and Auditing of IFAD-financed Projects;

Designated Account statement and reconciliation – appendix 3 to the IFAD Handbook on Financial Reporting and Auditing of IFAD-financed Projects;

[Statement of Expenditure – appendix 5 to the IFAD Handbook on Financial Reporting and Auditing of IFAD-financed Projects] – application to grants;

[Expenditure transaction list - appendix 6 to the IFAD Handbook on Financial Reporting and Auditing of IFAD-financed Projects] – applicable to grants.

**4. Responsibilities of the auditor**

**i. Auditing standards**

The auditor is responsible for the formulation of an opinion on the financial statements in accordance with [ISA/ISSAI/national auditing standards];

**ii. General principles**

By agreeing to these terms, the auditor confirms that:

The firm is independent from the project, its staff and activities, in accordance with international best practices.

The firm is not providing consultancy services to the project or preparing its project financial statements (nor has it done so in the previous two years).

The auditor is suitably qualified and a member of a professional body affiliated with the International Federation of Accountants.

[The office of [public auditor] is a member of the International Organization of Supreme Audit Institutions (INTOSAI).]

The auditor is able to conduct the audit in line with auditing standards acceptable to IFAD, pursuant to paragraph 4.1.

The firm can assign an audit team to the audit that has the necessary competence and skills.

The firm has a proven track record in conducting audits of a similar nature and complexity.

**iii. Management letter**

The management letter is an integral part of the audit package that documents accounting and internal control issues identified by the auditors. The management letter should:

Outline the auditor’s recommendations to improve identified accounting and internal control issues;

Include the responses of project management to the identified control issues, and its proposal to address the issues identified within a specific time period.

Where applicable, follow up on the issues identified in the previous year's management letter.

*iv.*

**Reporting**

The Auditor is required to deliver an audit package that includes:

The audited financial statements, including additional disclosures as outlined in paragraph 3.2;

An audit opinion on the financial statements, within the scope as outlined in paragraph 5;

[A report on factual findings, within the scope of agreed-upon procedures as outlined in paragraph 6.] Any ineligible expenditure identified should be

clearly mentioned.

A management letter, including the information outlined in paragraph 4.3;

The audit report should provide sufficient detail as to the nature and extent of the procedures performed by the auditor. The auditor is required to provide the audit package by no later than [insert date]. Reports are to be delivered in English.

**5. Scope of the financial audit**

In performing the audit, at a minimum the auditor shall:

Obtain an understanding of the internal controls related to the financial reporting process, to identify and assess any weakness in internal control that

might result in misstatements, whether due to fraud or to error;

Design and conduct audit procedures in response to any weaknesses identified in the internal controls relating to the financial reporting process, to obtain audit evidence that the financial statements are fairly presented and free from material misstatements, in accordance with the applicable accounting framework;

Verify whether expenditure that was incurred in the name of the project is in line with the terms of the financing agreement(s) (appendix xx) and incurred for the purposes intended in this agreement. Both IFAD and third party funding should be taken into consideration;

Verify that the inventory and fixed assets held by the entity exist, are complete, are properly accounted and are used for the project purposes;

Note any weaknesses in the internal control environment and in the financial reporting process, and communicate those in the management letter.

[List others].

**6. Scope of the agreed-upon procedures**

The auditor is required to perform the following specific procedures and report on factual findings as required in paragraph 4.4.

*i. Withdrawal application summary*

The auditor is requested to obtain the individual withdrawal applications (WAs) submitted to IFAD, as summarized in the withdrawal application summary, and develop test procedures to:

Determine whether the Designated Account currency equivalent was determined using the historical exchange rate of transfers to the operating account;

Determine whether goods and services have been purchased through the SOE mechanism in line with the stipulated SOE threshold;

Determine whether the expenditures claimed through SOE procedures were properly and appropriately authorized, classified<sup>47</sup> and supported by audit documentation;

Identify any ineligible expenditure;  
[List additional procedures, if applicable].<sup>48</sup>

***ii. Designated account statement and reconciliation***

The auditor is requested to review the activities of the designated account(s) associated with the project, including the initial advance, replenishments, interest that may accrue on the outstanding balances, and the year-end balances. The auditor is requested develop test procedures to:

Check the accuracy of the Designated Account reconciliation(s);  
Confirm that the Designated Account(s) have been maintained in accordance with the provisions of the financing agreement;  
[List additional procedures if applicable].

**7. Public disclosure**

IFAD promotes public disclosure of project financial information to enhance the level of transparency and accountability. IFAD will disclose project audit reports, as appropriate, in line with the Fund's disclosure policy. Management Letters issued by auditors are not subject to public disclosure by IFAD. In agreeing to the terms of reference, the auditor explicitly acknowledges IFAD's right to publicly disclose audit reports (audited financial statements and audit opinion) and will issue reports without a limitation of use clause.

To facilitate the public disclosure process, the auditor is requested to submit two separate files as follows:

- Audited financial statements and audit opinion; and
- Management Letter.

**Annex XI: Required Aide Memoire tables for IFAD Supervision missions****Table 1: Cumulative expenditures by component and Financier -as at DD/MM/YYYY (USD '000)**

	<b>IFAD Loan</b>	<b>IFAD Grant</b>	<b>Benef .</b>	<b>Governmen t</b>	<b>Tota l</b>
1. Rural Market Development					
1 a. Rural Market innovation strategy					
1b. Rural Market infrastructure					
1c. Women Capacity Building					
2. Irrigation Infrastructure					
3. Rural Finance					
4. Programme Management					
<b>Total</b>					

**Table 2: Budgeted Expenditures and Performance against previous year's AWPB (USD '000)**

	<b>IFAD Loan</b>	<b>IFAD Grant</b>	<b>Benef .</b>	<b>Governmen t</b>	<b>Tota l</b>	<b>Financial Performance (% )</b>
1. Rural Market Development						
1 a. Rural Market innovation strategy						
1b. Rural Market infrastructure						
1c. Women Capacity Building						
2. Irrigation Infrastructure						

3. Rural  
Finance  
4. Programme  
Management

---

**Total**

---

**Table 3A: Financial performance by financier - as at DD/MM/YYYY**

Financier	Approval (USD '000)	Current (USD '000)	Disbursements (USD '000)	Per cent disbursed
IFAD loan				
Government				
<b>Private sector</b>				
Beneficiaries				
<b>Total</b>				

**Table 3 B. Financial performance by financier by component - as at DD/MM/YYYY (USD)**

	IFAD Loan			Gover nment			Private sector			Beneficiarie s			Total		
	Ap pr.	Act ual	%	Ap pr.	Actual	%	Ap pr.	Act ual	%	Ap pr.	Act ual	%	Ap pr.	Act ual	%
1. <b>Supporti ng inclusive rural develop ment</b> a. Improvin g Chanye fupin model															

b. Stimulating entrepreneurship					
c. Improving access to finance					
a. Improving infrastructure climate resilience					
b. Improving rural infrastructure					
4. Programme Management					
<b>TOTAL</b>					

**TABLE 3 C: Expenditures by category - as at DD/MM/YYYY (USD)**

Category description	Original Allocation	Revised Allocation	Expenditures	W/A pending	Balance	Per cent Spent
I. Civil Works						
II. Equipment, Goods and vehicles						
III. Technical assistance and Studies						
IV. Training and Workshops						
V. Credit line						
VI. Incremental Operating Costs						
Unallocated						
Total						



**Annex XII: Sample recovery plan**

Recovery Plan Designated Account									
IFAD Loan No.:			IFAD Loan Amount (SDR) <b>20 000 000.00</b>						
Project Completion Date: <b>31-Dec-12</b>			Loan Closing Date: <b>30-Jun-13</b>						
Particulars Reporting Period	WA No.	Date	US \$	EUR	SDR	Unjustified balance USD SDR			
Authorized Allocation	1	18/01/2006	\$ 250 000.00	€ -	172 648.51	0.00		(77 351.49)	
				€ -	172 648.51				
			0.00	#VALUE!					
Exchange Rate:									
Justification:									
Ref. No.	WA No.	Date	Estimated WA value (SP)	Estimated WA value (USD)	Proposed Recovery %	Recovery Amount (USD)	Commulative Recovery Amount (USD)	Commulative Unjustified balance (USD)	
1	40	21-Feb-12		111 832.56	45%	50 324.65	50 324.65	(50 324.65)	
2	41	3-Mar-12		72 685.11	35%	25 439.79	75 764.44	(75 764.44)	
3	42	5-May-12		74 685.11	35%	26 139.79	101 904.23	(101 904.23)	
4	43	7-Jul-12		70 885.11	42%	29 771.75	131 675.98	(131 675.98)	
5	44	5-Sep-12		64 885.11	40%	25 954.04	157 630.02	(157 630.02)	
6	45	31-Dec-12		82 627.66	80%	66 102.13	223 732.15	(223 732.15)	
7	46	10-Jun-13		26 065.11	100%	26 267.85	250 000.00	(250 000.00)	
8									
TOTAL					503 665.77 USD	250 000.00 USD			
In accordance with IFAD procedures, any amount unjustified at the time of loan closing date will be promptly refunded to IFAD.									
Prepared by: _____ Date: 15-Oct-11									
Confirmed by: _____ Date: _____									

**Annex XIII: Designated account reconciliation statement (Imprest account )**

<b>5 A. Designated Account Reconciliation Statement (imprest account)</b>			
Designated Account No:			
Bank Name:			
1. Total Advanced by IFAD			USD
2. Less total amount recovered by IFAD			USD
3. Equals present outstanding amount advanced to the designated account (line 1 less line 2)			USD
<hr/>			
4. Balance of designated account per attached bank statements as of (Date: day/month/year)			USD
5. Plus balance of the project account(s) (listed separately)			USD
Plus balance of sub accounts (listed separately)			USD
Plus balance of Cash in Hand			USD
Total of Bank Balances (designated A/C, PA, SUB accounts& cash in hand balance) (line 4+line 5)			USD
6. Plus total amount claimed in this WA no.			USD
7. Plus total amount withdrawn from the designated/PA/Grant account and not yet claimed for replenishment) or WAs pending submission			USD
8. Plus amounts claimed in previous applications but not yet created at the date of bank statement and/or claimed after date of bank statement			USD
<hr/>			
Application			
No.	Date	USD	Amount
		\$	
		\$	
		\$	
9. Minus Interest earned (to be completed. If zero, please enter zero)			USD
10. Total Advance accounted for (line 5 through line 9)			USD
11. Explanation of any difference between the totals appearing in Lines 3 and 10			USD
e.g.	Non eligible amount to be refunded to the designated account		USD

e.g.	calculation errors in application of percentage financing	USD
e.g.	counterpart financial resources to be reimbursed	USD
e.g.	cheques not yet cleared/presented to Bank	USD
12 DATE	_____	SIGNATURE _____ Name in full _____ Title in Full _____

## Annex XIV: Checklist for Withdrawal Application

XXX Loan/Grant No.	XXX WA No.
<b>FORM 100 APPLICATION FOR WITHDRAWAL</b>	
<b>1. Sequential numbering of withdrawal application</b>	
2. Withdrawal application amount tallies with sequentially numbered summary sheets	
3. Categories/subcategories charged according to schedule 2 of financing agreement	
4. Percentage of financing applicable for each category or subcategory	
5. Availability of funds in categories and the overall financing amount	
6. Currency of payment	
7. Completeness and accuracy of banking instructions	
8. Complete name and address of correspondent bank	
9. WA signed by authorized representative	
10. Expenditure summary sheet by category attached	
<b>STATEMENT OF EXPENDITURE</b>	
1. Eligibility of expenditures claimed	
(a) Within SOE financial ceiling	
(b) Expenditures under specific category [----] eligibility	
2. Form 102 signed by designated project accountant, project director, authorized representative	
3. Form 102 supported by signed Form 101 for items reported in 2, but over the financial ceiling	
<b>DESIGNATED ACCOUNT REPLENISHMENT REQUESTS</b>	
1. Amount within ceiling figure agreed as reasonable limit [--- US\$ or ---]; or per AWP/B period	
2. Amount at least equal to 30 percent of the advance or 3 months of expenditure; or	
3. Amount agreed sufficient to cover a specific reporting period (revolving fund option)	
4. Exchange rate used	
5. Completeness of designated account banking and account details	
6. Enclosed designated account reconciliation and bank statements	
<b>SUPPORTING DOCUMENTATION (attached when/if required)</b>	
1. Copy of contract	
2. Copy of invoice, certified by project director	
3. Copy of bank guarantee and performance guarantee (for advance payment)	
4. Copy of delivery receipt	
5. Copy of evidence of payment	
6. Completed Form 101	
7. Completed Form 102 (A or B) including reference to AWPB, name of the supplier, invoice/contract number, total contract value, date of payment, list of supporting documentation, and payment reference (bank/cash)	
<b>PROCUREMENT</b>	
1. Copy of no objection(s) provided by IFAD (attached)	
2. Copy of Contract Payment Monitoring Form(s) duly signed (attached) <b>3. Copy of Register of contracts with reference to the procurement plan duly signed (attached)</b>	
<b>COMPLIANCE WITH CONDITION(S) FOR DISBURSEMENT</b>	
1. In accordance with terms in section 1 of the financing agreement	
2. In accordance with terms in the letter to the borrower/recipient	
<b>EXPENDITURE INCURRED/COMMITTED BEFORE PROJECT COMPLETION DATE</b>	
1. Expenditure verified as eligible:	
(a) Contract signed before project completion date	
(b) Goods delivered before project completion date	
(c) Services completed and/or rendered before project completion date	

Remarks:

Prepared by: Project Accountant

Dated: xx/xx/xx

Certified by: Project Director

Dated: xx/xx/xx

**Annex XV: Sample Project Financial Statements**

Project Name.....  
Implementing Agency.....  
IFAD Loan/Grant Number.....

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PROJECT FINANCIAL STATEMENTS

FOR THE YEAR ENDED DECEMBER 31, 200X

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Prepared in accordance with the Cash Basis of Accounting Method of the International  
Public Sector Accounting Standards (IPSAS)

PROJECT NAME AND NUMBER  
FINANCIAL STATEMENTS  
FOR THE YEAR ENDED DECEMBER 31, 200X

CONTENTS	PAGE
Project Information and performance	1
Statement of project management responsibilities	2
Report of the independent auditor	3
Statement of cash receipts and payments (by category)	4
Statement of cash receipts and payments (by component)	5
Statement of comparative budget and actual amount	6
Statement of Special Account movements	7
Statement of Special Account Reconciliations	8
SOE-Withdrawal Application Statement	9
Notes to the Financial Statements	10-11

**PROJECT NAME AND NUMBER**

**PROJECT INFORMATION AND PERFORMANCE**

**PROJECT NAME AND NUMBER**

- **Institutional Details/Information:** Implementing agency, status, location, names, account numbers and address of bankers (Special and Project accounts) name and address of independent auditors
- **Members of the Project Coordinating Unit:** Names and roles
- **Background Information on the Project:** Source of financing: size of Loan/Grant(s), effective and closing date(s)
- **Project Objectives:** As per Design Completion/Appraisal Report
- **Project Costs:** By component and category of expenditures as per Financing Agreement and Design Completion/Appraisal Report
- **Summary of Performance:** Physical progresses as per Progress/Supervision Reports

**PROJECT NAME AND NUMBER**

**STATEMENT OF ACCOUNTING OFFICER AND PROJECT  
COORDINATOR'S RESPONSIBILITIES**



**PROJECT NAME AND NUMBER**  
**STATEMENT OF RECEIPTS AND PAYMENTS (BY CATEGORY OF EXPENDITURES)**  
**FOR THE YEAR ENDED DECEMBER 31, 200X**

		Notes	200X	200X-1	Cumulative to date
			Local currency	Local currency	Local currency
	Balance B/F	4	XXX	XXX	
FINANCING					
IFAD Credit					
	Initial Deposit				XXX
	Replenishments to SA		XXX	XXX	XXX
	IFAD Direct Payments	5	XXX	XXX	XXX
	Government Funds	6	XXX	XXX	XXX
	Other Donors	7			
	Other Receipts	8			
TOTAL FINANCING			XXX	XXX	XXX
PROJECT EXPENDITURES: (BY CATEGORY OF EXPENDITURES)					
Cat	IFAD CREDIT				
1	AAA	9	XXX	XXX	XXX
2	BBB	9	XXX	XXX	XXX
3	CCC		XXX	XXX	XXX
4	DDD		XXX	XXX	XXX
5	EEE		XXX	XXX	XXX
6	GGG		XXX	XXX	XXX
7	HHH		XXX	XXX	XXX
8	LLL		XXX	XXX	XXX
			XXX	XXX	XXX
Government Funds					
1	AAA		XXX	XXX	XXX
2	BBB		XXX	XXX	XXX
TOTAL			XXX	XXX	XXX
TOTAL PROJECT EXPENDITURES			XXX	XXX	XXX
BALANCE C/F		4	XXX	XXX	XXX

**PROJECT NAME AND NUMBER**  
**STATEMENT OF RECEIPTS AND PAYMENTS (BY COMPONENT)**  
**FOR THE YEAR ENDED DECEMBER 31, 200X**

		Notes	200X	200X-1	Cumulative to date
			Local currency	Local currency	Local currency
	Balance B/F	4	XXX	XXX	
FINANCING					
	IFAD Credit				
	Initial Deposit				XXX
	Replenishments to SA		XXX	XXX	XXX
	IFAD Direct Payments	5	XXX	XXX	XXX
	Government Funds	6	XXX	XXX	XXX
	Other Donors	7			
	Other Receipts	8			
TOTAL FINANCING			XXX	XXX	XXX
PROJECT EXPENDITURES:					
(BY COMPONENT)					
Comp	IFAD CREDIT				
A	AAA		XXX	XXX	XXX
B	BBB		XXX	XXX	XXX
C	CCC		XXX	XXX	XXX
			XXX	XXX	XXX
	Government Funds				
A	AAA		XXX	XXX	XXX
B	BBB		XXX	XXX	XXX
TOTAL			XXX	XXX	XXX
TOTAL PROJECT EXPENDITURES			XXX	XXX	XXX
	BALANCE C/F	4	XXX	XXX	XXX

**PROJECT NAME AND NUMBER**  
**STATEMENT OF COMPARISON OF BUDGET AND ACTUAL AMOUNTS**  
**FOR THE YEAR ENDED DECEMBER 31, 200X**

		200X Budget	200X Actual	Variance
Notes		Local currency XXX	Local currency XXX	Local currency XXX
<b>FINANCING</b>				
<b>IFAD Credit</b>				
Replenishments to SA		XXX	XXX	XXX
IFAD Direct Payments		XXX	XXX	XXX
Government Funds		XXX	XXX	XXX
<b>TOTAL FINANCING</b>		XXX	XXX	XXX
<b>PROJECT EXPENDITURES: (BY CATEGORY OF EXPENDITURES)</b>				
<b>Cat</b>	<b>IFAD CREDIT</b>			
1	AAA	XXX	XXX	XXX
2	BBB	XXX	XXX	XXX
3	CCC	XXX	XXX	XXX
4	DDD	XXX	XXX	XXX
5	EEE	XXX	XXX	XXX
6	GGG	XXX	XXX	XXX
7	HHH	XXX	XXX	XXX
8	LLL	XXX	XXX	XXX
		XXX	XXX	XXX
<b>Government Funds</b>				
1	AAA	XXX	XXX	XXX
2	BBB	XXX	XXX	XXX
	<b>TOTAL</b>	XXX	XXX	XXX
<b>TOTAL PROJECT EXPENDITURES</b>		XXX	XXX	XXX
<b>Surplus/Deficit for the period</b>		XXX	XXX	XXX

The excess/deficit of actual expenditures over the Budget of X% was due to....

**PROJECT NAME AND NUMBER**  
**STATEMENT OF SPECIAL ACCOUNT ACTIVITIES**  
**FOR THE YEAR ENDED DECEMBER 31, 200X**

Account No: \_\_\_\_\_

Bank: \_\_\_\_\_

Address: \_\_\_\_\_

			USD (or as otherwise denominated)	Local Currency Equiv
Opening Balance	Notes		XXX	XXX
Add:				
IFAD Replenishments:				
Date	WA No	XXX		
Date	WA No	XXX		
		XXX	XXX	XXX
Bank Interests			XXX	XXX
Total			XXX	XXX
Deduct:				
Transfers to Operating Accounts:				
Date		XXX		
Date		XXX		
		XXX	XXX	XXX
Bank Charges			XXX	XXX
Exchange Rate Difference			XXX	XXX
Closing Balance as at 31/12/200X			XXX	XXX

(as per Bank Statement)

Include reconciliation with IFAD records

**PROJECT NAME AND NUMBER**  
**STATEMENT OF SPECIAL ACCOUNT RECONCILIATION**  
**FOR THE YEAR ENDED DECEMBER 31, 200X**

Account No: \_\_\_\_\_

Bank: \_\_\_\_\_

Address: \_\_\_\_\_

			USD (or as otherwise denominated)	Local Currency Equiv
			<b>Notes</b>	
1	Initial Deposit		XXXX	XXXX
2	Less amount(s) recovered:		XXXX	XXXX
3	Outstanding Amount advanced		XXXX	XXXX
Represented by:				
4	Special Account Balance as at 31/12/200X		XXXX	XXXX
5	Plus amounts claimed but not yet credited as at 31/12/200X:			
	WA	XXX Date		
	WA	XXX Date		
		XXX	XXXX	XXXX
Plus amounts withdrawn not yet claimed, composed of:				
Was Prepared not yet submitted:				
	WA	XXX		
	WA	XXX		
		XXX		
Was not yet prepared:			XXX	
6	Total amount withdrawn not yet claimed		XXXX	XXXX
7	Less Interest earned and/or plus Bank charges (if included in the Special Account)		XXXX	XXXX
8	Total Special Account Advance as at 31/12/200X		XXXX	XXXX
	Difference between Line 3 and line 8		XXXX	XXXX
Notes:				

**PROJECT NAME AND NUMBER**  
**SOEs-WITHDRAWAL APPLICATION STATEMENT**  
**FOR THE YEAR ENDED DECEMBER 31, 200X**  
**by Category of Expenditures in Local Currency**

Notes	Category description	Category description	Total	In USD Equivalent	Rejected from IFAD	Net Reimbursed
	1	2				
Cat No						
WA No:						
	XXX	XXX	XXX	XXX	XXX	XXX
	XXX	XXX	XXX	XXX	XXX	XXX
	XXX	XXX	XXX	XXX	XXX	XXX
	XXX	XXX	XXX	XXX	XXX	XXX
Total						XXX
WA Pending for Submission:						
WA No:	XXX	XXX	XXX	XXX	XXX	XXX
	XXX	XXX	XXX	XXX	XXX	XXX
						XXX
TOTAL	XXX	XXX	XXX	XXX	XXX	XXX

Withdrawal Applications are submitted for reimbursement to IFAD using the historical exchange rate of the transfers to the Operating Account  
Expenditures rejected by IFAD (if any) should be detailed here.  
This statement should be reconciled with the Statement of Receipts and Payments and include reconciliation with IFAD records

PROJECT NAME AND NUMBER  
NOTES TO THE FINANCIAL STATEMENTS  
FOR THE YEAR ENDED DECEMBER 31, 200X

1. FINANCIAL REPORTING UNDER INTERNATIONAL PUBLIC SECTOR  
ACCOUNTING STANDARDS (IPSAS)

In accordance with International Public Sector Accounting Standards (IPSAS), notes to the financial statements of an entity should:

- Present any information about the basis of preparation of the financial statements and the specific accounting policies selected and applied for significant transactions and other events, and
- Provide additional information **which is not presented on the face of the financial statements but is necessary for a fair presentation of the entity's cash receipts, cash payments, cash balances and other statements as statement of financial position**

2 SIGNIFICANT ACCOUNTING POLICIES

The principle accounting policies adopted in the preparation of these financial statements are set out below:

A Basis of Preparation

The financial statements have been prepared in accordance with International Public Sector Accounting Standards (IPSAS) with particular emphasis on Cash Basis Financial Reporting under the Cash Basis of Accounting

B Cash Basis of Accounting

The cash basis of accounting recognizes transactions and events only when cash is received or paid by the entity.

C Foreign Currency Transactions

Cash receipts and payments arising from transactions in a foreign currency are recorded in the financial statements using the average rate of exchange. Cash balances held in foreign currency are reported using the closing rate. Gains/Losses on foreign currency transactions/balances are dealt within the Statement of Special Account Activities.

3 BUDGET

The budget is developed on the same accounting basis (cash basis), same classification and for the same period as the financial statements. Material variances (above XXX) have been explained as notes to the financial statements

#### 4 CASH/FUND BALANCES

Reconciliation

	200X Loc currency	200X-1 Loc currency
<b>Cash Accounts</b>	XXX	XXX
<b>Advances</b>	XXX	XXX
	XXX	XXX

#### 4-a CASH DETAILS

	200X Loc currency	200X-1 Loc currency
<b>A/c No_____ Project Operating Account</b>	XXX	XXX
<b>A/c No_____ IFAD Designated Account (as per DA Statement)</b>	XXX	XXX
<b>Petty cash</b>	XXX	XXX
	XXX	XXX

#### 5 DIRECT PAYMENTS

These payments were made directly by IFAD from the Loan account to the specified supplier/service provider in accordance with the terms and conditions of the financing Agreement

Include here details of direct payments

WA, Date, currency and amount received, amount in local currency

#### 6 GOVERNMENT COUNTERPART FUNDS

Details here. Cumulative contributions, yearly contributions (compared to budget). Include details of counterpart contributions as tax exemption.

Include details of tax treatments.

#### 7 OTHER DONOR FUNDS

	200X Loc currency	200X-1 Loc currency
<b>List of Donors</b>	XXX	XXX
	XXX	XXX
	XXX	XXX
	XXX	XXX

Add details of cumulative and expected contributions

#### 8 OTHER RECEIPTS



<b>200X Loc currency</b>	<b>200X-1 Loc currency</b>
----------------------------------	------------------------------------

**Interest Income**  
**other income (specify)**

<b>XXX</b>	<b>XXX</b>
<b>XXX</b>	<b>XXX</b>
<b>XXX</b>	<b>XXX</b>
<b>XXX</b>	<b>XXX</b>

## 9 NON-CURRENT ASSETS

*Financial Statement*  
*Currency*

	<b>Cat 1 - Infrastructure</b>		<b>Cat 2 Vehicles</b>		<b>Cat 3- Equipment</b>	
	<b>200X</b>	<b>200X-1</b>	<b>200X</b>	<b>200X-1</b>	<b>200X</b>	<b>200X-1</b>
Opening Balance	XXX	XXX	XXX	XXX	XXX	XXX
Additions (Statement of Receipts and Payments)	XXX	XXX	XXX	XXX	XXX	XXX
Disposals	XXX	XXX	XXX	XXX	XXX	XXX
Closing Balance	XXX	XXX	XXX	XXX	XXX	XXX

This schedule includes all assets acquired from the commencement of the Project. These assets are stated at cost. Existence and beneficial ownership to be verified by the auditors.

Apart of the summary schedule, details schedules for yearly changes to be included.

## 10 YEARLY PROCUREMENTS

Include here a list of the yearly procurements including methods

## Chapter 9: Project Procurement

301. The main items of goods to be procured for project are office and technical equipment and furniture. Other goods and materials will be procured following the local shopping (LS) as appropriate. Civil works will involve the improvement of rural infrastructure, including irrigation and drinking water supply facilities and village roads. They will be procured by using NBF and LCB or LS, depending on the nature of expenditure and the estimated value of the related contract. Technical services, training, workshops and studies for the project will be procured by using Direct Contracting or NBF method.

302. The following Table presents a summary of the procurement methods. Figures in parenthesis are the respective amounts financed by IFAD.

China Y2RDP PDR			Procurement Method				
Procurement Arrangements			Local	Local	Direct		
(US\$ '000)			Competitive	Shopping	Contracting	N.B.F.	Total
			Bidding				
A. Civil work			-	-	-	86,311.1	86,311.1
B. Smart civil work			20,482.9	-	-	-	20,482.9
			(18,434.6)				(18,434.6)
C. Equipment and material			-	156.3	-	129.7	286.0
				(140.7)			(140.7)
D. Training, workshop, capacity building			-	-	8,781.2	490.0	9,271.2
					(7,903.1)		(7,903.1)
E. Goods, services and inputs			-	3,338.0	-	265.2	3,603.3
				(3,004.2)			(3,004.2)
F. Grants and subsidy			-	-	85,818.0	18,955.7	104,773.7
					(44,132.3)		(44,132.3)
G. Salary and allowances			-	-	-	2,986.0	2,986.0
						(580.5)	(580.5)
H. Operating costs			-	-	-	3,801.5	3,801.5
						(377.9)	(377.9)
I. Operations and maintenance			-	-	-	2,769.0	2,769.0
Total			20,482.9	3,494.4	94,599.2	115,708.1	234,284.6
			(18,434.6)	(3,144.9)	(52,035.4)	(958.3)	(74,573.3)
Note: Figures in parenthesis are the respective amounts financed by IFAD							

303. Procurement of goods, works and services financed by the project will be carried out in accordance with the Procurement Law of the People's Republic of China (2002) and its amendments to the extent that they are consistent with the provisions of IFAD's Project Procurement Guidelines and Handbook (2010) and its amendments. The procurement methods to be applied, prior review arrangements, and the thresholds for different procurement methods will depend on the

expenditure and the estimated value of the contract and will be detailed in the letter to the borrower.

304. A procurement plan covering a period of 18 months is prepared, attached as table 2 & 3, as part of AWPBs to be reviewed by IFAD. First AWPB is also prepared and attached as table 1. The procurement plan is based on the individual procurement plans prepared by each county and the Provincial PMO, the plan contains information of goods disaggregated into different modules and the project management component. It is live plan and will be amended/updated accordingly during the course of project. The project will, during the project implementation period, use national procurement regulations and items of specific applicability will be identified clearly in procurement plans that are submitted to IFAD along with AWP&B.

305. Details on procurement review by IFAD, including prior and post reviews; modifications etc. are explained in Appendix I of the IFAD Procurement Guideline Manual. The CPMOs/PPMO will adhere to the National including those of the Provincial and IFAD procurement requirements and maintain all relevant documents, bids, purchase orders and payment vouchers for post review by IFAD and for audit purpose

306. Community participation in procurement (CPP) where appropriate, may be considered for some interventions. The Appendix II of the IFAD Procurement Guideline Manual outlines the considerations in this respect. The CPMO, in coordination with the PPMO will workout the detailed procedures and regulations relevant to community participation in procurement, where needed. The principals of transparency, competition, participatory monitoring, and joint decision-making will be adhered at all levels. County PMOs will also involve themselves in monitoring the procurement process, and ensure compliance of procedures and principals such those procurement methods as Local Shopping and Local Competitive Bidding.

备注：1、土建类合同编码为：AB县-W-年份+序号(序号为001开始，依此类推)，例如镇雄土建第一合同编码为ZX-W-20-001 Note for numbering

2、货物类合同编码为：AB县-G-年份+序号(序号为001开始，依此类推)，例如镇雄货物第一合同编码为ZX-G-20-001

国际农发基金贷款云南乡村振兴示范项目 Y2RDP  
2020-21 年度项目采购计划汇总表（咨询服务类） 18 month Procurement Plan (Services)

备注：1、咨询类合同编码为：AB县-C-年份+序号(序号为001开始，依此类推)，例如镇雄土建第一合同编码为ZX-C-20-001	
2、服务类合同编码为：AB县-S-年份+序号(序号为001开始，依此类推)，例如镇雄土建第一合同编码为ZX-S-20-001	

2、服务类合同编码为：AB县-S-年份+序号(序号为001开始，依此类推)，例如镇雄土建第一合同编码为ZX-S-20-001

Table: 1 First Annual Work Plan and Budget (AWPB)

表Table 1: 国际农发基金贷款云南乡村振兴示范项目 Y2RDP 2020-21AWPB by Component 项目实施与投资费用计划汇总表（按建设内容）																
报告单位: 云南省项目办 By Provincial PMO			报告日期: 2020 年1 M 月1 D日					Unit 单位: 千美元 '000 USD								
序号	项目活动 Project Activities	单位 Unit	项目目标 Project Total Budget					2020-2021 Plan 年度计划								
			规模 Number	投资费用 Financier				规模 Number	投资费用 Budget & Financier					占目标%		
				IFAD	Gov	Ben	Ope		Total	IFAD	Gov	Ben	Ope		Total	
				农发	政府	受益人	经营主体		合计	农发	政府	受益人	经营主体		合计	
A、Improving Chanyefupin Model 改进产业扶贫模式																
A.1	A1.1 Upgrading cooperative meeting 合作社标准化改造															
	1. Payment to cooperative meeting 改造费用支付	份		1,204.7	133.9	-	-	1,338.5		120.5	13.4	-	-	133.9	10%	
	2. Verification expenses 论证费用			84.7	9.4	-	-	94.2		28.8	3.2	-	-	32.0	34%	
	3. Investment on pro-poor cooperatives 合格合作社的投资			7,339.9	-	-	4,893.2	12,233.1		367.0	-	-	244.7	611.7	5%	
	A1.2. Cooperative co-investment 一般合作社投资模式			13,312.7	2,935.9	-	13,312.7	29,561.4		1,996.9	440.4	-	1,996.9	4,434.2	15%	
	A1.3 Company-cooperative-households models 企业合作社农户模式			16,019.8	10,679.9	-	16,019.8	42,719.4		2,403.0	1,602.0	-	2,403.0	6,407.9	15%	
	A1.4 Other innovative models 其它创新模式			5,339.9	5,339.9	-	5,339.9	16,019.8		801.0	801.0	-	801.0	2,403.0	15%	
	A1.5. Product traceability system 产品追溯体系			179.6	20.0	-	-	199.6		71.9	8.0	-	-	79.8	40%	
	A1.6 Improving climate information and adoption advice 天气智慧生产服务			1,416.7	157.4	-	-	1,574.2		283.3	31.5	-	-	314.8	20%	
	小 计 Subtotal			44,898.1	19,276.4	-	39,565.7	103,740.1		6,072.3	2,899.4	-	5,445.5	14,417.3	14%	
A.2	Stimulating entrepreneurship and Business Services 创业孵化与服务															
	A2.1. Business incubation / Service centres 孵化中心			226.9	25.2	-	-	252.1		45.4	5.0	-	-	50.4	20%	
	A2.2. Technical assistance to the service centre 技术援助			3,117.7	346.4	-	-	3,464.1		311.8	34.6	-	-	346.4	10%	
	A.2.3 Start up Investment 创业启动投资			2,120.0	-	-	2,120.0	4,240.0		106.0	-	-	106.0	212.0	5%	
	A2.4 Operation cost 运行费用			958.3	526.4	-	-	1,484.7		191.7	105.3	-	-	296.9	20%	
	小 计 Subtotal			6,422.9	898.0	-	2,120.0	9,440.9		654.82	144.96	-	106.00	905.78	10%	
A.3	Improving access to finance 金融服务															
	A3.1 Strengthening financial capacity 能力建设			242.9	27.0	-	-	269.9		48.59	5.40	-	-	53.99	20%	
	A3.2 Improving financial advisory services 改进咨询服务			215.9	24.0	-	-	239.9		43.19	4.80	-	-	47.99	20%	
	小 计 Subtotal			458.9	51.0	-	-	509.9		91.78	10.20	-	-	101.97	20%	
Total Component A				51,779.9	20,225.3	-	41,685.7	113,690.9		6,818.9	3,054.6	-	5,551.5	15,425.0	14%	

表Table 1: 国际农发基金贷款云南乡村振兴示范项目 Y2RDP 2020-21AWPB by Component 项目实施与投资费用计划汇总表（按建设内容）															
报告单位：云南省项目办 By Provincial PMO			报告日期：2020 年1 M 月1 D日					Unit 单位：千美元 '000 USD							
序号	项目活动 Project Activities	单位 Unit	项目目标 Project Total Budget					2020-2021 Plan 年度计划							
			规模 Number	投资费用 Financier				规模 Number	投资费用 Budget & Financier					占目标%	
				IFAD	Gov	Ben	Ope		Total	IFAD	Gov	Ben	Ope		Total
			规模 Number	农发	政府	受益人	经营主体	合计		农发	政府	受益人	经营主体	合计	
B、公共基础设施和服务Improving infrastructure climate resilience															
B.1	气候智能基础设施发展Climate Smart Irrigation Infrastructure														
	B1.1 Design and Planning 气候智能基设规划与设计			347.1	38.6	-	-	385.7		104.1	11.6	-	-	115.7	30%
	B1.2 Infrastructures 设施建设														
	池塘 Pond	个 set	513	1,170.7	130.1	-	-	1,300.7		351.2	39.0	-	-	390.2	30%
	蓄水池 Storages	个 set	404	370.9	41.2	-	-	412.1		111.3	12.4	-	-	123.6	30%
	灌溉系统 Irrigation system	目 mu	8,010	2,248.5	249.8	-	-	2,498.3		674.6	75.0	-	-	749.5	30%
	管道 Pipeline	公里 km	2,304	9,118.2	1013.1	-	-	10,131.3		2,735.5	303.9	-	-	3,039.4	30%
	泵站 Pumping stations	座 set	28	2,175.6	241.7	-	-	2,417.3		652.7	72.5	-	-	725.2	30%
	灌溉渠道 Canal	公里 km	113	1,272.6	141.4	-	-	1,414.0		381.8	42.4	-	-	424.2	30%
	人畜饮水 Domestic water	套 set	16	654.8	72.8	-	-	727.6		196.5	21.8	-	-	218.3	30%
	用水者协会 Support to WUA	个 each		17.2	1.9	-	-	19.1		5.2	0.6	-	-	5.7	30%
	渠配路 修复 Rural road, rehabilitation	公里 km	331	2,385.8	265.1	-	-	2,650.9		715.7	79.5	-	-	795.3	30%
	设施管护 O&M			0.0	0.0	687.0	-	687.0		-	-	137.4	-	137.4	20%
	小 计 Subtotal			19,414.4	2,157.2	687.0	0.0	22,258.5		5,928.4	658.7	137.4	-	6,724.6	30%
B.2	Public Rural infrastructure 公共基础设施														
	B2.1设计监测费用 Infrastructure design and supervision			-	8,689.4	-	-	8,689.4			2,606.82	-	-	2,606.82	30%
	B2.2基础设施建设 Infrastructure investment														
	农田道路 Rural/Farm road			-	37,928.6	-	-	37,928.6			15,171.5	-	-	15,171	40%
	水源和水池 Water source and storages			-	10,226.0	-	-	10,226.0			4,090.4	-	-	4,090.4	40%
	渠道管道等 Canals and pipelines			-	18,544.7	-	-	18,544.7			7,417.9	-	-	7,417.9	40%
	其它公共设施 Other infrastructures			-	10,922.3	-	-	10,922.3			4,368.9	-	-	4,368.9	40%
	小 计 Subtotal				77,621.7			77,621.7		-	33,655.5	-	-	33,655.5	43%
	Total Component B			19,414.36	79,778.80	686.98	-	99,880.13		5,928.4	34,314.2	137.4	-	40,380.0	40%

表Table 1: 国际农发基金贷款云南乡村振兴示范项目 Y2RDP 2020-21AWPB by Component 项目实施与投资费用计划汇总表（按建设内容）															
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序号	项目活动 Project Activities	单位 Unit	项目目标 Project Total Budget					2020-2021 Plan 年度计划							
			规模 Number	投资费用 Financier					规模 Number	投资费用 Budget & Financier					占目标%
				IFAD	Gov	Ben	Ope	Total		IFAD	Gov	Ben	Ope	Total	
				农发	政府	受益人	经营主体	合计		农发	政府	受益人	经营主体	合计	
3、项目管理与能力建设 Project Management															
	3.1 项目办设备 PMO equipment			140.7	145.3	0.0	0.0	286.0		70.3	72.7	-	-	143.0	50%
	3.2 项目培训研讨能力建设等 Training, workshop etc.			1710.3	522.6	0.0	0.0	2232.9		342.1	104.5	-	-	446.6	20%
	3.3 项目监测与评估 M&E and KM related			1180.9	553.9	0.0	0.0	1734.8		236.2	110.8	-	-	347.0	20%
	3.4 项目办运行 Office operation			0.0	2961.7	0.0	0.0	2961.7		-	592.3	-	-	592.3	20%
	3.5 办公室人员 Office staff			0.0	2341.0	0.0	0.0	2341.0		-	468.2	-	-	468.2	20%
	小 计 Subtotal			3031.9	6524.5	0.0	0.0	9556.4		648.6	1,348.5	-	-	1,997.1	21%
Total component C				3,031.91	6,524.49	-	-	9,556.40		648.6	1,348.5	-	-	1,997.1	21%
Total合计				74,226.2	106,528.6	687.0	41,685.7	223,127.5		13,396.0	38,717.3	137.4	5,551.5	57,802.2	26%



## **Chapter 10: Draft Environment and Social Management Plan (ESMP)**

### **Objective**

307. The objective of the Environmental and Social Management Plan (ESMP) is to make sure that all environmental, social and climate change risks related to the project's activities and investments are properly identified, managed and mitigated. For more details on the risks related to the project, see the full analysis in the SECAP main document. The below table outlines the projects interventions and related risks and mitigation measures, how their effectiveness will be monitored and who will be responsible, and the related budget. This framework shall be finalized as part of the Project Implementation Manual (PIM) at project start up and updated and adjusted as need be during project implementation.

### **Grievance and Redress Mechanism (GRM)**

308. The project will follow IFAD's Complaints Procedure which ensures that appropriate mechanisms are in place to allow individuals and communities to contact IFAD directly and file a complaint if they believe they are or might be adversely affected by an IFAD-funded project/programme not complying with IFAD's Social and Environmental Policies and mandatory aspects of SECAP.
309. IFAD's Grievance and Redress Mechanism shall be fully explained to stakeholders during the programme's start-up workshop and to beneficiaries during the programme's activities. The complainants should first bring the matter to the attention of the County Project Management Offices (PMOs) of the County Agriculture and Rural Development Agencies (CARAs) or the Provincial Project management Office (PPMO) of the Provincial Agriculture and Rural Development Agency (DARA). If the PMOs or PPMO do not adequately respond, the matter may be brought to the attention of IFAD. The issue may also be brought straight to IFAD if the complainants feel they might be subject to retaliation if they bring it first to the PMOs or the PPMO.
310. Grievances shall be addressed at the field level by the project team which will be the first layer of redressal mechanism. If the grievance is not resolved at the field level, it will be escalated to the PPMO and then to IFAD who will be responsible for addressing grievances related to violations of the Programme's SECAP reflecting IFAD's social and environmental policies and standards.
311. As provided by IFAD's Policy on prevention and response to Sexual Exploitation and Abuse (SEA, 2018), all contracts with project personnel, contractors, service providers and other third parties, that are funded with IFAD funds, must include provisions: (i) for prohibiting acts of SEA; (ii) that establish the obligation to immediately report to IFAD or the Government incidents of SEA; and (iii) that establish immediate termination of contract based on proven acts of SEA.
312. Likewise, all contracts with contractors and service providers and other third parties must include provisions for the protection of labour rights and working conditions.

313. All grievances (including reports on SEA and violations of worker rights and conditions) received and action taken to address them will be reported to the relevant PMO, PPMO and the Steering committee. The PMOs and the PPMO shall ensure that all complaints received and actions taken are included in the progress reports to IFAD.

314. As detailed in the ESMP table below, all infrastructure investments are foreseen to be within IFAD's environmental and social risk category B. As part of the approval of any concrete infrastructure investment to be financed under the project, the PMOs (monitored by the PPMO) must verify if its dimensions are exceeding the thresholds listed in the table below, which would trigger an environmental risk category A. In the case the thresholds are exceeded IFAD must be contacted before any investments are made to discuss and agree on the environmental and social impact assessments needed and risk mitigation measures to be implemented.

Criteria and thresholds for infrastructure investments that will trigger an environmental and social risk category A

Irrigation	The investment include the construction/ rehabilitation/upgrade of dam(s) and/or reservoir(s) meeting at least one of the following criteria <ul style="list-style-type: none"> <li>- more than 15 metre high wall;</li> <li>- more than 500 metre long crest;</li> <li>- more than 3 million m<sup>3</sup> reservoir capacity; or</li> <li>- incoming flow of more than 2,000 m<sup>3</sup>/s</li> </ul>
	The investment involve large-scale irrigation schemes rehabilitation and/or development (more than 100 hectares per scheme) <sup>14</sup>
	The investment include drainage or correction of natural waterbodies
	The investment involve significant extraction/diversion/containment of surface water, leaving the river flow below 20 per cent environmental flow plus downstream user requirements
Roads	The investment include construction/ rehabilitation/upgrade of roads that entail a total area being cleared above 10 km long, or any farmer with more than 10 per cent of his or her private land taken
All infrastructure	The investment will cause significant adverse impacts to habitats and/or ecosystems and their services (e.g. conversion of more than 50 hectares of natural forest, loss of habitat, erosion/other form of land degradation, fragmentation and hydrological changes).
	The investment area include ecologically sensitive areas, <sup>15</sup> areas of

<sup>14</sup> The size threshold to trigger an Environmental and Social Impact Assessment (ESIA) may vary based on the country context and fragility of specific locations. China's regulations determining size of irrigation development requiring a full ESIA will be adopted where they exist. However, where there are no standards, it is proposed to use 100 hectares as an irrigation development unit size to trigger an ESIA.

<sup>15</sup> "Sensitive areas" include: protected areas (national parks, wildlife/nature reserves, biosphere reserves) and their buffer zones; areas of global significance for biodiversity conservation; habitats depended on by endangered species; natural forests; wetlands; coastal ecosystems, including coral reefs and mangrove swamps; small island ecosystems; areas most vulnerable to climate change and

	global/national significance for biodiversity conservation, and/or biodiversity-rich areas and habitats depended on by endangered species
	The investment will result in economic displacement <sup>16</sup> or physical resettlement of more than 20 people, or impacting more than 10 per cent of an individual household's assets

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variability; lands highly susceptible to landslides, erosion and other forms of land degradation, areas that include physical cultural resources (of historical, religious, archaeological or other cultural significance), and areas with high social vulnerability.

<sup>16</sup> Economic displacement implies the loss of land, assets, access to assets, income sources, or means of livelihoods.

Interventions	Social, Environmental & Climate Risks	Mitigating Measure	Monitoring	Responsible Institution	Cost All budget figures need to be checked completed with the latest version of the Costab
<i>All interventions</i>	Risks not mitigated causing adverse impacts on people and livelihoods in the project area	<ul style="list-style-type: none"> <li>• Make sure the Grievance Redress Mechanism (GRM) is strictly applied.</li> <li>• Ensure dissemination of the GRM to local communities, contractors, service providers, other third parties and workers prior to starting project activities.</li> <li>• Maintain solid documentation for the received complaints during the operation of the project and track the level of responsiveness (provision of feedback). [L] [SEP]</li> </ul>	<ul style="list-style-type: none"> <li>• Quarterly review of the number of complaints received.</li> <li>• Quarterly review of the number of complaints addressed, the mechanisms used and the time it took to address them.</li> </ul>	<ul style="list-style-type: none"> <li>• PMOs and PPMO. If not solved then IFAD.</li> </ul>	<ul style="list-style-type: none"> <li>• \$2,000 (PPMO admin budget)</li> </ul>
<i>All interventions</i>	<u>Social:</u> Beneficiary Dissatisfaction and	<ul style="list-style-type: none"> <li>• Collect feedback on project performance and beneficiary satisfaction from women and men of various ethnic and age groups, with special</li> </ul>	<ul style="list-style-type: none"> <li>• Annual surveys. [L] [SEP]</li> </ul>	<ul style="list-style-type: none"> <li>• PMOs and PPMO</li> </ul>	<ul style="list-style-type: none"> <li>• \$3,000 (M&amp;E budget)</li> </ul>

	Discrimination	representation of vulnerable households, through focus group discussions.			
<i>All interventions</i>	<u>Social:</u> Gender issues and all forms of Gender Based discrimination and exclusion from project benefits and leadership roles.	<ul style="list-style-type: none"> <li>• PMOs and PPMO to have gender and social inclusion experts and gender balance among their staff. All staff to have minimum gender training.</li> <li>• Achievement of gender quotas for beneficiaries of the various activities (on average at least 50% women), as established in the Logframe and PIM, to be closely monitored. Corrective actions to be promptly taken if falling behind in achieving the targets.</li> <li>• Gender training for men and women raising awareness on gender based discrimination and leadership training for women to be given to members of cooperatives, Water Users Associations (or their likes), and start-ups entrepreneur groups.</li> </ul>	<ul style="list-style-type: none"> <li>• Quarterly collecting gender disaggregated monitoring and evaluation data to track the extent to which women have been able to participate and benefit from project activities and take leading roles and positions.</li> </ul>	<ul style="list-style-type: none"> <li>• PMOs and PPMO M&amp;E responsible</li> </ul>	<ul style="list-style-type: none"> <li>• Included in M&amp;E budget and \$5,000 (Capacity building budget)</li> </ul>
<i>All interventions</i>	<u>Environmental:</u> Impact on the protected areas and their buffer zones in particular the Yunnan Three Parallel Rivers Protected Area	<ul style="list-style-type: none"> <li>• None of the project intervention areas will be within the YPRPA. Most interventions are on already existing agricultural land. If any of the intervention areas should be in the buffer zones of the YPRPA its management Bureau must be informed and asked to verify, that the proposed activities are in line with the specific zones management and use regulations.</li> </ul>	<ul style="list-style-type: none"> <li>• Verification every time a new intervention is approved.</li> </ul>	<ul style="list-style-type: none"> <li>• PMOs with annual monitoring by the PPMO</li> </ul>	<ul style="list-style-type: none"> <li>•</li> </ul>

	(YPRPA)				
<b>Component A: Supporting Inclusive Rural Development</b>					
<b>Activity A.1.1: Upgrading Cooperatives to Meet Operational Standards</b> <b>Activity A.1.2: Matching Grant Support for Certified Pro-Poor Farmer Professional Cooperatives</b>	<u>Social:</u> <ul style="list-style-type: none"> <li>Women, Youth and vulnerable households are not benefiting from the improved business of the cooperatives</li> </ul>	<u>Social: (PIM chapter 3 attachment 1)</u> <ul style="list-style-type: none"> <li>The operational standards include criteria for inclusion of poor households, youth and women among the members and inclusion of women in the board</li> <li>The operational standards include criteria for fair benefit sharing of profits.</li> <li>Compliance with the standards will be verified by an independent third party</li> <li>Business plan proposals to include an assessment of all social exclusion and adverse impact risks and proper mitigation measures including measure to ensure inclusion and benefits to women youth and poor and vulnerable households</li> </ul>	<ul style="list-style-type: none"> <li>Initial verification and annual follow up verification of compliance with social inclusion standards</li> </ul>	<ul style="list-style-type: none"> <li>Independent third party and PMOs and PPMO</li> </ul>	<ul style="list-style-type: none"> <li>\$5,000 (M&amp;E budget)</li> </ul>
	<u>Environmental:</u> <ul style="list-style-type: none"> <li>Increased production with inadequate practices may increase soil erosion, pollution from agrochemicals</li> </ul>	<u>Environmental: (PIM chapter 3 attachment 2)</u> <ul style="list-style-type: none"> <li>Business plan proposals to include: 1) an assessment of all environmental risks and mitigation measures related to the agricultural production and eventual processing activities; and 2) documentation of how the investments in production and processing activities will comply with local environmental standards and required certificates</li> </ul>			

	and waste from processing activities	<ul style="list-style-type: none"> <li>• TAG and CARA to review the environmental risk assessment of the business plans and compliance with IFAD and the governments environmental standards before the approval of the business plan and matching rant</li> <li>• Key environmental and social risk mitigation measures to be included in the Financing Agreement between the Cooperative and the county PMO</li> <li>• Training and technical assistance provided as needed to the cooperative farmers, livestock keepers and to operators and employees of related processing plants in: improved soil and water management practices; IPM; other practices increasing production sustainability and climate change adaptation and resilience; good manufacturing practices (waste management and resources use efficiency); and operation of renewable energy technologies.</li> </ul>	<ul style="list-style-type: none"> <li>• Annually monitoring of cooperative's compliance with environmental and social safeguards including all mitigation measures included in the business plans and financing agreements</li> </ul>	<ul style="list-style-type: none"> <li>• County PMOs with periodic checks by the PPMO</li> </ul>	
<b>Activity A.1.3: Cooperative Co-investor support</b> <b>Activity A.1.4: Company-cooperative/h</b>	<u>Social:</u> <ul style="list-style-type: none"> <li>• Women, Youth and vulnerable households are not benefiting from the various models</li> </ul>	<u>Social: (PIM chapter 3 attachment 3)</u> <ul style="list-style-type: none"> <li>• Joint investment proposal and financing plan prepared and investment agreement signed between cooperatives, enterprise and the PPMO</li> <li>• The funding proposal and business plan must have a clear identification and socio-economic profile of beneficiary households (location, number,</li> </ul>	<ul style="list-style-type: none"> <li>• Initial verification and annual follow up verification of compliance with social safeguards and</li> </ul>	<ul style="list-style-type: none"> <li>• Independent third party and PMOs and PPMO</li> </ul>	<ul style="list-style-type: none"> <li>• \$5,000 (Capacity building budget)</li> </ul>

<b>household models</b> <b>Activity A.1.5:</b> <b>Other Innovative Models</b>	<ul style="list-style-type: none"> <li>• Elite capture</li> <li>• Pressure on land tenure of poor households from increased land value</li> </ul>	<p>poverty, ethnic minority, gender and age of main participant/beneficiary, farm size, etc.)</p> <ul style="list-style-type: none"> <li>• Project funds can only be used to finance the cooperative or household investments including joint infrastructure and training and capacity building (no enterprise assets can be funded)</li> <li>• No funding will be provided directly to enterprises, but will be channelled through the cooperatives or directly to farmers</li> <li>• The investment agreement to include agreement to third-party monitoring of the social safeguard and inclusion measures</li> <li>• China has a dual urban-rural land tenure system, where urban land belongs to the state and rural land belongs to rural/farmer's collectives. The user rights for rural land are distributed to the rural households to be used for agricultural production regulated by a long-term land-use contract. The households can lease the land to other actors, however, during the development and implementation of joint proposals and financing plans small land holders will be supported to be active producers in the cooperatives as a viable alternative to leasing their land.</li> </ul>	inclusion standards	<ul style="list-style-type: none"> <li>• County PMOs with</li> </ul>	
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	<p><u>Environmental:</u></p> <ul style="list-style-type: none"> <li>Increased production with inadequate practices may increase soil erosion, pollution from agrochemicals and waste from processing activities</li> </ul>	<p><u>Environmental: (PIM chapter 3 attachment 2)</u></p> <ul style="list-style-type: none"> <li>Investment proposal and business plan to include:               <ol style="list-style-type: none"> <li>1) an assessment of all environmental risks and mitigation measures related to the agricultural production and eventual processing activities; and</li> <li>2) documentation of how the investments in production and processing activities will comply with local environmental standards and required certificates</li> </ol> </li> <li>TAG and CARA to review the environmental risk assessment of the business plans and compliance with IFAD and the governments environmental standards before the approval of the business plan and matching rant</li> <li>Key environmental and social risk mitigation measures to be included in the Financing Agreement between the Cooperative and the county PMO</li> <li>Training and technical assistance provided as needed to the cooperative farmers, livestock keepers and to operators and employees of related processing plants in: improved soil and water management practices; IPM; other practices increasing production sustainability and climate change adaptation and resilience; good manufacturing practices (waste management and</li> </ul>	<ul style="list-style-type: none"> <li>Annually monitoring of cooperative's compliance with environmental and social safeguards including all mitigation measures included in the business plans and financing agreements</li> </ul>	<p>periodic checks by the PPMO</p>	
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		resources use efficiency); and operation of renewable energy technologies.			
<b>Activity A.1.6: Establishment of County Traceability System</b> <b>Activity A.1.7: Improving Climate Information and Adaptation Advice.</b>	<ul style="list-style-type: none"> <li>No adverse environmental and social risks foreseen from these two activities</li> </ul>				
<b>Activity A.2.1: Business Incubation/ Service Centres</b> <b>Activity A.2.2: Investment Support for Start-ups</b>	<u>Social:</u> <ul style="list-style-type: none"> <li>Not achieving to include 50% women among the youth supported by star-up investment grants</li> </ul> <u>Environmental:</u> <ul style="list-style-type: none"> <li>Pollution from improper management of</li> </ul>	<u>Social:</u> <ul style="list-style-type: none"> <li>Application of concrete targeting strategies to attract young women to the Business Incubation Service Centers (BISC) in collaboration with the All-China-Women-Federation.</li> <li>Monitor closely the participation of women among the beneficiaries, and take action if below 50%.</li> </ul> <u>Environmental:</u> <ul style="list-style-type: none"> <li>Business plan proposal for matching grants to include: 1) an assessment of all environmental risks and mitigation measures related to the star-</li> </ul>	<ul style="list-style-type: none"> <li>Quarterly collecting gender disaggregated monitoring and evaluation data to track the extent to which young women are benefitting from the</li> </ul>	<ul style="list-style-type: none"> <li>County PMOs periodically checked by the PPMO</li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>

	waste from the start-up activity and inefficiency in use of water and energy resources	<p>up activity; 2) documentation of how the activity will comply with local environmental standards and eventual required certificates; and 3) when relevant priority shall be given to renewable energy sources and water and waste recycling.</p> <ul style="list-style-type: none"> <li>• Evaluation committee of matching grants to review the assessment of environmental and social risks of the business plans and the adequacy of proposed mitigation measures.</li> <li>• Key environmental and social risk mitigation measures to be included in the Financing Agreement for the matching grant as needed</li> <li>• Training and technical assistance provided as needed by the BISCs to the start-up entrepreneurs in: environmental and climate risk assessment and mitigation measures; proper management of solid waste and wastewater including recycling; resources use efficiency; and operation of renewable energy technologies.</li> </ul>	<p>matching grants.</p> <ul style="list-style-type: none"> <li>• Annually monitoring of Start-up activities and their compliance with environmental and social risk mitigation measures</li> </ul>		
<b>3.1.3 Sub-component A.3: Improving access to finance</b>	<p><u>Environmental:</u></p> <ul style="list-style-type: none"> <li>• Credit finance supports an increase in agricultural production with inadequate</li> </ul>	<p><u>Environmental:</u></p> <ul style="list-style-type: none"> <li>• Training in environmental and social risk assessment to be included in the training of finance institutions</li> <li>• Environmental and social risks assessments to be included in the tools used by finance institutions to evaluate credit worthiness of credit applications</li> </ul>	<ul style="list-style-type: none"> <li>• Annual monitoring of the application of the assessment tool by supported</li> </ul>	<ul style="list-style-type: none"> <li>• County PMOs periodically checked by the PPMO</li> </ul>	<ul style="list-style-type: none"> <li>•</li> </ul>

	<p>practices increasing soil erosion, pollution from agrochemicals and waste from processing activities</p> <ul style="list-style-type: none"> <li>• Credit finance supports an increase in non-agricultural activities causing pollution from improper management of waste and inefficiency in use of water and energy resources</li> </ul>		finance institutions		
<b>Component B: Climate Proofed Public Infrastructure Planning &amp; Development</b>					
<b>Activity B.1.1: Climate proofed irrigation planning,</b>	<u>Social:</u> <ul style="list-style-type: none"> <li>• Economic displacement by conversion of farmland to water</li> </ul>	<u>Social (PIM activity B.1.2 description)</u> <ul style="list-style-type: none"> <li>• Transparent, informed and documented discussion with all farmers benefitting from the planned irrigation system to reach voluntary signed consent with land user rights holders for placing</li> </ul>	<ul style="list-style-type: none"> <li>• Six-monthly monitoring of application of environmental and social risk</li> </ul>	<ul style="list-style-type: none"> <li>• County PMO backed up by the County Water</li> </ul>	<ul style="list-style-type: none"> <li>•</li> </ul>

<p><b>design &amp; decision making</b></p> <p><b>Activity B.1.2</b></p> <p><b>Climate proofed Smart irrigation</b></p> <p><b>Activity B.2.2</b></p> <p><b>Improvement and development of safe drinking water supply</b></p>	<p>ponds and pools. Will only affect very small areas (25m<sup>2</sup> -100m<sup>2</sup>) and no farmer affected will lose more than 10% of his/her land</p> <ul style="list-style-type: none"> <li>• Ad hoc organisation of O&amp;M of irrigation systems and infrastructure may affect sustainability</li> </ul> <p><u>Environmental:</u></p> <ul style="list-style-type: none"> <li>• Downstream impacts on water ecological systems from overuse of the water source</li> <li>• Conversion of forest land to</li> </ul>	<p>water ponds or pools on their land. Farmers may decide compensating affected farmers by transferring user rights to land from non-affected farmers.</p> <ul style="list-style-type: none"> <li>• Establishment of water users associations (WUA) or other O&amp;M associations/groups at the irrigation infrastructure planning phase and involve them in the design of the irrigation system and the development of an O&amp;M plan, including roles and responsibilities, budget and cost recovery mechanism.</li> <li>• Training of WUA or other O&amp;M group in irrigation water management using rainfall forecasts and operation and maintenance of water infrastructure</li> </ul> <p><u>Environmental:</u></p> <ul style="list-style-type: none"> <li>• Surface water resources are in general plentiful in the rainy mountainous province (700-1100 mm/year with moderate evapotranspiration with a mean temperature between 15-23 degrees). The water source for the irrigation system investments will in most cases be water harvested and stored from mountain streams. In some cases, it will pumped water from the Jin Sha Jiang river which has a dry season streamflow of 400m<sup>3</sup>/second. The</li> </ul>	management measures	Bureaus as needed	
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	<p>reservoirs and pumping stations</p> <ul style="list-style-type: none"> <li>• Drainage water polluted with agrochemicals</li> <li>• Low efficiency in usage of irrigation water _</li> </ul>	<p>water volume intake will in all cases be far below the 2m<sup>3</sup>/second limit above which approval is needed from the Municipal Water Bureau<sup>17</sup>. There will be no pumping in the peak of the dry season where irrigation water will come from the stored water in ponds and reservoirs. It is planned the water pumping will be based on solar energy. There will be no pumping of ground water financed by the project. On the contrary, the provision of irrigation based on surface water will facilitate that irregular and unsustainable groundwater wells currently used by farmers can be closed</p> <ul style="list-style-type: none"> <li>• The water harvesting and irrigation infrastructures financed by the project are small scale and low risks with ponds from 15-100m<sup>3</sup> serving 80-200mu each<sup>18</sup> and reservoirs of up to 130 000m<sup>3</sup> which are all already existing but a few will be upgraded by the project. They will need approval from the County Water Bureaus<sup>19</sup></li> <li>• Only limited land areas will be used for reservoirs and pumping stations. Most of this land is</li> </ul>			
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<sup>17</sup> Measures for the administration of water intake permit and water resource fee collection in Yunnan province (2009)

<sup>18</sup> 1 hectares equals 15 Chinese mu

<sup>19</sup> Regulations on the Management of Water Conservancy Projects in Yunnan Province (March 2018)

		<p>currently village collectively owned barren land. The biggest case will be the solar driven pumping stations, which will cover less than 30 mu (2 hectares). No forest with any protection grade status will be affected.</p> <ul style="list-style-type: none"> <li>• In most cases drip and sprinkler irrigation will be used and only in few cases surface/flood irrigation will be used for paddy fields, where proper drainage will be designed.</li> <li>• Farmers to be trained in IPM in line with the government's action plan for capacity building and introduction of practices for reduction in the use of agrochemical, which has already led to a 30% reduction in pilot examples in some of the project counties. An important part of the production in the project areas are organic or green production certified meaning limited use of agrochemicals.</li> <li>• WUAs or other O&amp;M associations/ group in areas of water scarcity will be trained in adaptive water management for water use efficiency under different climate conditions using digital water monitoring of water productivity and use efficiency</li> </ul>			
<b>Activity B.2.1: Improvement</b>	<u>Social:</u>	<u>Social (PIM activity B.1.2 description)</u>	<ul style="list-style-type: none"> <li>• Six-monthly monitoring of</li> </ul>	<ul style="list-style-type: none"> <li>• County PMO backed up by</li> </ul>	<ul style="list-style-type: none"> <li>•</li> </ul>

<b>and development of road systems.</b>	<ul style="list-style-type: none"> <li>• Economic displacement by conversion of farmland to roads. Will affect limited areas and no farmer affected will lose more than 10% of his/her land</li> <li>• Ad hoc organisation of O&amp;M of rural roads may affect their sustainability</li> </ul> <p><u>Environmental:</u></p> <ul style="list-style-type: none"> <li>• Soil erosion and increased risks of landslides from improper drainage and interventions on slopes and mountain sides removing vegetation</li> </ul>	<ul style="list-style-type: none"> <li>• Transparent, informed and documented discussion with all farmers benefitting from the road and affected by its routing to reach voluntary signed consent with land user rights holders of farmland proposed for conversion to the road. Farmers may decide compensating affected farmers by transferring user rights to land from non-affected farmers. Monetary compensation may also be used.</li> <li>• Before the investment in any road infrastructure an operation and maintenance (O&amp;M) plan for each section of the roads must be prepared, including roles and responsibilities, budget and sources of funding</li> </ul> <p><u>Environmental:</u></p> <ul style="list-style-type: none"> <li>• There will be a mixture of upgrading of existing roads and construction of new roads. Most of the roads are too small to require an environmental assessment. The responsibility for rural roads has been transferred to the CARA, who will oversee that proper erosion control and drainage measures are built into the bidding process, contracts, and the engineering design before they give the final permission for the road construction.</li> </ul>	application of environmental and social risk management measures	CARAs as needed	
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	<ul style="list-style-type: none"> <li>• Conversion of forest land to roads _</li> </ul>	<ul style="list-style-type: none"> <li>• Township governments working with the County PMO will manage the contracting process. In addition to the constructing company, a supervision company will be contracted to oversee the works and its acceptance. A warranty is included in the construction contract, which makes the constructing company responsible for fixing any failures in the works, including the failure to apply proper soil erosion control and drainage measures, within the 1<sup>st</sup> year after the end of the project.</li> <li>• Most of the roads will go through current agriculture land and collectively owned barren land. In a few cases forestland will be impacted, which will require the assessment of impacts and approval from the forest Bureau. Forest land with any protection category should be avoided.</li> </ul>			
<b>Activity B.2.4 Land improvement and preparation</b>	<u>Environmental</u> <ul style="list-style-type: none"> <li>• Loss of topsoil when levelling land and constructing terraces.</li> </ul>	<u>Environmental:</u> <ul style="list-style-type: none"> <li>• Addition of organic to the soil after the levelling should be applied as part of the land improvement approach.</li> </ul>	<ul style="list-style-type: none"> <li>• Verification in the field</li> </ul>	<ul style="list-style-type: none"> <li>• County PMOs and CARAs</li> </ul>	<ul style="list-style-type: none"> <li>•</li> </ul>

PIM Y2RRDP

## Chapter 11: Terms of Reference of Key PMO Staff

315. For successful implementation of the Project, a project management system, PMOs, will be established at county levels and at province level which will operate under the guidance of Provincial Department of Agriculture and Rural Affairs as lead agency. Specifically the Farmland Enhancement Division within DARA would take lead responsibility for project implementation management, supervision and evaluation, and will act as the Provincial Project Management Office (PPMO). Additional support will be mobilized from the Division of Cooperative Economy of DARA, and other division whenever needed. Major implementation responsibilities of the project lie with the counties. County Project Management Offices (CPMOs) will be established at the County Bureau of Agriculture and Rural Affairs. Relevant technical bureaus in the counties (such as water conservancy, metrological, transportation bureaus, etc.) will be mobilized to support the project implementation in the related activities of the project as per need.
316. The prime responsibilities of a PMO, inter alia, are to consolidate annual work plan and budget (AWPB) at their respective level, coordinate project implementation, manage the project resources, monitor project implementation, report on implementation progress on a six-monthly basis and project impact on required basis, and to ensure that project's implementation strategy is effectively applied in all activities including the project's targeting, gender and youth strategies. Generally, the overall responsibilities of the CPMO/PPMO staff are similar to that of a project management office. However, each PMO staff has his/her specific tasks and responsibilities in accordance with the post he/she holds. The main responsibilities of the key PMO staff are as follows:
317. **PMO Director/Officer:** The director/head of each PMO will undertake the overall responsibility of project implementation. The overall responsibility is to coordinate the PMO staff, relevant institutions and implementing agencies to ensure that the project implementation complies with the project Loan Agreement, strategy and requirements for reaching its objectives and goal. This include close monitoring of the effectiveness of the implementation of the project's targeting, gender and youth strategies. His/Her specific responsibilities mainly include the following points:
- Staff the PMO with qualified personnel in accordance with the requirements set forth in the Loan Agreement, work out the responsibilities of PMO staff, organize performance appraisal of PMO staff by the end of each year through linking the responsibilities with achievements of each PMO staff;
  - Work out management/administration regulations of the PMO to ensure that all PMO staff perform their duties properly and that project property, documentations, data and records are filed and kept properly with gender and age disaggregated data, whenever applicable;

- Plan and organise necessary trainings and workshops for PMO staff and other relevant project personnel to raise their capacity, awareness, and responsibility senses of project implementation, particularly the trainings on project management, implementation modalities, M&E, gender sensitization, participatory planning, and effective targeting of in particular vulnerable households, women and youth;
- Facilitate PMO staff executing their duties properly and ensure that all reports will be submitted to IFAD timely as required;
- Coordinate relevant institutions and implementing agencies to formulate project implementation plan, particularly AWPBs, in accordance with project strategy and approach, including the identification and selection of target villages and beneficiaries for each module and the adaptation of project modules to local conditions;
- Make sure all project partner institutions and agencies are aware of the project's specific gender strategies for: strengthening of capacities of women; their involvement in the development and implementation of investment plans; and promote their leadership roles in the supported cooperatives;
- Coordinate relevant institutions to ensure timely allocation of project resources to the implementing agencies to carry out the project, including IFAD loan and counterpart funds, and monitor the use of project resources to ensure that the project fund are not misused;
- Supervise the implementation of AWPBs to ensure that the project is implemented and appropriately target the eligible beneficiaries with particular focus on meeting the targets for benefits to vulnerable households, women and youth;
- Coordinate relevant institutions to ensure that women focused activities are well implemented and poor women's participation is fully focused;
- Plan and organise assessments/evaluations of project outcomes and impact, including the benchmark/baseline, mid-term, and completion surveys with data disaggregated by gender, age and ethnicity, when relevant, and report the results to IFAD as required;
- Work out adjustment proposal of implementation and submit it to IFAD for "no objection" when needed, based on the up-to-date situation and results, for achieving project objectives including the objectives for the different target groups.

318. **M&E Officer:** The M&E officer, under the guidance of project director, will undertake the responsibility of monitoring the project implementation, including project progress, achievements, availability of resources, expenditures, targeting, and gender mainstreaming, and collecting relevant data and reporting to project director to ensure that the project activities are implemented in accordance with

project strategy and with approved AWPBs. The specific responsibilities are as follows:

- Develop project monitoring strategy and action plan, by component and by module, through consulting with relevant implementing agencies and related village implementing groups, including the methodology, channels, and procedures of data collection;
- Monitor the physical and financial progress and achievements of the project by component and by module and with data disaggregated by gender, age and ethnicity, when relevant;
- Monitor the allocation and flow of project resources including IFAD loan proceeds and counterpart funds, and their uses, to see if the funds are available to implementing agencies on time for carrying out the project and if the funds are targeted and used properly;
- Cooperate with relevant implementing agencies to monitor if the implementation of project modules target the poor, women, and youth appropriately in accordance with the project strategy;
- Assist project director to plan and organise assessments/evaluations of project outcomes and impact, including the benchmark/baseline, mid-term, and completion surveys as well as other irregular assessment activities with data disaggregated by gender, age and ethnicity, when relevant;
- Plan and organise M&E training for relevant personnel to improve their capacity in performing M&E activities, including M&E methodology and techniques, RIMS, data collection, data analysis, and reporting;
- Prepare M&E report and project progress report and submit them to IFAD on time as required, after confirmation and approval of relevant PMOs;
- Report to PMO director regularly with proposals based on the analysis of M&E data to ensure that the project activities are implemented in accordance with the project strategy and approach and is on time with achieving the targets established in the Logical Framework.

319. **Gender Focal Coordinator (GFC):** The GFC, under the guidance of project director, will undertake the responsibility of ensuring gender equity and equality in project implementation through development and implementation of project gender strategy and action plan. The overall objective is to facilitate rural men and women equitably participating in project activities and benefiting on an equitable basis by creating necessary enabling environment, using appropriate tools to address gender differences, and by cooperating with all project stakeholders, particularly with Women Federation and other implementing agencies. The specific duties of the project GFP include:

- Develop project gender strategy and action plan, particularly for component A, through consulting with relevant stakeholders, including the Women

Federation and focus group discussions with women involved in all functions in potential beneficiary cooperatives and women investors and entrepreneurs, and implementing agencies;

- Coordinate with relevant institutions and implementing agencies to fully address gender issues in the formulation of AWPBs;
- Supervise the implementation of gender action plan through cooperation with the M&E officer to ensure equitable participation by men and women in decision-making and project implementation;
- Coordinate with relevant institutions and implementing agencies to create an enabling environment for women to play an effective and broad role in project activities and to ensure that women focused activities are conducted and attention will be drawn to enhance the quality of such activities to benefit women;
- Plan and organize gender sensitive training for relevant project staff involved in the project implementation, promote and disseminate the project's gender approach to all stakeholders.
- Coordinate with WFs to foster the capacity of poor women in participating in the cooperative activities under component-A of the project including in leadership roles;
- Monitor resources allocation to support gender-related activities and assess and report results achieved.
- Transfer update gender mainstreaming knowledge from IFAD to the project area and report through provincial PPMO to IFAD any change of policies related to gender.

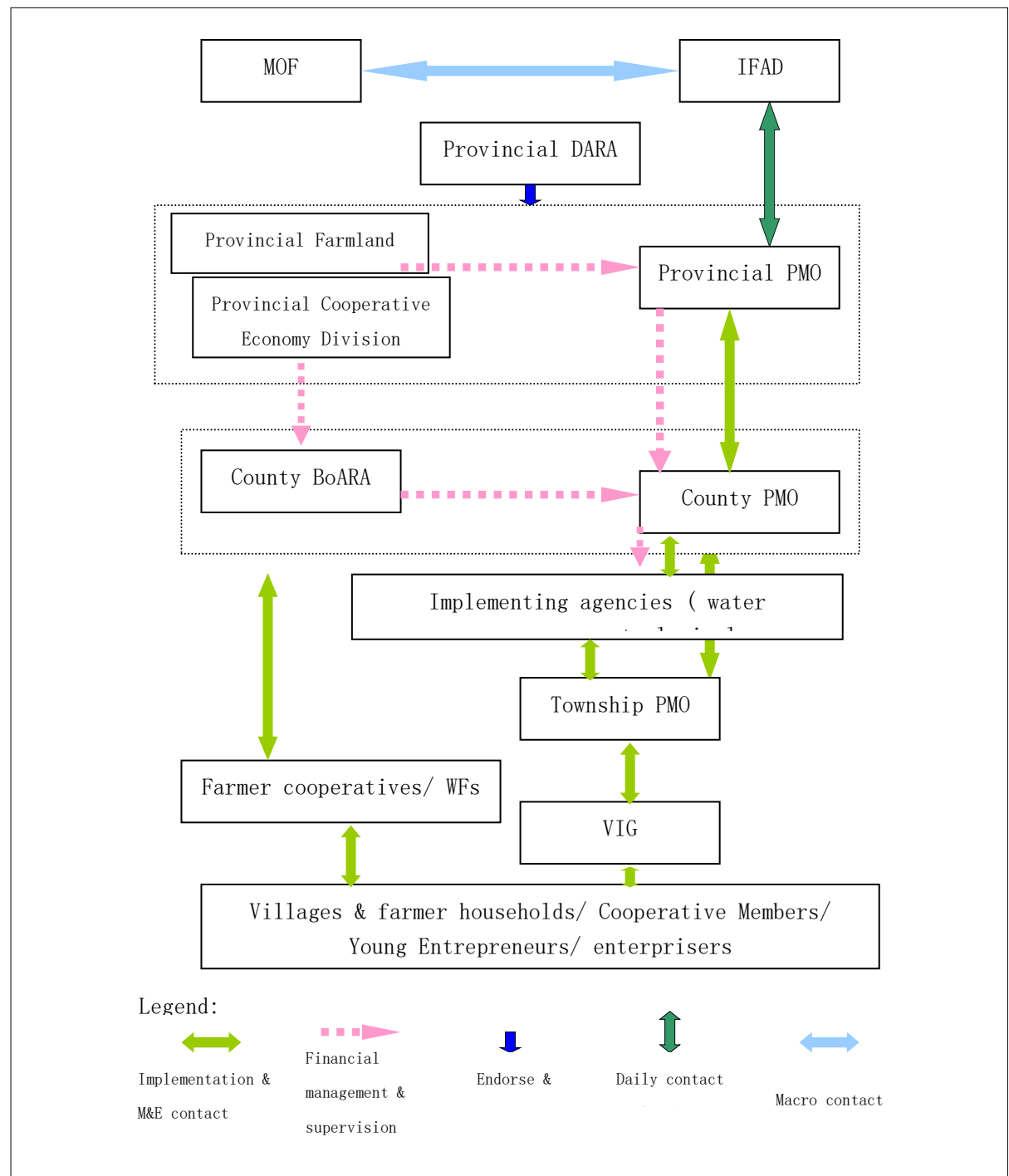
320. **Project Accountant:** The project accountant, under the guidance of project director, will take the responsibility of managing the Project Account, i.e. maintaining a separate account and records, preparing financial statements of the operations, resources and expenditures related to the project, setting up accounting subjects, transferring project resources to relevant implementing agencies, preparing withdrawal application and documents, to ensure that the project resources are well managed and used for project implementation in line with the Loan Agreement and the approved AWPBs. His/Her specific responsibilities are as follows:

- Work out, under guidance of project director, financial management regulation, and set up accounting subjects for the management of project resources;
- Open a project account under the guidance of project director, maintain a separate account and records and thereafter prepare the financial statements of the operations, resources and expenditures related to the project, and the prefecture PMO accountant will submit the financial statements through

provincial PMO to IFAD timely as required after confirmation and approval of PMO and relevant departments;

- Well manage the flow and expenditures of project funds by subjects, and properly file and retain the records evidencing project expenditures for annual audit by independent auditors and for inspection by the representatives of IFAD;
- Prepare withdrawal application and related documents of IFAD loan proceeds on a frequent basis, well manage the funds in the project account, timely transfer of project funds to relevant implementing agencies for carrying out the project;
- Supervise the use of project resources through cooperation with the M&E officer;
- Plan and organise necessary trainings or hold workshops for relevant accountants to improve their capacity in the management of project account and in the preparation of financial statements of the operation, resources and expenditures related to the project and withdrawal applications.

## Project Organizational Structure





## **China**

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### **Yunnan Rural Revitalization Demonstration Project Project Design Report**

#### **Annex 9: Integrated Project Risk Matrix (IPRM)**

Mission Dates: 16 to 25 September 2019  
Document Date: 27/02/2020  
Project No. 2000002358  
Report No. 5310-CN

Asia and the Pacific Division  
Programme Management Department



## Overall Summary

Risk Category / Subcategory	Inherent risk	Residual risk
<b>Country Context</b>		<b>Low</b>
<i>Political Commitment</i>		<i>Low</i>
<i>Governance</i>		<i>N/A</i>
<i>Macroeconomic</i>		<i>Low</i>
<i>Fragility and Security</i>		<i>N/A</i>
<b>Sector Strategies and Policies</b>		<b>Low</b>
<i>Policy alignment</i>		<i>Low</i>
<i>Policy Development and Implementation</i>		<i>N/A</i>
<b>Environment and Climate Context</b>		<b>Moderate</b>
<i>Project vulnerability to environmental conditions</i>		<i>N/A</i>
<i>Project vulnerability to climate change impacts</i>		<i>N/A</i>
<b>Project Scope</b>		<b>Low</b>
<i>Project Relevance</i>		<i>N/A</i>
<i>Technical Soundness</i>		<i>Low</i>
<b>Institutional Capacity for Implementation and Sustainability</b>		<b>Moderate</b>
<i>Implementation Arrangements</i>		<i>Moderate</i>
<i>Monitoring and Evaluation Arrangements</i>		<i>N/A</i>
<b>Financial Management</b>		<b>Moderate</b>
<i>Organization and Staffing</i>		<i>N/A</i>
<i>Budgeting</i>		<i>N/A</i>
<i>Funds Flow/Disbursement Arrangements</i>		<i>N/A</i>
<i>Internal Controls</i>		<i>N/A</i>
<i>Accounting and financial reporting</i>		<i>N/A</i>
<i>External Audit</i>		<i>N/A</i>
<b>Project Procurement</b>		<b>Low</b>
<i>Legal and Regulatory Framework</i>		<i>N/A</i>
<i>Accountability and Transparency</i>		<i>N/A</i>
<i>Capability in Public Procurement</i>		<i>Low</i>
<i>Public Procurement Processes</i>		<i>N/A</i>
<b>Environment, Social and Climate Impact</b>		<b>N/A</b>
<i>Biodiversity Conservation</i>		<i>N/A</i>
<i>Resource Efficiency and Pollution Prevention</i>		<i>N/A</i>
<i>Cultural Heritage</i>		<i>N/A</i>
<i>Indigenous People</i>		<i>N/A</i>

<b>Risk Category / Subcategory</b>	<b>Inherent risk</b>	<b>Residual risk</b>
<i>Labour and Working Conditions</i>		<i>N/A</i>
<i>Community Health and Safety</i>		<i>N/A</i>
<i>Physical and Economic Resettlement</i>		<i>N/A</i>
<i>Greenhouse Gas Emissions</i>		<i>N/A</i>
<i>Vulnerability of target populations and ecosystems to climate variability and hazards</i>		<i>N/A</i>
<b>Stakeholders</b>		<b>Low</b>
<i>Stakeholder Engagement/Coordination</i>		<i>Low</i>
<i>Stakeholder Grievances</i>		<i>N/A</i>
<b>Overall</b>		<b>Low</b>

<b>Country Context</b>		<b>Low</b>
<b>Political Commitment</b>		<b>Low</b>
<b>Risk:</b> <p>The risk that a country's political developments result in delays or the potential reversal of key political decisions and commitments (including approval and implementation of laws and regulations, and timely counterpart funding) that underpin the project's success. This includes upcoming elections, impending changes in government, high political instability/turnover/uncertainty, and/or changing political priorities.</p>		Low
<b>Mitigations:</b> <p>Overall there is a low likelihood that political and governance factor could impact the project objective or IFAD program reputation.  Risk1: stability and continuity: government stability and continuity has no risk due to prevailing socialist system of ruling communist party.  Risk2: Adequate resources and commitment: Project is very much aligned with government priorities and strategies so there is no issue of lack of comment or resources.  Risk3: bureaucratic changes i.e DARA officials/PPM: adequate assurances are assumed from government authorities on continuity of officials related to project.</p>		
<b>Macroeconomic</b>		<b>Low</b>
<b>Risk:</b> <p>The risk that macroeconomic policies, such as monetary, fiscal, debt management/sustainability, and trade policies are not robust, are unsustainable, and/or are vulnerable to domestic or external shocks (e.g. resulting in high inflation, low foreign exchange reserves, large fiscal deficits, debt distress), undermining government capacity to mobilize counterpart funding, and significantly impacting market dynamics of value chains, including market prices and profit margins for project target groups.</p>		Low

<b>Mitigations:</b>  Overall Macroeconomic indicators have very strong track record of growth and stability, so no impending risk to project objective or IFAD program in the country. Risk 1: status of external and fiscal account balance: both external and internal accounts have historic no/low-deficit trends. Fiscal space both at capital account and current account are healthy and pose no risk. Risk 2: macroeconomic policy support: project objectives are very much aligned with macroeconomic policy of domestic consumption, economic sustainability, rural revitalization and elimination of poverty. Risk 3: Trade dispute: Current trade dispute with USA if got worsen, might slow down economy but there is no direct risk to project or IFAD program.	
<b>Sector Strategies and Policies</b>	<b>Low</b>
<b>Policy alignment</b>	<b>Low</b>
<b>Risk:</b>  The risk that a country's strategies and policies governing the rural and agricultural sector are not sufficiently pro-poor and/or aligned with IFAD priorities (e.g. on land, environment, climate, gender, indigenous peoples, nutrition, youth, private sector engagement), undermining project implementation and the achievement of project development objectives.	Low
<b>Mitigations:</b>  Sector strategies and policies represent low risk to project objective or IFAD program due to high alignment with national priorities. Risk1: Alignment with Sector level strategies: Project is designed as per agriculture sector policy Document No 1. i.e. rural revitalization. Risk 2: Alignment with country's development strategy and objectives: the project is aligned with country development strategy of eliminating poverty by 2020 and monitoring post 2020 resilience of livelihood of people.	
<b>Environment and Climate Context</b>	<b>Moderate</b>
<b>Project Scope</b>	<b>Low</b>
<b>Technical Soundness</b>	<b>Low</b>
<b>Risk:</b>  The risk that technical design factors, such as over-complexity, over/insufficient-ambition or innovativeness, inadequate incorporation of lessons learned and best practices, weak economic, social inclusion and environmental sustainability rationale, weak analytic underpinnings (including because such may not be available), or overly rigid design, may undermine project implementation and achievement of project development objectives.	Low
<b>Mitigations:</b>  Very low likelihood that technical design of project adversely affect project objectives/goals or hamper IFAD program due to IFAD extensive experience with similar projects. Risk1: community participation : project design mission witnessed high community participation, enthusiasm and trust and project objective are very much demand driven. Risk 2: ownership of local government : IFAD and Client have extensive experience of working together and local ownership is reflected by willing to invest in matching grants. Risk 3: operational risk: IFAD and Client have worked mutually in the same geographic area and can handle any operational risk if arise. Presently project foresee low operational risk.	
<b>Institutional Capacity for Implementation and Sustainability</b>	<b>Moderate</b>
<b>Implementation Arrangements</b>	<b>Moderate</b>

<b>Risk:</b>  The risk that the project executing agency does not have adequate resources, processes and/or systems to manage the project effectively (in accordance with the Financing Agreement and all relevant IFAD basic legal documents) towards achievement of envisaged project development objectives. This includes the project executing agency's lack of experience with IFAD (or other multilateral development bank) projects/procedures and lack of capacity to coordinate/support implementation arrangements that may involve several government agencies, different levels of government (or non-government entities), or multiple donor/financing agencies with different procedures and/or reporting requirements.	Moderate
<b>Mitigations:</b>  There is a moderate likelihood that institutional capacity for implementing and sustaining the operational management may adversely impact the project objective. Risk 1: Strong in-house capacity: Risk1: Though implementing agency i.e DARA has strong in-house capacity for project preparation and implementation , the proposed project with bottom-up approach of strengthening poor house-holds through ug-graded and independent cooperatives might pose moderate risk. To mitigate the risk, extensive training of officials and monitoring is planned. Risk 2: Area of operation: , though one province, is quite diverse in terms of topography, ethnicity and poverty. Project design caters special care to ethnic minority and backwardness of area in terms of socio-economic indicators. Risk 3: project design is innovative in nature i.e. post production emphases and focus on cooperatives rather than enterprises: extensive training of project staff and community cooperative members is planned on cooperative up-gradation and selection and capacity building on value chain development.	
<b>Financial Management</b>	<b>Moderate</b>
<b>Project Procurement</b>	<b>Low</b>
<b>Capability in Public Procurement</b>	<b>Low</b>
<b>Risk:</b>  The risk that the implementing agency does not have sound processes, procedures, systems and personnel in place for the administration, supervision and management of contracts resulting in adverse impacts to the development outcomes of the project.	Low
<b>Mitigations:</b>  Overall procurement functions and controls are strong due to extensive project implementation experience. Risk1: procurement compliance and capacity: principles of efficiency, effectiveness, integrity, transparency and accountability are well in placed and ensured. Risk 2: value for money: project sustainable objectives embrace for value for money due to proper procurement functions.	
<b>Environment, Social and Climate Impact</b>	<b>N/A</b>
<b>Stakeholders</b>	<b>Low</b>
<b>Stakeholder Engagement/Coordination</b>	<b>Low</b>
<b>Risk:</b>  The risk that relevant stakeholders are not identified, and/or of inadequate/insufficient information disclosure, consultation/coordination with and buy-in from stakeholders on project objectives, delivery of interventions and promotion of sound environmental and social practices (e.g. with government, project target groups, civil society organizations, implementing partners, private sector, including financial intermediaries), resulting in misunderstandings or opposition by stakeholders, or duplication/inconsistencies between partners working in the same target area that may undermine project implementation and achievement of project development objectives.	Low

<b>Mitigations:</b>	
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Overall risk on stakeholders concern is very low due to well informed and well discussed project objectives and well understood by general public and target group.	
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Risk1: Targeting principles: targeting principle of project by generating development benefits to create jobs and provide rural services is very much aligned with national and local priorities and strategies.	
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Risk 2: Targeting strategy: project is focused on recognized poor and vulnerable group i.e. extreme poor, ethnic minorities, women/youth and disable and aged people. Client and IFAD interventions are well coordinated and complementary to each other.	
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## **China**

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### **Yunnan Rural Revitalization Demonstration Project Project Design Report**

#### **Annex 10: Exit Strategy**

Mission Dates: 16 to 25 September 2019  
Document Date: 27/02/2020  
Project No. 2000002358  
Report No. 5310-CN

Asia and the Pacific Division  
Programme Management Department





## **Annex 10: Exit Strategy**

1. Y2RDP has dual objectives of enhancing the income generating opportunities for the poor and vulnerable groups in the project area, meanwhile demonstrating effective pro-poor public and private partnership as well as public services for inclusive agribusiness development being the driving force for rural revitalization.

2. The exit strategy of the project thus takes considerations of two important dimensions: a) effectiveness and sustainability of project interventions and values during and after project implementation and; b) potential scaling out/up project experiences and lessons to inform government strategies and policies in rural revitalization.

3. Overall, exit strategy in the sustainability dimension will build on:

- i) Alignment and synergy with government strategies and programs to ascertain political commitment and sustainability of resources.

Y2RDP adopts most of its strategic and implementation features well aligned with government strategies and policies. Mainstreaming smallholders in modern agriculture and revitalizing the rural areas with thriving industry that can benefit the smallholders are the key strategies of the government that Y2RDP will closely aligned with. Human resources development especially the focus to youth and women will nurture new farmers for rural China to vitalize. Throughout the implementation, the project shall focus on demonstrating inclusive, equitable and sustainable business models adopting a value chain approach. Standardizing farmer cooperatives and supporting cooperative-led business models will be given priority by the project. Evidence based success and experience in all these areas shall draw due emphasis from governments for continued support of project practices and values. A robust Management Information System (MIS) will be developed for Y2RDP to serve management and strategic purposes.

- ii) Beneficiary empowerment and stakeholder institutional capacity building.

Y2RDP shall adopt adequate beneficiary participation in developing business plans where they are one of the benefiting partners. Through cooperative standardization, Y2RDP shall empower smallholders with collective decision making in agro-business management, the same applies to Y2RDP's special support to rural women and youth. Project management offices will be established on basis of existing offices within the government systems to ascertain continuity. Private entities involved in the project will be selected based on criteria considering their sustainable operation. All the government and private institutions shall be oriented with project strategy and approach of inclusive and sustained value chain development, so as to adequately carry out their services and support during and after project implementation.

- iii) Lasting partnership with service providers and economic entities to ascertain business continuity.

Y2RDP shall adopt competitive and transparent process to select agri-business partners for the smallholders. Sub-sectors with local specialties and market comparative advantages will be prioritized as result of value chain mapping. Public finance to the business partnership shall not constitute subsidy to either of the partners in the relation, rather will be catalyst to forge business relation and start/expand business operation. Performance of business will be linked to disbursement of public support. Government services will be availed to the partnership during and after project completion.

Incubation centers established by the project will aim to graduate from initially subsidized operation at project start to self-survival at project completion from services offers. External partners for related business services (e.g. training of young entrepreneurs etc) will be networked as sustained resources for these centers to continue their service provision.

- iv) Robust technical and economic sound business proposals that will generate benefits for all partners.

The review and approval committees of Y2RDP shall employ experienced/competent technical reviewers to ascertain business proposals are technically sound and economically viable. As much as possible, value chain approach will be adopted by all BPs. Project MIS shall be developed to monitor the performance of BPs during the project implementation. Profitability from project support agri-business partnership shall provide incentive for private entities to continue invest in the rural sectors.

- v) And last but not the least, the project supported infrastructures shall adopt adequate climate considerations to mitigate risks and be sustained in their functioning through the O&M arrangements introduced by the project.

4. The exit strategy on scaling out/up dimensions will build on:

- (a) Pathways through building synergy with other interventions of the country program which would include analytical works, technical assistance, impact assessments, policy engagement, south-south cooperation and partnerships. Meanwhile, interventions will be built in Y2RDP to allow a process of knowledge capturing, sharing and policy influence be led by the PPMO to explore scaling up of best practices derived from the project.
- (b) Engagement of national and provincial level stakeholders as drivers to replicate and scale up effective and innovative ideas and experiences derived from Y2RDP. Central level agencies such as MOF, NDRC, LGOP have strong expectation from IFAD finance project for innovations and best practices. A number of features in Y2RDP, once prove to be successful, shall inform the Ministry of Agricultural and Rural Affairs (MARA) for adoption in their program and policies, such as cooperative standardization program, rural youth entrepreneurship program, traceability system, climate service for agricultural production etc..
- (c) Exploring spaces in the context of government strategic pursuit to revitalize rural areas to scale up project best practices, this relates to political emphasis, financing required from both government and private sectors, engagement of related institutions both at local and national levels. Partnership shall be explored with academic institutions (such as the Chinese Academy of Agricultural Sciences) both for M&E and for analytical work, development partners for sharing and learning from each other, and related service providers and local institutions to scale up project introduced practices. A robust MIS and knowledge management strategy shall be developed at outset of project implementation to offer learning space for possible eventual scaling up.

5. Potential focuses for sustained effect and for learning and scaling up of Y2RDP may include, but not limited to, some of the following: Result Based Lending, incubation center, cooperative standardization, climate related risk mitigation schemes and services, traceability system, various inclusive agri-business models adopting value chain approach, climate proof techniques in irrigation and infrastructure development, benefiting mechanisms involving smallholders, Business Plan for strategic development of agro-entities, Management Information System for results-oriented project management. The modular design of the project especially relating to business models may also offer a learning for government projects to replicate.

6. To successfully implement the above outlined exit strategy, due efforts and certain provisions should be made during project implementation. Among others, it will be important for all PMO staff to comprehend and appreciate the project strategy and key design features, staff training and exchange visits shall be regularly conducted, especially during the project start up. Adequate budget for project M&E and knowledge management should be made available. Y2RDP shall undertake necessary advocacy and policy related events to engage and inform partners and policy makers. Project Implementation Manual (PIM) shall outline key technical requirements and processes to guide the implementation of the strategic and technical features and approaches that may generates potential for replication and scaling up. Technical assistance will be imperative especially in the areas of cooperative standardization and agri-business management. Y2RDP shall also actively participate in IFAD program related activities including annual portfolio review, COSOP consultation and policy related events. Y2RDP shall also maintain regular interaction with key stakeholders and partners at national and provincial level.

## **China**

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### **Yunnan Rural Revitalization Demonstration Project Project Design Report**

#### **Annex 11: Mainstreaming themes – Eligibility criteria checklist**

Mission Dates: 16 to 25 September 2019  
Document Date: 27/02/2020  
Project No. 2000002358  
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Asia and the Pacific Division  
Programme Management Department



## Mainstreaming themes – Eligibility criteria checklist

	<input checked="" type="checkbox"/> <b>Gender transformational</b>	<input checked="" type="checkbox"/> <b>Youth sensitive</b>	<input type="checkbox"/> <b>Nutrition sensitive</b>	<input checked="" type="checkbox"/> <b>Climate finance</b>
<b>Situation analysis</b>	<input type="checkbox"/> National gender policies, strategies and actors <input type="checkbox"/> Gender roles and exclusion/discrimination <input type="checkbox"/> Key livelihood problems and opportunities, by gender <input type="checkbox"/> Use (pro-WEAI) assessment for M&E baseline	<input type="checkbox"/> National youth policies, strategies and actors <input type="checkbox"/> Main youth groups <input type="checkbox"/> Challenges and opportunities by youth group	<input type="checkbox"/> National nutrition policies, strategies and actors <input type="checkbox"/> Key nutrition problems and underlying causes, by group <input type="checkbox"/> Nutritionally vulnerable beneficiaries, by group	
<b>Theory of change</b>	<input type="checkbox"/> Gender policy objectives (empowerment, voice, workload) <input type="checkbox"/> Gender transformative pathways <input type="checkbox"/> Policy engagement on GEWE	<input type="checkbox"/> Pathways to youth socioeconomic empowerment <input type="checkbox"/> Youth employment included in project objectives/activities	<input type="checkbox"/> Nutrition pathways <input type="checkbox"/> Causal linkage between problems, outcomes and impacts	
<b>Logframe indicators</b>	<input type="checkbox"/> Outreach disaggregated by gender <input type="checkbox"/> Women are > 40% of outreach beneficiaries <ul style="list-style-type: none"> <li>• Pro-WEAI indicator</li> </ul>	<input type="checkbox"/> Outreach disaggregated by age	<input type="checkbox"/> Outreach disaggregated by gender <ul style="list-style-type: none"> <li>• Further details to be confirmed</li> </ul>	
<b>Human and financial resources</b>	<input type="checkbox"/> Staff with gender TORs <input type="checkbox"/> Funds for gender activities <input type="checkbox"/> Funds for Pro-WEAI surveys in M&E budget	<input type="checkbox"/> Staff with youth TORs <input type="checkbox"/> Funds for youth activities	<input type="checkbox"/> Staff or partner with nutrition TORs <input type="checkbox"/> Funds for nutrition activities	IFAD Adaptation Finance      N/A  IFAD Mitigation Finance      N/A  Total IFAD Climate-focused Finance      \$0
<b>ECG Remarks</b>	<b>Gender</b>  <b>Nutrition</b>  <b>Youth</b>  <input type="checkbox"/> No social inclusion themes			

## **China**

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### **Yunnan Rural Revitalization Demonstration Project Project Design Report**

#### **Annex: Stakeholders consulted**

Mission Dates: 16 to 25 September 2019  
Document Date: 27/02/2020  
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Asia and the Pacific Division  
Programme Management Department





### Y2RDP Stakeholders Consulted During Design Mission

Who	Where
Department of Agriculture and Rural Affairs (DARA)	Yunnan Province
Farmland Enhancement Division in DARA	Yunnan Province
Farmland Construction Division, Dept. Of Agri. & Rural Development	Yunnan Province
Division of Cooperative Economy in DARA	Yunnan Province
Poverty Alleviation Division in DARA	Yunnan Province
Finance Division in DARA	Yunnan Province
Yunnan Bureau of Agriculture and Rural Affairs	Yunnan Province
Yunnan Metrological Bureau	Yunnan Province
Women's Federation	Yunnan Province
Youth League	Yunnan Province
Poverty Alleviation Office	Yunnan Province
Maternity and Child Care Center	Yunnan Province
Bureau of Agri. & Rural Development	Yunlong County
Poverty Alleviation Office	Yunlong County
Bureau of Ethnic Groups and Religions	Yunlong County
Bureau of Employment	Yunlong County
Women's Federation	Yunlong County
Youth League	Yunnan County
Water Conservancy Bureau	Yunnan Province
Transportation Bureau	Yunnan Province
Wenxing Village Committee (Village heads & households)	Yunlong County
Dayanchang Livestock Coop.	Yunlong County
Jiaju Village (Village heads, households & women)	Yunlong County
Agriculture, Water Conservancy and Transportation Bureaus	Yunlong County
Environment Protection Agency	Yunlong County
County Metrological station	Yunlong County
Plant protection and Extension Services, Agriculture and Rural Development Bureau	Yunlong County
Bureau of Agri. & Rural Development	Yongping County
Poverty Alleviation Office	Yongping County
Bureau of Ethnic Groups and Religions	Yongping County
Youth League	Yongping County
Bureau of Human Resources and Social Security	Yongping County
Women's Federation	Yongping County
Water Conservancy and Transportation Bureaus	Yongping County
Bonanshan Tea Company	Yongping County
Boheng Tea Factory	Yongping County
Dapingtan Village (Village heads, households & women)	Yongping County
Dapingtan Tea Factory	Yongping County

Shijiacun Kiwi Coop.	Yongping County
Women's Federation	Lanping County
Youth League	Zhenxiong County
Poverty Alleviation Office	Lanping County
Maternity and Child Care Center	Zhenxiong County
Pianjiao Township	Yongshen County
Pianjiao Pomegranate Coop.	Yongshen County
Cunong Fruit & Vegetable Coop.	Yongshen County
Anhong Cropping and Livestock Coop.	Yongshen County
Bureau of Agri. & Rural Development	Yongshen County
Poverty Alleviation Office	Yongshen County
Women's Federation	Yongshen County
Maternity and Child Care Center	Yongshen County
Youth League	Yongshen County
Bureau of Agri. & Rural Development	Huaping County
Bureau of Agri. & Rural Development	Lanping County
Bureau of Agri. & Rural Development	Zhenxiong County
Bureau of Agri. & Rural Development	Suijiang County
Water Conservancy and Transportation Bureaus	Huaping County
Water Conservancy and Transportation Bureaus	Lanping County
Water Conservancy and Transportation Bureaus	Zhenxiong County
Water Conservancy and Transportation Bureaus	Suijiang County
Water Conservancy and Transportation Bureaus	Yongshen County
Village Committees and Farmer Cooperatives	Yongping County
Village Committees and Farmer Cooperatives	Lanping County
Village Committees and Farmer Cooperatives	Zhenxiong County
Village Committees and Farmer Cooperatives	Huaping County
Village Committees and Farmer Cooperatives	Lanping County
Village Committees and Farmer Cooperatives	Zhenxiong County
Village Committees and Farmer Cooperatives	Suijiang County