



Investing in rural people

## **Kingdom of Cambodia**

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### **Project for Agricultural Development and Economic Empowerment (PADEE)**

#### **Project completion report**

#### **Main report and appendices**

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## Currency equivalents

Currency Unit	= Riel
USD1.0	= 4,000

## Weights and measures

1 kilogram	=	1000 g
1 000 kg	=	2.204 lb.
1 kilometre (km)	=	0.62 mile
1 metre	=	1.09 yards
1 square metre	=	10.76 square feet
1 acre	=	0.405 hectare
1 hectare	=	2.47 acres

## Abbreviations and acronyms

ASPIRE	Agriculture Services Programme for Innovation, Resilience and Extension
CARDI	Cambodia Agricultural Research and Development Institute
CEDAC	Cambodian Center for Study and Development in Agriculture
CEW	Commune Extension Worker
CIG	Common Interest Group
CLCs	Community Learning Centres
CWCFP	Commune Women and Children Focal Point
DST	District Support Team
FAO	Food and Agriculture Organization of the United Nations
FBA	Farm Business Advisor
FFS	Farmer Field School
GCCT	Group Conditional Capital Transfer
GDA	General Directorate of Agriculture
GRF	Group Revolving Fund
ID Poor	Identification of Poor Household Programme, Ministry of Planning
IDE	International Development Enterprises
IFAD	International Fund for Agricultural Development
IGRF	Improved Group Revolving Fund
IRR	Internal Rate of Return
IPM	Integrated Pest Management
ISU	Implementation Support Unit, MOWA
LFA	Local Field Agent
MAFF	Ministry of Agriculture, Forestry and Fisheries
MBWin	MicroBanking System for Windows (banking software)
M&E	Monitoring and Evaluation
MEF	Ministry of Economy and Finance
MFA	Mobile Field Agent
MFI	Micro-finance Intermediary
MIS	Management Information System
MoWA	Ministry of Women's Affairs
MST	Mobile Support Team
NCDD	National Committee for Sub-National Democratic Development
NCDDS	NCDD Secretariat
NGO	Non-Governmental Organization
NIPMP	National Integrated Pest Management Programme
NLB	Non- Land Based Livelihood Activities
O&M	Operation and Maintenance
PADEE	Project for Agricultural Development and Economic Empowerment
PAR	Portfolio at risk
PIM	Project Implementation Manual
PDA	Provincial Department of Agriculture
PDOWA	Provincial Department for Women's Affairs
PM	Procurement Management
PIPs	Project Implementation Partners
PSU	Project Support Unit
RIMS	Results and Impact Management System
RULIP	Rural Livelihoods Improvement Programme in Kratie, Preah Vihear and Ratanakiri
TA	Technical Assistance
TOT	Training of Trainers
VAHW	Village Animal Health Worker

## Map of the Project area

### Kingdom of Cambodia

#### Project for Agricultural Development and Economic Empowerment

*Completion report*



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 | 31-07-2018



## PADEE at a glance

Country	Kingdom of Cambodia				
Project Name	Project for Agricultural Development and Economic Empowerment (PADEE)				
Key Dates					
IFAD Approval	Signing	Effectiveness	Mid-Term Review	Original Completion	Actual Completion
03 April 2012	08 June 2012	08 June 2012	March-April 2015	30 June 2018	30 June 2018
Last supervision	Interim Evaluation	Original Loan Closing	Actual Loan Closing		
06-17 July 2017	None	31 Dec. 2018	31 Dec. 2018		
IFAD Financing					
Loan	SDR million	11.3	% disbursed	99.29%	
Grant	SDR million	11.3	% disbursed	99.94%	
Loan top-up	SDR million	2.1	% disbursed	74.97%	

### Actual Costs and Financing (USD '000), as of 31 April 2018

Components	IFAD Loan	IFAD Grant	IFAD Top-up	Gov.	Benef.	FAO	SNV	iDE	Total	Appraisal targets	% Achieved
1.Improved Access to Financial Service	11,658	1,659	45	737	-	306	-	-	13,671	15,757	0.87
2. Improved Access to Technology and Markets	3,517	11,411	1,062	2,760	412	-	668	847	20,681	24,603	0.84
3. Project Coordination and Management	1,174	3,452	829	1,688	-	-	-	-	7,145	5,784	1.24
									-		
<b>Total</b>	16,351	16,523	1,937	4,449	412	306	668	847	41,498	46,144	0.90

### Number of Beneficiaries

<b>Total</b>	<b>Direct</b>	<b>Indirect</b>	<b>Women</b>	<b>Other</b>	<b>Other</b>
88,986	80,706	8,280	41,160		

### Project Objective

**The project goal** is to improve the livelihoods for poor people in the targeted communes in the project area of Kampot, Kandal, Prey Veng, Svay Rieng and Takeo.

**The development objective** is to improve agricultural productivity and to diversify income sources for rural households living in poverty in the project area.

### Country Partners

<b>Executing Agency</b>	Ministry of Agriculture, Forestry and Fisheries (MAFF)
<b>NGOs/civil society</b>	SNV, iDE, FAO, PROCASUR
<b>Other</b>	Ministry of Women's Affairs (MoWA) Provincial Department for Women's Affairs (PDoWA) Provincial Department of Agriculture (PDAFF) PA Morrison Kak Accounting/FAO

## Executive Summary

1. **Country Context.** Agriculture in Cambodia provides a modest contribution to national gross domestic product but remains critical to rural household food security and employment. Agriculture continues to be a vital sector for national economic growth plans, even as it is set to provide a decreasing share of rural incomes. Poverty rates in Cambodia are dropping and are at a historical low, as urban, and rural poor benefit from the diversification of the Cambodian economy. In agriculture, public policies promoting market-driven growth, open trade, and private investments has spurred an increase in both the volume and quality of products. Despite recent expansion, the relatively narrow economic base in the country has resulted in large segments of the population being unable to take advantage of economic gains. This is particularly true for the rural poor who lack sufficient land to ensure food security, employment opportunities, and physical, social, and financial assets to improve their household's welfare.
2. **Area of IFAD Collaboration.** The main thrusts of cooperation between the RGC and IFAD has been to build the human, physical, and financial assets of rural households. Interventions aim to improve extension services, while investing in inclusive commodity value chains and market access development opening paths towards improved poor rural household welfare and livelihoods.
3. **COSOP focus.** The 2013-2018 Country Strategic Opportunity Programme (COSOP) shifted programmatic focus from a livelihood to a market orientation approach. It also focuses on promoting decentralization of public services towards a broader concept of pro-poor rural service delivery involving non-government actors and a more explicit focus on the resilience of poor rural households. IFAD investment strategies from the 1980s until the mid-1990s combined building financial capital, extension services, and rural infrastructure in a single programme. From 2012 onwards, IFAD reoriented its focus on its comparative advantage in rural finance and extension services.
1. **Project duration, funding and area.** The Project for Agricultural Development and Economic Empowerment (PADEE) is a six-year programme implemented in five southern Cambodian provinces (Kandal, Takeo, Kampot, Prey Veng, and Svay Rieng). The total project investment is composed of an IFAD Loan of SDR 11.3 million (USD 17.5 million) and an IFAD Grant of SDR 11.3 million (USD 17.5 million) under the Debt Sustainability Framework (DSF). The Project was also funded by the Government of Cambodia (RGC) (USD 4.69 million), an IFAD loan top-up loan (USD 2.8 million), beneficiary contributions (USD 2.19 million), and contributions from implementing partners including SNV (USD 668,500), FAO (USD 313,350), and iDE (USD 378,490). GEF funding of USD 4.6 million was approved to support the *Building Adaptive Capacity through the Scaling-Up of Renewable Energy Technologies in Cambodia* (S-RET) under the PADEE framework. The IFAD Executive Board approved PADEE 3 April 2012. The Financing Agreement was signed on 8 June 2012 and became effective on the same date.
2. **The goal** of PADEE is to improve the livelihoods of the poor rural people in the target communes of Kampot, Kandal, Prey Veng, Svay Rieng and Takeo provinces. The development objective is to improve agricultural productivity and diversify the sources of income of 90,000 rural households living in poverty in the selected provinces.
3. **Rationale and Components.** PADEE supports poor rural small holder households to improve their livelihoods, assets, and incomes. The project is aligned with the country COSOP's second strategic objective to promote pro-poor D&D, and to support local institutional governance for agricultural and rural development. The programme has three

components: (i) Improved access to financial services; (ii) Improved access to technology and markets; and (iii) Project management and coordination.

4. **Project targeting and Implementation Arrangement.** The project was implemented in 975 villages in 246 communes and 33 districts. It covered 88,986 households, of which 8% were considered poorest, 22% poor, 61% medium poor households, and 9% were above poverty line. Landless and land-poor farmers, rural youth and woman-headed households in the poorest category were prioritized for assistance. The selection of beneficiary households was based on National ID Poor Programme and validated by participatory wealth ranking exercises. The project is led by Ministry of Agriculture Forestry and Fisheries and implemented through decentralization framework at sub-national level. Three Project Implementation Partners supported the project: FAO (on rural finance), iDE (establishing private extension service), and SNV (on/ off farm enterprise training curriculum development and market linkages).
5. **Relevance is rated satisfactory (5).** PADEE design and implementation was closely aligned with national country development policies and strategies, the with IFAD strategic framework, and with the development evolution of previous/ current COSOPs.
6. **The PADEE design** was built on rural poverty alleviation through improved agricultural productivity and diversification of income sources among the project target group beneficiaries. Project interventions focused on improving access to financial services through 50-member IGRFs, improved farming and enterprise practices via Common Interest Groups, as well as improved access to markets. More technically capable extension helped beneficiaries go beyond subsistence farming to selling produce at organized markets fetching higher prices over traditional farm gate and local buyer sales practice. IGRF group management, training, and capacity building in groups, along with increased incomes and improved food security was to increase target beneficiary household financial, human, social, physical, and natural capital. This would translate into sustainable livelihoods and poverty reduction impacts as well as increased climate change resilience. The emphasis on climate resilience was reinforced when S-RET renewable energy interventions were introduced to PADEE. (See ¶ 43 below) Notably, programme implementation by provincial and local level governments worked to decentralize both capacity development and leadership, consistent with RCG policy aims. The participation of the Provincial Department for Women's Affairs (PDoWA) ensured a strong focus on gender equality, as well as on youth opportunity development.
7. The programme remained relevant through to completion, with modest modifications at Mid-term review (MTR) which had overall beneficiary targets reduced from 90,000 to 68,200. This was due to an overestimation of participation from Group Revolving Fund Members (transferred from the Rural Poverty Reduction Project) and non-land base activity households, along with shifting a bio-digester intervention to the Scaling-Up of Renewable Energy Technologies (S-RET) Project.
8. **Effectiveness is rated satisfactory (5)** The project served 88,986 households (99% of its original target and 130% of its target revised at MTR<sup>1</sup>), with more than 50% of household are headed by women. With an average household of five persons, the total number of beneficiaries was 445,000 people, exceeded the MTR revised target of 341,000 people and meeting the original design target of 450,000 persons.
9. *Outputs mostly achieved under component 1.* Through effective membership training and support provided by Commune Extension Workers (CEW) and accounting support from the Mobile Field Agents (MFAs), IGRFs met most PADEE output and outcome indicator targets. IGRF membership increased steadily with strong female participation as target households benefited from financial literacy training and technical assistance. Understanding of and commitment to IGRF organizational governance, principles, and processes created a virtual cycle of social and financial capital creation, which further

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<sup>1</sup> The target at MTR was reduced from 90,000 to 68,200 HHs due to i) the high realization of GRF under Rural Poverty Reduction Project (RPRP) at design and the exclusion of bio-digester beneficiaries.

inspired membership commitment to good practice group management. PADEE also put in place an effective online IGRF performance monitoring system for group and for ensuring timely and quality MFA support (also serving as a implementation partner performance incentive measurement system). Many IGRFs are likely to become sustainable but some other will require further support (to be provided in part by the new IFAD ASPIRE programme).

10. *Mixed physical achievement of outputs under component 2.* A series of on and off farm training and capacity building activities led to beneficiary adoption of new production and enterprise development methods, technologies and market access points (e.g., produce collection points, value chain clusters, and community learning centers). The results saw notable small holder beneficiary access to markets and value chains leading to increased household/ enterprise income. Outputs targeting agriculture produce clearly led to more anticipated outcomes than non-agriculture-based training achieved possibly due to a focus on value chain clusters and market access points geared to agricultural products. Linkages to financial services supported improved income and asset development and the market linkage models showed promise for replicability and scaling. The component also contributed to improved nutritional security through the implementation of low-cost early childhood nutrition promotion systems.
11. *Observable links from outputs to expected outcomes, leading to impacts.* Achievement of key outputs under the two technical components led to improved access to financial services, increased agricultural productivity and income, and increased physical and financial assets among the target groups. The project strengthened human and social capital, supported empowerment of the poor and women, improved food security, and enhanced gender equity.
12. **Efficiency is rated satisfactory (5).** The project achieved an overall disbursement rate of 89.9% (IFAD loan 93% and grant 94%). An IFAD top up loan to scale activities was 67% disbursed. The RCG and beneficiary contributions were 95% and 19% (at 30 April 2018). Once eligible expenses are accounted, PADEE will achieve 95% of its financial target and for a total USD 41.5 million expenditures. IFAD financed 84% with 39%, 40% and 5% from loan, grant and top up financing respectively, while the RCG invested 11% and beneficiaries 5%. Programme management costs were 16.7% of expenditures or USD 6.95 million, yielding a low cost per beneficiary household of USD 466, and per beneficiary of USD 93.
13. *Responsive management and coordination.* Despite a temporary slowdown of implementation caused a change in senior programme management at the programme support unit in 2015, the project management maintained an acceptable pace of implementation. The PSU was able to do this in an evolving implementation environment incorporating S-RET into PADEE and applying additional financing for scaling up both technical components. Recommendations made by supervision mission were sound, and supported implementation consistent with expected programme goals and objectives. The project management effectively operationalized annual workplan and budgets (AWPB) progress reporting regimes, procurement planning/ plans, monitoring and evaluation system, and management information systems, accounting system. The implementation of PADEE technical components relied on partnerships based on agreements with external institutions such as FAO, SNV, iDE, PROCASUR and MoWA resulting in satisfactory physical and financial performance.
14. *Satisfactory financial management.* The presence of knowledgeable and experienced staff in the PADEE finance unit from beginning of the project was vital for good practice financial management. The programme accounting software was promptly procured and established. This allowed the finance unit to produce required programme reports on time with notable quality (although system customization did not allow automatic reporting of expenditures by component). This facilitated the preparation of withdrawal applications and supported programme management decision making. AWPBs were less accurate than ideal due to the highly decentralized and participatory nature of their development.

15. *IFAD and Government financing.* Fund flows to the programme were regular and timely, with no cash shortages reported. Government counterpart funding was in the form of cash and in-kind (e.g., office rent & utilities, etc.). Its USD 4.45 million contribution was 95% of its USD 4.7 million commitment and was provided in line with and on time with AWBP expectations.
16. **Consistent IFAD and Government support.** Guidance from IFAD Head Quarters (HQ) on programme implementation, financial management, and fiduciary aspects was adequate and useful. IFAD was flexible and responsive to the evolving implementation context and provided technical support from HQ and the IFAD country office in Phnom Penh. IFAD participated in annual supervision missions and the MTR. IFAD follow-ups on withdrawal applications most 'no objection' decisions were within reasonable time limits. The RCG committed the relevant technical agencies and required staff at each level of government, ensuring consistent implementation progress and support.
17. **Economic Analysis.** The results from the updated Economic Analysis found positive values for all the Cost Benefit Analysis indicators. The financial net present value (NPV) is USD 20 million, while the economic NPV is USD 15 million. The programme benefit to financial and economic cost ratios are 1.37 and 1.30 respectively. The financial internal rate of return is 26.2% and economic internal rate of return is 23.4%.
18. **Sustainability is rated moderately satisfactory (4).** Some 80% or more of IGRFs are expected to become sustainable over the long term particularly as linkages to the formal financial increase. Increased access to finance, coupled with good agricultural practices and improved off-farm economic activities and decentralized agricultural extension/ MAFF services provision will support sustainable and more profitable linkages between poor smallholders, buyers, and markets. After an assessment of six institutional development options, the programme has taken initial steps towards converting IGRFs to Agricultural Cooperatives and towards creating a supporting apex organization (to be continued under ASPIRE). Group/ community actions and RCG support leading to successful household development outcomes has improved beneficiary confidence to continue to adopt new on and off farm enterprise development methods/ technologies. Beneficiaries reported being able to stay with their families in the villages as a result.
19. The continued success and sustainable outcomes of PADEE's will rely on three pillars: (i) supporting smallholder and poor farming households led institutions by helping them to organize themselves, build social capital, and access financial services; (ii) empowering local farmers through knowledge and technology transfer to sustainably improved productivity; and, (iii) improved market access/ linkages. Local commune authorities have committed to support IGRF by *inter alia*: (i) encouraging transformation IGRF into agricultural cooperatives; (ii) supporting monthly meetings and Banking Day; (iii) assigning a staff member to be responsible for IGRF/AC development; (iv) coordinating with other donors to secure ongoing support; and, (v) merging IGRF activities into ASPIRE.
20. *Environmental sustainability.* The renewable energy technology component of PADEE under S-RET was transferred to ASPIRE. Other activities implemented under PADEE focusing on climate-smart coping farming system, sustainable livestock, and renewable energy initiative will also be continued under ASPIRE and supported by various levels of the RCG.
21. A roadmap for the integration of PADEE activities (IGRFs, value chain clusters and S-RET) into the new IFAD programme ASPIRE was developed for the continuity of results
22. **Knowledge generated.** PADEE generated several good practices with notable replication and scaling up potential in Cambodia and other countries. Some include:
  - PADEE was the first programme to successfully implement activities with the participation of the MAFF, MoWA, PDAFFs, PDoWAs and PAs, NGOs, and UN agencies;

- MoWA has adopted the programme's successful integration of gender and nutrition projects/ promotion for its agricultural development plan as part of the next Cambodian five-year gender strategic plan (2019-2023);
- Local grassroots extension service providers including communal extension works and farmer to farmer field schools proved an effective means to transfer and support agricultural technology;
- Success market collection points for vegetables depends on the location and its proximity to the market; and
- Contract farming works well with organic and Good Agricultural Practices (GAPs).

### Key lessons learnt

- Allow for a longer value chain market access learning curve especially if implementation is a 'learning-by-doing' intervention and if it focuses on non-land based activities (even if supported by external, expert service providers).
- Supply-driven savings/ credit group sustainability considerations are key. IGRFs run the risk of being unsustainable unless their long-term profitability is considered at design, including a well researched assessment of the future rural financial service sector supply and demand context.
- Lack of fully effective loan collection mechanism among IGRFs remains a concern especially the cases of member relocation or death.
- Knowledge sharing requires a knowledge management strategy and knowledge management and communication officer.
- Change in senior management affected the project implementation. Senior project management consistency/ stability is crucial to implementation success, and great care must be taken if management must change during the programme;
- The hiring of skilled and experienced FM staff is key for early and effective financial management systems development.
- More accurate annual budgets enhances use of budget as planning and monitoring tool.
- Improved coordination between M&E and finance staff allows record keeping of in-kind contributions from beneficiaries.
- Better customization of the FM reporting in the accounting system (e.g., to include all required reports, especially those required by government).

### Conclusions and recommendations

23. PADEE achieved its development objective of improved agricultural productivity and diversification of income sources for the rural households living in poverty in the five project provinces. The project was effectively implemented and exceeded revised outreach target by reaching more than 88,986 direct beneficiary households. Targeting was also effective, and the project was able to successfully help the poorest, the poor, and the medium poor improve access to financial services, adopt appropriate production and enterprise techniques and technology, and enhance access to markets.

24. The project investment coherence was good, with observable links from outputs to expected outcomes, leading to anticipated impacts. Achievement of key outputs under the two technical components led to improved access to financial services, increased agricultural productivity and income, and increased physical and financial assets among the target groups. The project demonstrably strengthened human and social capital and empowerment and improved food security. With over 50% of women as participants and beneficiaries, the programme notably enhanced sensitivity to and positive action on gender equity and women's empowerment.
25. The prospects of PADEE interventions achieving lasting effects and some degree of sustainability are good, with some activities requiring ongoing support being transferred to the new ASPIRE programme. Knowledge generated by the programme and lessons learned are a positive legacy for the IFAD Cambodia country programme, some of which have notable potential for replication and scaling-up in the country and in the region.

### **Recommendations**

- An institutional approach for rural financial services should be considered to improve sustainability potential;
- The value chain cluster approach implemented under PADEE should be replicated by other IFAD-supported projects, including individual support packages, in-country and international learning and sharing, and South-South exchange/ cooperation;
- Design and execute technical assistance with an agenda and roadmap, including explicit actions to transfer knowledge to participating technical agencies as part of the institutional capacity building;
- Set explicit and measurable goals and linkages between technical components to ensure maximum synergies;
- Organize communities into marketing groups/ clusters before IGRF are formed (e.g., before the financing mechanism);
- Factor the in costs of programme implementation convergence/ coordination among various levels of managers/ partners (e.g., at the provincial and community level). This will enhance institutional sustainability beyond the project completion.





## A. Introduction

26. The Agricultural Development and Economic Empowerment (PADEE) programme was approved by the IFAD Executive Board in April 2012 for 50% loan and 50% grant under Debt Sustainability Framework (DSF) of SDR 22.6 million (or USD 35 million). The Financing Agreement of PADEE was signed on 08 June 2012 with a completion date of 30 June 2018 and a financing closing date 31 December 2018. The Project was also funded by the Government of Cambodia (RGC) (USD 4.69 million), an IFAD loan top-up loan (USD 2.8 million), beneficiary contributions (USD 2.19 million), and contributions from implementing partners including SNV (USD 668,500), FAO (USD 313,350), and IDE (USD 378,490). GEF funding of USD 4.6 million was approved to support the *Building Adaptive Capacity through the Scaling-Up of Renewable Energy Technologies in Cambodia* (S-RET) under the PADEE framework.
27. **Design rationale.** Despite a growing and dynamic economic, rural Cambodians suffer high levels of poverty and economic inequality. At the time of design, the Global Hunger Index for Cambodia was of 19.9, indicating serious conditions of hunger and poor nutrition. Indeed, rural Cambodia was home to 92% of the country's poor.
28. The Cambodian rural economy remains dominated by low value added agricultural production and low levels of productivity. Rice was by far (and remains) the dominant crop, accounting for 80% of the cultivated land at design. While other sectors were emerging, they provided few employment opportunities in rural areas, and agriculture was by far the main source of employment.
29. Cambodia was also considered highly susceptible to the effects of global climate change. Cambodia was expected to see an overall increase in temperature as well as higher, more intense rainfalls in shorter, more intense wet seasons. The frequency of extreme events such as windstorms, floods, and droughts would increase as a result. Rising sea levels would affect many low-lying agricultural areas with flooding and salt-water intrusion.
30. Agriculture and natural resources were/ are most vulnerable to climate change, and the threats to the rural poor and their sources of income and livelihood were great as a result. Exacerbating this context was the generally low level of technical and institutional preparedness for both responses to extreme events and development of longer-term climate resilience.
31. Despite these challenges, Cambodia's potential for agricultural-led rural poverty alleviation was and remains strong. Progress had been made in rice productivity, crop diversification, and improved livestock production. Opportunities for improving agricultural production and value added were identified at design were numerous and substantial, including enhancing natural resources management such as soil and water use/ access. Other opportunities included improving poor small holder access to quality inputs, production techniques, post harvest storage and handling, value added activities, and access to inclusive and pro-poor finance.
32. **Evolution of context.** The implementation context has seen significant evolution since design, including in rural areas. The country significantly reduced poverty from over 50% in 2007 to 13.5% in 2014, with rural poverty declining from 48% to 17%.<sup>2</sup> Agriculture has benefited from more market-driven development, particularly in several domestic and export oriented agricultural value chains such as garden vegetables. Agriculture as a percentage of GDP has dropped from 5.5% in 2006 to less than 1% in 2014. While lagging other sectors, agriculture exports have nonetheless notably improved since design and the RGC continues to see modernisation of agriculture production, processing, and exports as key components to a national strategic development vision.
33. Diversification of agri-businesses remains a development bottleneck, as is expanding and improving agricultural extension support services across rural areas. This is critical particularly for poor smallholder farmers who typically lack the knowledge and assets, physical and financial, to

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<sup>2</sup> Cambodian Agriculture in Transition: Risks and Opportunities, 2015

maximize investments in new or traditional production and commercialization methods. There are many underdeveloped value chains that require improved coordination, planning, and investments if they are to maximize stakeholder investment returns, including to the poor. A key and constant need for integrating the poor successfully in developing value chains and the economy more generally, is improved access to quality and inclusive financial services for rural poor on and off farm enterprise development.

34. **Enabled policy environment of implementation.** The implementation of PADEE has benefited a favorable government policies and strategies. There has been strong policy support, as well as consistent and increasing investments in the agricultural sector and in agri-business development by the RCG. *The Policy for Agriculture Extension* adopted in 2015, has the goal of facilitating for all Cambodian farmers, improved agricultural knowledge, information, agricultural productivity enhancing technologies, product diversification, market access/ commercialization, and sustainable natural resources management. The policy calls for enhanced linkages between farmers, researchers, and agricultural institutions for the delivery of improved agricultural extension services. Linkage mechanisms would include policy and regulations, institutional structure and organization, and operations. The Agriculture Master Plan to 2030 is under formulation and is expected to define other key elements for national agricultural transformation.
35. The formulation of the *National Council for Sustainable Development* (NCSD) has led to improved coordination of climate change activities in Cambodia and to promoting a stronger, comprehensive, and more effective climate resilience response, including preparation of the Cambodian Climate Change Strategic Plan 2014-2023, the Sectoral Climate Change Action Plans, and the Climate Change Financing Framework.
36. **Objective of this PCR.** The objective of this PCR is to assess and document PADEE's overall implementation performance and the results achieved. The PCR captures and documents the experience and lessons learned for use by the RCG, IFAD and others in similar current and future projects. The PCR: (i) assesses project relevance at the time of design and at the end of the programme; (ii) assesses how effectively the project was implemented and met its objectives; (iii) documents outputs, outcomes, and impacts; (iv) presents project costs and benefits; (v) assesses project implementation efficiency, including IFAD's and partner's performances; (vi) assesses project benefits sustainability prospects; (vii) documents lessons learned; and, (viii) assess the potential for replication and/ or scaling up of project activities.
37. **Organization of the PCR.** The PCR process began with a review by stakeholders of the PCR terms of reference and results from previous supervision missions/ the midterm review. These reviews were done at a PSU organized Provincial Annual Refection Workshop (late 2017), the Provincial Stakeholder Workshop (May 2018), and the National Stakeholder Workshop in June 2018. The PSU compiled stakeholder input, as well as data from the programme's MIS system, and the end-line survey. The PSU drafted the PCR.
38. A PCR mission was conducted during 6 - 19 June 2018 in country.<sup>3</sup> The objective of the mission was to assist the RCG and project management to validate and finalise the PCR. The mission assessed M&E data, had extensive consultations with programme stakeholders at various levels of implementation including provincial and district-level implementing partners and beneficiaries in their villages. The mission visited the project provinces of Kandal, Svay Rieng and Prey Veng during the period 07 – 10 June 2018, and held a national stakeholders' workshop in Prey Veng on 10-11 June 2018. A debriefing with PSU was held 15 June 2018 and a wrap-up meeting, chaired by Dr. Meas Pyseth, Deputy Secretary General of MAFF and Project Director for PADEE and ASPIRE, was held 19 June 2018 in Phnom Penh.

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<sup>3</sup> Mission composition: Ms. Yangyuentham Wanaporn, Programme Analyst, Ms. Emily Colema, Rural Finance Specialist, Mr. Srey Chanthay, Implementation Performance Specialist, Mr. Chan Sophal, Economist, Mr. Meng Sakphouseh, IFAD CPO in Cambodia and Team Leader, and Mr. Peter Situ, Mission Leader.

## B. PADEE description

### B.1. PADEE context

39. Economic growth in Cambodia has been fuelled by the tourism, construction, and garment sectors. While significant poverty reduction had been achieved over the last decade, the relatively narrow economic base for growth has resulted in large segments of the population being unable to take advantage of economic improvements. This was particularly true of rural areas and for the rural poor who are the majority of PADEE's target group. The poor typically have less than one hectare of rice land and few to no small livestock. The single most important livelihood for poor households is rice production, which, as important as it is, has low yields (between 2 to 2.5 Mt/ha) which ensures some food insecurity in poor households for several months each year.<sup>4</sup>
40. Poor households face other constraints to improving their welfare. Very poor farmers were highly risk-averse and, even if they were not, generally lack the physical and financial assets required to adopt improved farming/ enterprise methods/ technologies. PADEE's intervention strategy was designed to create a supportive/ safe learning environment for farmers to increase confidence and reduce the actual and perceived risks of investing their time and money in productivity improvements and income diversification. The programme approach included *inter alia* a menu of capacity building activities, market linkages, and access to finance to provide household appropriate paths to improved welfare and livelihoods.

### B.2. PADEE objectives

41. **The project goal** is to improve the livelihoods for poor people in the targeted communes in the project area of Kampot, Kandal, Prey Veng, Svay Rieng and Takeo.
42. **The development objective** is to improve agricultural productivity and to diversify income sources for rural households living in poverty in the project area.
43. The programme was six years long, with two technical components: (i) improved access to financial services; and, (ii) improved access to technology and markets. Component 3 was project management and coordination.
44. **Component 1. Improved Access to Financial Services:** The specific objectives of Component 1 was to improve the target population's access to financial services in a sustainable way. The component had three strategic major activities: (i) formation of groups of poor households for constituting Improved Group Revolving Funds (IGRFs) and re-capitalizing poor family economic base through an increase in their assets; (ii) support improvements in individual households' ability to manage cash flows; and, (iii) support to existing groups of poor households through a combination of financial literacy and improved access to financial services.
45. **Component 2. Improved Access to Technology and Markets:** The specific objectives of Component 2 were to support economic empowerment of target households and contribute to agricultural development in the project area. Outcomes included: (i) improved and innovative training packages and approaches being developed and used; (ii) farmers adopting improved production and marketing techniques; (iii) poor rural households diversifying income sources through adoption of improved technologies for non-rice crops, livestock, aquaculture and non-land based income generating activities; (iv) successful establishment of sustainable private extension agents and associated input supply chain in project area; (v) establishment of approximately seventy five (75) profitable contractual linkages between farmer groups and

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<sup>4</sup> Low yields are a result of a combination of poor soil quality (soils with low nutrient levels and low water retention capacity), requiring as a result considerable amounts of fertilizer for moderate yields. Inputs are not always available to poor farmers given low incomes, difficulties in saving, and lack of access to, and high cost of credit. Other key constraints include: (i) inefficient production techniques; (ii) high post-harvest losses and inefficient marketing practices; and, (iii) lack of efficient rural infrastructure.

- agricultural markets or other business ventures; and, (vi) pro-poor bio-digester technology being successfully adapted to benefit project beneficiaries (4,000 bio-digesters).
46. **Component 3. Project Coordination and Management:** The specific objectives of Component 3 were to support the efficient programme oversight/ management of Ministry of Agriculture, Forestry and Fisheries (MAFF) Project Support Unit (PSU) and the Ministry of Women's Affairs (MoWA) Implementation Support Unit (ISU).
  47. **Modification in design.** Modifications to PADEE were introduced after the mid term review (MTR) without altering the overall project design. (See Section C.3) Modifications included: (i) the overall target population was reduced from 90,000 to 68,200 households due to a) overestimation of Group Revolving Fund Members of the Rural Poverty Reduction Project (RPRP), b) non-land base activity households, and c) shifting of the bio-digester activity for 4,000 households to the Scaling-Up of Renewable Energy Technologies (S-RET) Project at MTR; (ii) reallocations of funding and the addition of USD 2.9 million IFAD top up grant; and, (iii) a top up the Global Environment Fund (GEF) funded Building Adaptive Capacity project through S-RET.
  48. **Innovative features.** PADDE was recognized for several innovative features, including *inter alia*: (i) introduction of the online IGRF monitoring and management information system via a third party service provider (MBwin); (ii) the MAFF and the International Development Enterprises (iDE) partnership to substantially expand the successful Farmer Business Advisor programme into additional provinces and communes; (iii) piloting the business cluster approach; (iv) introducing a demand-driven approach to capacity development; (v) introducing pro-poor bio-digester component into National Bio-digester Programme supported of SRET; and, (vi) supporting non-land based capacity building programme.

### B.3. Implementation modalities

49. The project management was based on previously IFAD-financed interventions in Cambodia focusing on agriculture and rural livelihoods, all of which included some combination of improved agricultural practices training, on and off-farm enterprise/ livelihood activities, improved access to finance through group revolving funds, and decentralized agricultural service provision. PADEE relied on MAFF for management and coordination, delivery of agricultural extension services, and extensive partnerships with other technical agencies and organizations within the RCG, civil society, and at the grassroots level. The project's strategy meant to balance the experience of previous IFAD projects and to introduce some new and/ or innovative features.
50. **Project Management.** The project was implemented by MAFF, MoWA, the National Committee for Sub-National Democratic Development Secretariat (NCDDS), the Provincial, District and Commune Administrations (PCAs), Provincial Departments of Agriculture (PDA), Provincial Departments of Women's Affairs (PDOWA) and their respective district offices.
51. **National level.** MAFF had overall programme oversight and project management/ coordination. The General Directorate of Agriculture (GDA) of MAFF had responsibility for land-based technical support at the national and sub-national levels. The Ministry of Women's Affairs (MoWA) implemented the programme's gender mainstreaming strategy and its non-land-based activities in Component 2. The National Committee for Sub-National Democratic Development (NCDD) took responsibility for integrating the programme into emerging sub-national administrative structures and supporting implementation activities through its network of advisers at Provincial and District levels. It also ensured effective communications between the MAFF-PSU and the Provincial Administrations and the Provincial and District Administrations which had provincial programme implementation responsibilities. The Ministry of Economy and Finance (MEF) provided *inter alia* inter-agency coordination, fulfilled the government fiduciary oversight responsibilities, ensured RCG counterpart contributions, timely withdrawal applications, procurement approvals and provision of required RCG programme documentation.

52. **At sub-national level.** Provincial administrations had responsibility to contract project implementation activities to the Provincial Departments of Agriculture (PDA) and the Provincial Department for Women's Affairs (PDOWA). They assigned a senior official to act as the Provincial Project Coordinator, managed and coordinated programme activities in each province, lead the annual work plan and budget (AWPB) process and preparation at the provincial level. The PDA had the responsibility to support programme capacity building for on-farm activities, to assign, manage and support the Mobile Support Teams (MST) and Commune Extension Workers (CEWs) which provided training/ support local CEWs and Village Animal Health Workers.
53. PDOWAs implemented PADEE's gender mainstreaming action plan at provincial level, including training of target beneficiaries, facilitating third party led trainings contracted by the MoWA or the PDOWA. The District Administration (DAs) led preparation of AWPBs and coordinated with the implementing agencies (IAs) at the district level. Reporting to the District Administrations, Commune Councils (CCs) supported participatory wealth rankings and identification of IGRF groups, monitored and supported IGRF groups, worked with PDAs, PDOWAs and DAOs to recruit and coordinate CEWs, plan, and monitor commune level activities.
54. **Implementation Strategy.** The project employed participatory based planning. Each level of the programme provided input on project costs, with a follow consultations process where each level (national, provincial, districts, and communes) worked with the level above to plan their physical activities and financial needs for each fiscal year. Project implementing institutions from all levels met to review and consolidate the AWPBs annually in September.

#### **B.4. Target groups**

55. PADEE targeted resource poor rural women and men and their households, particularly smallholder rice farmers. To avoid excluding the land-poor from project benefits, the project pursued a balance between improving agricultural productivity and supporting the rural poorest and most vulnerable through non-farm interventions.
56. Beneficiaries of project activities were selected based on National ID Poor Programme validated (by wealth ranking exercise and assessment, including self-assessment), willingness to participate in the programme, and an ability to meet beneficiary programmatic responsibilities. The project aimed to women as over 50% of beneficiaries.
57. Three broad beneficiary categories identified through the wealth ranking process: the poorest (less than USD 1/ day), poor (between USD 1-3/ day), and medium poor (below USD 5/ day). Landless and land-poor farmers, rural youth, and women headed households were usually included in the poorest category and were priority targets for project interventions. Among smallholder farmers, those in the poorest category generally had less than 0.5 ha of rice land (i.e., insufficient for subsistence needs in most areas) and few or no animals. Poor households had between 0.5 to 1 ha of rice land and some animals. The medium poor could have between 1 – 2ha of land and animals.
58. The project was implemented in 975 villages in 246 communes in 33 districts. It served 88,986 households of which 8% were poorest, 22% poor, 61% were medium poor households, and 9% were above poverty line.

### **C. Assessment of PADEE relevance - Relevance is rated satisfactory (5)**

#### **C.1. Relevance and the external context**

59. **Support to the country policies and strategies.** The project was aligned with RCG's agricultural development strategies and contributed to the implementation of National Rectangular Strategy III (RSIII), as well as the government's overall decentralization policy. PADEE was designed to support and provide a competitive space for diversified extension service provision. The programmes interventions such as farm field school, Common Interest Group supported PDAs' desire to provide more responsive and accountable support services

to the rural communities through various models including Mobile Support Team (MST), Commune Extension Workers, Local Champions, and farm business advisors. PADEE also provided the opportunity to assess various intervention models for replication and scaling up by Agriculture Services Programme for Innovation, Resilience and Extension (ASPIRE) and Accelerating Inclusive Market for Smallholders (AIMS).

60. **Alignment with IFAD strategic framework.** The project goal and objective are consistent with IFAD Strategic Framework 2011 – 2015 goals of improving natural resource and economic asset bases of the rural poor, facilitating access inclusive financial services, improving nutrition, raising incomes, and building resilience in a changing natural environment. PADDE is also aligned with IFAD's goals to improve access to income generation opportunities and decent work, provide capacity building for beneficiary-governed and grassroots organizations, and to enhance service support systems.
61. **Consistent with COSOPs.** The PADEE design was consistent with the COSOP 2007-2012 for Cambodia, aligned with Strategic Objectives 1 and 2 "sustainable improvement of the livelihoods of the rural, and promoting pro-poor Decentralization and De-concentration reform and local governance for agricultural and rural development through institutional support." PADEE was aligned with the COSOP 2013 - 2018 for Cambodia in three specific ways: (i) moving from a livelihoods approach to a focus on enabling poor farmers market opportunity access under SO 1; (ii) promoting decentralization and deconcentrating of public services towards a broader concept of pro-poor rural service delivery under SO 3; and, (iii) taking a more explicit focus on climate resilience of poor rural households under SO 2.
62. **Capitalizing the rural poor.** PADEE was specifically designed to help poor rural households build financing assets and increase incomes by investing the opportunities created by improved good agricultural practices (GAP) and technologies. Specially, this would:
  - Diversify means of livelihoods improvement (e.g., poultry raising, vegetable production, aquaculture);
  - Improve on-farm productivity through enhanced production practices and better technologies (good quality seeds, modern varieties, plastic mulching, drip irrigation, net housing, animal vaccinations, safe-food production, CamGAP, etc.);
  - Connect to markets through collection points, value chain clusters, and contract farming;
  - Increase incomes through improved productivity and/ or diversified on-farm and off-farm projects/ enterprise;
  - Facilitate community-based grassroots farmers' organizations such as IGRFs, common interest groups, and encouraging formation of agricultural cooperatives.

## C.2. Internal logic

63. **The PADEE theory of change** was built on rural poverty alleviation through improved agricultural productivity and diversification of income sources among the project target group beneficiaries in the five project provinces - Kampot, Kandal, Prey Veng, Svay Rieng and Takeo.
64. The goal of PADEE was to improve the livelihoods of the rural poor through productivity enhancements and diversification in agriculture, improvement of nutrition status, and the building of social capital among community members. Project interventions focused on improving access to financial services through 50-member IGRFs, improved farming and enterprise practices via Common Interest Groups, as well as improved access to markets. More technically capable extension would help beneficiaries go beyond subsistence farming to selling produce at via organized markets fetching higher prices over traditional farm gate and local buyer sales practice. IGRF group management, training, and capacity building in groups, along with increased incomes and improved food security would increase target beneficiary household financial, human, social, physical, and natural capital. This would translate into sustainable livelihoods and poverty

reduction impacts as well as increased climate change resilience. The emphasis on climate resilience was reinforced when S-RET access to renewable energy interventions were introduced to PADEE.

65. **Appropriateness of proposed activities and modalities.** The objectives of each PADDE activity were found to be clear and coherent, and linked to outcome achievements at the beneficiary households. This said, the PADEE intervention activities/ modalities may have been more effectively sequenced. While establishing IGRFs at the outset of the programme provided basic financial instruments to beneficiaries, many households were not initially able to maximize use of funding due to a lack of income generating investment opportunities. Design may have more effectively provided technical training stimulating IGA projects and formation of community interest groups (including co funding of IGA ventures and cooperative farming activities) ahead of the IGRFs to prepare beneficiaries for access to financial capital.

*S-RET.* In view of RCG efforts to promote renewable energy and the potential for renewable energy use in the project area, S-RET was integrated into PADEE's IGRFs in all five provinces.<sup>5</sup> S-RET will be integrated at programme end into the new IFAD programme ASPIRE, covering 10 provinces.

66. *IFAD loan top-up loan.* The RCG requested an IFAD top-up loan of USD 2.9 million to enhance and extend programme outcomes. The additional financing was approved in September 2015 and was applied to scaling-up/ strengthening of: i) IGRFs; ii) farmer to farmer learning; iii) nutrition support; and, iv) market and value chain development support.

### C.3. Adequacy of design changes

67. **Reallocations and additional financing made to support the evolving needs.** There was no significant change in key design elements of the programme. Funding reallocation were made at the recommendation of the 2015 MTR. Loan and grant proceeds to Category III – Consultancy services and training; Category IV – Group Conditional Transfer Scheme; and Category VII – Activities implemented by project implementation partners (PIPs) were all increased. Loans and grant proceeds for Category I - Equipment; Category II – Technical Assistance; Category V – Operating and allowance; and Category VI – Rural Business Facility were all increased. The reallocations supported investments in grassroots-level capacity building, and to prepare for integration of the S-RET/GEF contributions and IFAD top-up allocation.

## D. Assessment of PADEE effectiveness

68. Effectiveness assesses the extent to which the development intervention's objectives were achieved, or are expected to be achieved, considering their relative importance. Effectiveness is rated **satisfactory (5)**.
69. PADEE development objective was to improve agricultural productivity and diversification of income sources for rural households living in poverty in the five provinces

### D.1. Physical targets and output delivery

70. Physical target and output delivery is rated satisfactory (5).

#### Component 1 – Improved access to financial services

71. Through effective membership training and support provided by Commune Extension Workers (CEW) and accounting support from the Mobile Field Agents (MFAs), IGRFs met most PADEE output and outcome indicator targets. Understanding of and commitment to IGRF organizational governance, principles, and processes created a virtual cycle of social and financial capital creation, which further inspired membership commitment to good practice group management. PADEE also put in place an effective online IGRF performance monitoring system for group and programme

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<sup>5</sup> The S-RET project is funded through the Global Environment Fund (GEF) with total amount of USD 4 600 000

management timely poor performance support intervention, and for supporting the MFA incentive system rewarding quality service provision.

72. Component 1 had three sub-components: (i) Group Conditional Capital Transfer Scheme; (ii) Capacity Building for Improved Access to Finance; and, (iii) Support to Existing Group Revolving Funds.
73. Table 01 and 02 shows PADEE met or beat most main outcome and output targets for Component 1 (revised after the MTR).
74. **PADEE met IGRF beneficiary participation targets** - The IGRF group formation target was met, as was the total beneficiary target of 49,200 IGRF members. Most of the groups showed solid lending performance (84% of IGRF lend more than 70% of their capital). Some 83% of IGRFs increased the size of their initial funding by 30% or more after three years of operation, or 17% less of expected results. The resulting aggregate IGRF loan portfolio is USD 15.8 million which represents a “contribution” of USD 320 per member (or about 25% of GDP per capita).<sup>6</sup>
75. **Female participation in IGRFs was strong.** The project exceeded its target of 50% of women as IGRF members by 40%. Just over 64%, or 34,440 of beneficiaries, were women. By 2016 there were also 3,196 women in elected IGRF committee positions, exceeding the target by 224%. Just over 40% more women were trained in financial literacy than planned at design.
76. **Target households benefited from financial literacy training.** Financial literacy training began in 2014 and by the end of the programme all IGRF group members had received training. PADEE employed a specialist service provider for capacity building in basic and advance financial literacy. The course included family cash flow, support for opening savings accounts with an MFI, and the support to link IGRFs with MFIs. Training also introduced household savings as a risk management tool (e.g., for natural disasters and illness) as well as way accumulate capital for future investments. The opening of all 984 IGRF group account with an MFI encouraged member to save and interact with the formal financial sector.

<b>Table 01: Component 1 Outcome – Output Performance against MTR target</b>		
<b>Outcome - Improved Access to Financial Services - targeted households improve financial literacy and increase level of investment and/or savings</b>	<b>Cumulative</b>	<b>% Target Achieved</b>
<b>Indicator</b>		
Outcome 1: 984 IGRFs established by PY4 and functional by PY 6, as indicated by the volume of savings and loan transactions and loan losses below 5% of loans outstanding as recorded through MBWIN and the records on MFA visits. (RIMS indicator)	981	99%
Outcome 2: By the end of PY 6, all IGRF groups have completed financial literacy training and have complied with at least two thirds of the conditions set for each transfer.	984	100%
Outcome 3: IGRF groups paid at least 95% of the amount due within 30 days of due date to the external service provider (MFAs).	981	99%
Outcome 4: 785 IGRFs increase the size of their initial fund by 30% after three years	650	82%
Output 1: Contract with specialist service provider for accounting, record keeping and reporting finalized successfully .	984	100%
Output 2: Contract with specialist service provider for capacity building in financial literacy finalized successfully.	984	100%
Output 3: 49,200 beneficiaries registered as members of an IGRF and trained in financial literacy by PY4 (of which at least 50% are women).	49,200	100%
Output 4: All IGRFs have female committee members, and women account for at least 25% of elected committees: 1,722	3,196	185%

77. **Strong, consistent organizational and structure creates social and financial capital** – The IGRFs are simple and well-structure group-based financial organizations. Group training targeting good leadership was found to be key to successful group operation. Better performing groups were

<sup>6</sup> <https://data.worldbank.org/indicator/NY.GDP.PCAP.CD>



those whose members reported leadership worked for the good of the group. Good leadership was guided by clear and well-understood group by-laws/ regulations and a common understanding group operational rules. Training and support facilitating understanding and acceptance of the rules was as a result critical. Accurate and consistent record keeping was also key. Groups that kept good records tended to have more trusted inter- member relationships and accumulated higher social and financial capital. Those groups which kept to regular meetings were also found to be associated with strong operation. A National Stakeholder Workshop report found that well trained groups had lower loan arrears.

78. **The virtuous cycle of good performance** - There was a positive relationship between savings and good operation of GRFs. Savings enable members and the group to increase their capital which in turn motivated members to come to meetings. The PADEE experience showed that when IGRF members start saving they would often reduce household expenses on unnecessary items so they can save more. This begins a virtuous cycle - more savings provides more capital to invest in economic enterprise, generating more earnings, creating more savings.

79. Consistent with the effectiveness of group order and structure, groups which met every six months as per organizational requirements had good loan repayment performance. Groups that met more frequently, however, had even better performance and accumulated more capital than those who with bi-annual meetings.

80. The PADDE experience also found better performing groups received positive reinforcement from public local authorities. Recognition incentivized group leaders and helped build member social capital central which in turn motivated constantly improved group management and development.

81. **Mobile field agents central to IGRF success.** The IGRFs were supported by a network of Mobile Field Agents (MFAs). These MFA provided ongoing group management, membership development, and supervisory support to the groups from start up to maturity. Critically, MFAs promoted the importance of IGRF operating procedures and governance, as well as providing hands-on record keeping support. MFAs were employed by a private sector external service provider PCG. The company won a competitive bid to provide services on a performance-based contract focused on-time client service provision.

82. **MBWin online accounting system provided timely monitoring information.** Partner for Consulting Group Ltd., (PCG) were awarded to provide accounting, record keeping, and reporting for IGRF groups. The MFA visited IGRFs on monthly basis (on 'banking day') to check books and submit data to the FAO-GIZ MicroBanking (MBWin), an online IGRF performance monitoring system. MBWin tracked a variety of IGRF performance data including portfolio quality, profitability analysis, capital growth and some programme output level data . The system also provided real time information on service quality

**Figure 1: Virtuous Cycle of IGRF of Management, Social & Financial Capital**



**Figure 2 – Service Provision Accountability and Performance**

A Minimum Quality Service indicator was introduced into the online IGRF MBWin to ensure MFA performance.

The "On-Time Ratio" (OTR) was measured for each MFA. An aggregate weighted average measure for all MFAs was also calculated.

For every one percent the On-Time Ratio is below 94% resulted in a 2% discount to the programme for PGC, the company managing MFAs, services for that month. By end 2017 the MFAs on time ratio was 98.4 per cent.

This system was suggested by the October 2015 IFAD's supervision mission and introduced by FAO

and programme management enhancements.<sup>7</sup> The MBWin is hosted by FAO, and the PADEE MBWin Server was maintained by the PCG. This arrangement was made to ensure the sustainability of the system.

83. **Client feedback.** A member complaints and feedback hotline was established with the support of FAO in late 2015 to provide IGRF members the means to hold MFAs accountable for service provision. There were 83 complaints in 2016 mostly related to absence of MFAs on banking days, late submission of reports, and mismatch between cash-in hand and reports. The service was discontinued for 2017 as the number of complaints decreased significantly and MFA services improved. A FAO phone survey in October 2016 found 88% of IGRF members were very satisfied or satisfied with MFA service (target 85%).
84. PADEE initiated steps to continued IGRF support under ASPIRE. The key elements of support include: (i) registering IGRFs as agricultural cooperatives (ACs); (ii) federating ACs and IGRF into Agricultural Cooperative Union for Revolving Fund (ACURF) in each province; and (iii) further strengthening the function of ACs and ACURFs under ASPIRE programme. Some 246, or 25% of PADEE IGRFs have already registered as ACs, and the remaining IGRFs will be transferred to ASPIRE which will assume the responsibility of ensuring group sustainability.
85. **Support to pre-existing Group Revolving Funds proved to be more challenging than anticipated at design.** PADEE's predecessor project, the Rural Poverty Reduction Project in Prey Veng and Svay Rieng (RPRP 2004 - 2011), supported Group Revolving Funds (GRF). Component 1 of PADEE was to support 3,000 Group Revolving Fund Member in existing GRFs. FAO was tasked to lead the Centre d'Etude et de Développement Agricole Cambodgien (CEDAC) in reviewing the existing GRFs and providing recommendations for their sustainability in 2015. It found 67% of the GRF were still operating but about 25% had weak management and substantial loan arrears.
86. The study recommended GRFs be supported to improve management capacity and particularly record keeping. PADEE made efforts to work with the GRFs, but due to different target communes of RPRP (e.g., different socio-economic context), operating models (e.g., 25 instead of 50 members, paid less interest on loans, etc.), and PADEE incentives/ capacity (e.g., pressure to meet IGRF goals, MTAs forming/ conditioning new groups) it was not possible to provide substantial support to the groups (who were, in any case, reported to be unenthusiastic about changing their *modus operandi*).
87. **Component 2: Improved Access to Technology and Markets.** The component was designed to support: (i) innovation in capacity building; (ii) applied training and capacity building; and, (iii) small rural business development.

### Summary findings

88. A series of on and off farm training and capacity building provided by the programme led to beneficiary adoption of new production and enterprise development methods and technologies. Improved small holder beneficiary access to markets and value chains combined with training led to increased household/ enterprise income and booster the adoption of the on farm practices. Outputs targeting agriculture produce led more clearly to anticipated outcomes than non-agriculture-based training, possibly due to the majority of the target HH are farmer and a focus on value chain clusters and market access points primarily geared to creating market access for agricultural products. Linkages to financial services also supported improved income and asset development.
89. **Agricultural training outputs achieved** While outputs clearly supported programme development objectives and led to outcomes predicted by the theory of change, performance by output was

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<sup>7</sup> See: <http://203.189.133.57/reports/>

mixed, albeit generally good. Based on participant numbers, livestock training had the highest rates of member training, and crop training the least for both men and women. Targets fishery training were exceeded for men, but women were underrepresented.

90. **Non-land and enterprise training outputs mixed** - PADEE had less success meeting non-land based and enterprise development training targets with only 55% of the total met. The activities were tasked to Ministry of Woman Affairs which did not have sufficient technical capacity and faced a scarcity of human resource.

<b>Table 02: Component 2 Outcome – Output Performance against MTR target</b>		
<b>Outcome - Improved Access to Technology and Markets - Targeted households use improved production technologies, establish market linkages, and diversify income sources</b>	<b>Cumulative</b>	<b>% Target Achieved</b>
<b>Indicator</b>		
Outcome 1: 70% of trained farmers still adopt <sup>8</sup> recommended technology two years after project intervention: 70	95	135%
Outcome 2: 10% of IGRF members engaged in new or scaled-up non-land based income generating activities by PY5. : 4,920	5,080	103%
Outcome 3: 34 small rural business matching grants approved and implemented efficiently by PY6.	34	100%
Outcome 4: Land and non-land based training packages developed (minimum 10 and 4 respectively), updated and endorsed by MAFF and MOWA by PY2	5	100%
Outcome 5: Around 200 Farmer Business Advisors providing extension services and supply of farm inputs to approximately 20,000 beneficiaries in a sustainable way by the end of the project period.: 200	368	184%
Outcome 6: The aggregate value of sales of each of the four priority VC products increases by 20% (in real terms) by IGRF members in the VC cluster areas within 3 years of starting VC activities in that cluster.	35%	175%
Outcome 7: 20% of IGRF benefit from e-PADEE intervention : 9,840	1,649	17%
Output 1: 490 CEWs trained and working by PY4, of which 50% are women	492	101%
Output 2: 49,000 beneficiaries trained in first and second year packages by PY5	49,200	101%
Output 3: 6,000 outstanding farmers trained in first and second year packages by PY5	8,280	138%
Output 4: 3,800 beneficiaries trained in non-land based income generating activities, of which at least 70% are women by PY5	3,870	102%
Output 5: 400 improved seed variety demonstrations conducted by PY5	400	100%
Output 6: 400 crop diversification demonstrations conducted by PY5	400	100%
Output 7: Low costs early childhood nutrition promotion systems to be developed and tested in each province in 2015 and then reviewed/refined before wider roll-out to all districts from 2016.	Done	100%

91. Overall training responsibility for implementation was under MAFF for on-farm activities and MoWA for non-land-based activities. SNV was responsible for overall coordination of the development of training modules. At provincial level, on-farm trainings were implemented by the district level trainers of the Mobil Support Team (MST), with support from the Provincial Support Team. Commune Extension Workers had a key role in the facilitation and follow up of groups along with Farm Business Advisors (FBAs implemented by IDE). The FBAs also played an important role supplying quality inputs to beneficiaries. In collaboration between Procasur and PADEE (2014 to 2017), the programme established the Local Champion system which sought to improve and enhance rural extension service by supporting knowledge sharing through farmer to farmer interactions. Additionally, with the support of a Korean grant, PADEE introduced an Agriculture Expert System technology (AES – a mobile tablet an digital system to provide farmers

<sup>8</sup> adoption defined as " at least half of the main changes/components of the technology covered in the training are applied"

with production enhancing information which included inter alia improved seed selection, soil testing kits et.). For the non-land base activities, MoWA contracted with Special Service Provider to provide training on handicraft, mushroom production and chicken raising. At the commune level, Commune Councils were encouraged to actively participate in the selection of the interventions.

92. **Other outputs delivered under the Component 2** – there were several other programmatic outputs not incorporated in the logframe and RIMS first level: (i) Collection Points (CPs); (ii) Value Chain Clusters (VCCs); Community Learning Centers (CLCs); and, Mother-to-Mother Networks.

93. **Market collection points successfully attracted farmers.** The project planned to set up and operationalize four vegetables collection points serving 300 farmers each. It was able to set up and operationalize eight collection points, serving 273 farmers on average.

94. **Good practice of value chain clusters attracted farmers and artisans.** The project assisted the beneficiary farmers with setting up 15 value chain clusters involving 1,444 farmers. The value chain clusters include vegetables, chickens, mushrooms, and handicrafts.

95. **Community Learning Centers offered local champion extension services beyond their communities.** Each CLC is run by five local champions who provide applied agricultural training services to their community members in their localities, but also to other communities and development agencies on demand. This increased the scale of the programme and related outcome and impacts.

96. **Nutrition packages reached all target communities.** The planned 588 low-cost early childhood nutrition promotion systems were operationalized. The project also facilitated the establishment and functioning of 984 Mother-to-Mother Networks (M2MNs) in all 246 target communes.

97. **Observable links from outputs to expected outcomes.** Achievement of key outputs under the two technical components was complemented by improved access to financial services, which in turn further increased agricultural productivity and income, and increased physical and financial assets among the target groups.

#### **Figure 3: Procasur, Farmer to Farmer Extension (F2F)**

The F2F Project was a collaboration between Procasur and PADEE (2014 to 2017), which aimed to establish the Local Champion system in Cambodia. It was a rural extension service tool which reduced the cost of knowledge and good practice transference to farmers, with the goal of developing farmers' capacities and skills to improve their economic activities and livelihoods, and encouraging them to share their experience and knowledge other farmers.

In doing so, the project would establish efficient and sustainable extension service from via Local Champions and serve as a basis for implementing the Local Champion system throughout Cambodia. Specifically the project aimed to: (i) strengthen and support actual Local Champions and develop Community Learning Centre complementing existing extension services, (ii) create partnerships with public and private actors, development partners, academic institutions and others within MAFF; (iii) scale up the Local Champions system by including new farmers from different provinces into the process; and (iv) support Local Champions to develop networks with potential partners.

The project had fully delivered their 4 deliverables: (i) support the sustainable establishment of Local Champions in 5 CLCs as a working model for Cambodia; (ii) establish 10 new CLCs in 5 Provinces with 50 new Local Champions during 2017; and, (iii) provide a guideline/ roadmap for applying the LC model to efficiently and sustainably support rural extension services in Cambodia.

## **D.2. PADEE outcomes and impacts**

98. **Rural poverty impact is rated satisfactory (5).** Based on a range of indicators and except for food consumption, the programme objectively achieved or exceeded its impact goal of improving livelihoods for poor rural people in the target areas. The programme. Improvements were wrought through IGRFs improving access to finance, to enhanced on and off farm enterprise performance supported by Common Interest Groups, through improved access to markets and by diversifying economic opportunities. Market driven extension services helped beneficiaries move from subsistence farming and farm gate sales to higher margin organized markets. Beyond increased income, assets, and food security, the programme sustainably improved beneficiary human, social, physical, and natural capital as well.

<b>Table 03: Project Goal and Objectives – Output Performance against MTR target</b>		
<b>Goal:</b> Improved livelihoods for poor rural people in the target of Kampot, Kandal, Prey Veng, SvayRieng and Takeo Provinces.	<b>Cumulative</b>	<b>% Achieved Target</b>
1. Value of Households assets owned by participating households (49,200HHs) increased in average by 25% [RIMS indicator].: 951USD	1363\$	143%
2. Decrease in prevalence of malnutrition in children under five which are part of the HHs benefitting from the project baseline <sup>9</sup> to 10% [RIMS indicator].	12%	80%
3. Average annual per capita food consumption by targeted households increased by 25% from the baseline of 299\$/year <sup>10</sup>	265	Not achieved
<b>Objectives:</b> Improved agricultural productivity and diversification of income sources for rural households living in poverty in the five provinces.		
1. Around 68,200 households directly benefiting from project activities by PY6 <sup>11</sup> (RIMS indicator)	88,986	130%
2. Average wet season paddy yield of targeted households increased by 15% from baseline (or average of 2.2t/ha to average of 2.5t/ha) (RIMS indicator) : 2.3 t/ha	2.2	95%
3. Average dry season paddy yield of targeted households increased by 15% from baseline (or average of 3.2t/ha to average of 3.7t/ha) (RIMS indicator) : 4.6t/ha	4.3	93%
4. Average labour productivity of target households increases by 15% from an average of USD 4.5 per labour day across project beneficiaries <sup>12</sup> : 7.94 USD	USD 8.28	104%

Province	Before Group Formation				2017			
	Poorest	Poor	Medium	Better	Poorest	Poor	Medium	Better
Kampot	537	1371	4232	1263	285	904	4347	1671
Kandal	407	2059	4386	366	100	1355	4908	837
Prey Veng	1563	3808	10132	1682	628	2424	11047	3096
Svay Rieng	227	978	4417	379	88	710	4260	942
Takeo	1159	2707	7089	645	778	1624	8144	1054
<b>Total</b>	<b>3893</b>	<b>10923</b>	<b>30256</b>	<b>4335</b>	<b>1879</b>	<b>7017</b>	<b>32706</b>	<b>7600</b>

99. **Human and social capital and empowerment** is rated **satisfactory (5)** given positive changes individual and group capacity development and to farming practices, diversified income sources and employment opportunities created for targeted rural poor households.
100. *Individual, group and community empowerment.* Capacity building and training at the community level primarily relying on community and field level agents was cornerstone project implementation. PADEE enabled direct and indirect beneficiaries to join community-based groups such as IGRFs, Common Interest Groups, Farmer Field Schools etc., to both participate in and

<sup>9</sup> Results from the 2010 RIMS survey for RPRP, the prevalence of chronic malnutrition in children under five of 30% have been used as complimentary to baseline survey of 18%.

<sup>10</sup> Food consumption is to be expressed in real terms. The Cambodia Socio-Economic Survey 2013 and 2015 indicates that rural households on average spend USD 35 monthly and USD 40 on food and non-alcoholic beverages.

<sup>11</sup> Target drop down from 90,000 at MTR as initial target to support existing group under PRPR was unrealistically high and the recent survey of these groups indicate a target of around 3,000 households from about 125 GRF group is more realistic. This includes 49,000 IGRF members; RPRP existing group member 3,000; outstanding farmer of iDE 6,000; additional household supported by MoWA 700; Small Rural Business Development 1500; and demonstration on crop diversify 8,000.

<sup>12</sup> Labour productivity is measured as return to total labour in USD terms.

direct project financial services and agricultural extension services. This community level empowerment was complemented and guided by relevant capacity building and technical support of trainers, RCG officials, programme staff, and other stakeholders.

101. Empowerment of targeted household member was notable, particularly among those participating in IGRFs. Members reported to the PCR mission about their satisfaction with participatory decision making among men and women within groups, but at the households' level as well. IGRF members were able form new financial organizations and through them confidently manage their savings and offer loans to other group members. This level of confidence, empowered members to rely on self-reliance through IGRFs and reduce borrowings from banks and MFIs by 50% (reported by each province during the National Stakeholder Workshop). This level of confidence translated into notable improvements in self-esteem, group/ community solidarity, as well as a high level of ownership and commitment the IGRFs. Indeed, some 309 IGRFs are in the process of graduating groups into formal agricultural cooperatives.
102. *Positive changes in farming and enterprise practices.* PADEE supported a range of community level groups and activities including agricultural extension services. Eighty local champions in 15 Community Learning Centres played a critical role as resource people in communities for sharing agricultural innovation and good practices learned from pro-poor rural Public Private Partnership in Thailand and Viet Nam farmer field schools etc. The PCR mission confirmed observations by previous supervision missions<sup>13</sup> that numerous changes to programme beneficiary traditional farming practices including a transition from costly chemical fertilizers to organic fertilizers and from a single crop to diversified cropping systems. Targets for new rice production, mung beans, sweet corn, and pig raising technology adoption were exceeded by 70% target.<sup>14</sup> Additionally, some 5,080 IGRF members were engaged in a new or scaled-up, non-land-based income generating activity by the end of project year 5 (103% of target), a clear indication of improved enterprise capacity and individual empowerment supported by programme training activities.
103. **Food security is rated moderately satisfactory (4).** A key project goal aimed to help beneficiary households achieve food security and improved nutrition for their families.

*Improved consumption via household production.* While PADEE did not meet all targeted food security goals, overall outcome and impact performance was generally positive both in terms of food produced and purchased, as well as household nutrition impacts. It is important to note that the baseline survey found households were spending food items below the national standard.<sup>15</sup> This was the case through the six years after base line for both project and control groups. The target to increase food expenditure by 25% was reasonable given the relatively stable inflation rate which averaged less than 5%.<sup>16</sup> The end-line survey shows food and non-alcoholic beverages expenditure decreased by 11% which was found to be related to increased farm productivity and crop diversification. Indeed, beneficiaries and non-beneficiaries had increased consumption of more and different types of vegetables by 9% and meat by 6%.

*Good results in reduction of malnutrition.* The programme targeted a decrease of chronic malnutrition in children under five years of age from 28% to 10%. At programme end, the condition among PADEE beneficiaries was 12.6%.<sup>17</sup> Indicators for under-weight and stunting-chronic malnutrition (weight and height for age respectively) saw notable reductions for targeted

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<sup>13</sup> Supervision Mission: 05 - 17 June 2016 and 06 – 18 July 2017; MRT: 15 March - 5 April 2015

<sup>14</sup> Main Impact Assessment Study: Stage 3 - Endline Household Survey, September 2017

<sup>15</sup> Rice consumption per HH per annum averages at 218 kg of rice (TD, 241 kg, CD, 169 kg). HHs are producing 73% of the rice they consume but relatively lower percentages of other items (less than 30% of meat products and less than 30% of fish and vegetables), which they mostly purchase these with income earned. Total per capita food consumption expenditure monthly is \$24 overall, with TD HHs spending \$25 on average and CD HHs \$23 on average.

<sup>16</sup> <https://tradingeconomics.com/cambodia/inflation-cpi>. Food consumption is to be expressed in real terms. The Cambodia Socio-Economic Survey 2013 and 2015 indicates that rural households on average spend USD 35 monthly and USD 40 on food and non-alcoholic beverages.

<sup>17</sup> As instructed by the project design, the baseline figure of 30% was replaced by 28% from PADEE baseline survey (results from the 2010 RIMS survey for previous IFAD-funded RPRP).



and non-targeted households with PADEE beneficiaries seeing generally more improved conditions than control groups. Wasted-acute malnutrition for both types of households rose slightly during the programme. (See Table 6)

**Table 04:** Sources of main food items consumed (% of all sources)

		Endline					Baseline			
		TD	CD1-a	CD1-b	CD2	Total	TD	CD1	CD2	Total
Rice	Purchased rice	25%	36%	43%	53%	35%	29%	45%	49%	26%
	Own rice consumed	74%	63%	56%	46%	64%	70%	53%	49%	68%
	Donated rice	1%	1%	1%	2%	1%	1%	2%	2%	1%
	ALL RICE	100%	100%	100%	100%	100%	100%	100%	100%	100%
Meat	Meat purchased	75%	74%	76%	82%	77%	81%	84%	87%	82%
	Own animals consumed	25%	26%	24%	18%	23%	19%	16%	13%	18%
	ALL MEAT	100%	100%	100%	100%	100%	100%	100%	100%	100%
Fish	Fish purchased	74%	66%	69%	75%	73%	75%	84%	78%	75%
	Fish caught and eaten	26%	34%	31%	25%	27%	25%	16%	22%	25%
	ALL FISH	100%	100%	100%	100%	100%	100%	100%	100%	100%
Vegetables	Vegetables purchased	68%	57%	66%	68%	67%	77%	80%	84%	75%
	Own vegetables consumed	32%	43%	34%	32%	33%	23%	20%	16%	25%
	ALL VEGETABLES	100%	100%	100%	100%	100%	100%	100%	100%	100%

Source: End-line survey (2017)

**Table 05:** Annual Per Capita Food Consumption (Riels/USD)

	Endline				
	TD	CD1-a	CD1-b	CD2	Total
Rice	257,567	248,723	275,580	257,152	258,879
Meat	271,172	244,874	261,588	258,946	264,160
Fish products	216,748	184,072	193,487	196,425	205,403
Vegetables	58,392	40,504	50,078	54,695	54,358
Fruit	44,724	32,685	39,005	46,804	42,960
Spices, herbs & sauces	67,415	52,057	55,264	69,109	64,302
Bread, noodles, etc.	89,627	45,169	68,576	98,947	83,471
Other food or drinks	54,991	39,832	65,720	63,848	56,531
<b>Totals</b>	<b>1,060,635</b>	<b>887,915</b>	<b>1,009,299</b>	<b>1,045,926</b>	<b>1,030,064</b>
<b>Estimate in US\$</b>	<b>265</b>	<b>222</b>	<b>252</b>	<b>261</b>	<b>258</b>
<b>BL amount USD</b>	<b>299</b>	<b>278</b>		<b>280</b>	<b>290</b>
<b>% change BL-EL</b>	<b>-11%</b>	<b>-20%</b>	<b>-9%</b>	<b>-7%</b>	<b>-11%</b>

Source: End-line survey (2017)

104. PADEE supported a social marketing approach to improve nutrition in the partnership with the MoWA's Department of Women and Health and Ministry of Health (MoH). The approach included the development of a nutrition strategy and a roadmap for programmatic activities such as mainstreaming a nutrition plan into 5-year Commune Development Plan (CDP) and 3 years rolling Commune Investment Plan (CIP). Networks between CWCFFPs and M2MNs and the emerging collaboration between MoWA's and MOH will continue to strengthen and sustain the nutrition initiatives.

**Table 06 : Malnutrition status**

	Baseline		End-line	
	Target HH	Non-target HH	Target HH	Non-target HH
<b>Weight for height (wasted-acute malnutrition)</b>				
Severely wasted	3.1%	2.7%	3.7%	5.6%
Wasted	9.5%	9.1%	9.5%	8.4%
<b>S/T</b>	<b>12.6%</b>	<b>11.7%</b>	<b>13.2%</b>	<b>14.0%</b>
Normal weight	84.1%	84.8%	84.1%	79.2%
Overweight	3.4%	3.4%	2.7%	6.8%
<b>Weight for age (underweight)</b>				
Severe underweight	8.9%	8.0%	4.4%	6.4%
Underweight	19.8%	22.1%	17.3%	18.4%
<b>S/T</b>	<b>28.7%</b>	<b>30.1%</b>	<b>21.6%</b>	<b>24.8%</b>
Normal weight	70.1%	68.1%	77.1%	73.6%
Overweight	1.2%	1.8%	1.3%	1.6%
<b>Height for age (stunting-chronic malnutrition)</b>				
Severely stunted	16.1%	19.6%	12.6%	17.6%
Stunted	24.0%	18.8%	20.4%	24.8%
<b>S/T</b>	<b>40.0%</b>	<b>38.4%</b>	<b>33.0%</b>	<b>42.4%</b>
Normal height	56.4%	53.6%	62.3%	53.2%
Taller than average	3.6%	8.0%	4.7%	4.4%

Data sources: SBK endline surveys 2013 and 2017<sup>18</sup>

105. **Households income and assets is rated satisfactory (5).** PADEE directly and indirectly contributed to increasing assets for 49,200 households who were members of the IGRFs. Household income increased notably for both categories: on farm and non-farm income, although households produced more food for consumption. Target households gained greater access to financial services and grew household assets at a better rate than non target households.
106. **Increased target group income.** The target group income grew in all categories of income sources. (See Table 07) While the proportion of target group household agricultural related income growth is slower than non-target beneficiary, farm produce remained important remain important source of income.<sup>19</sup> Income growth from rice was 88% even as the average price per kg of rice sold dropped from approximately 1,000 Riels at baseline to 800 Riels at end line survey. The programme saw the aggregate value of four priority products sold by IGRF members in value chain clusters established by the programme increase by 35% (target 20%). As noted, households improved food security through more consumption of a greater diversity of their own production, particularly meat, reducing household food expense and freeing income for other uses.
107. The income growth for beneficiary non-farming activity was higher than the non-target beneficiary. With changes to income ranging from 67% for day labour employment to almost 300% for 'other' sources. Small business remained the highest source of income on average at USD 15.66 per day. Overall, target households' non-farm income of the target households

<sup>18</sup> The measurement of nutritional status carried out under the SBK's surveys followed WHO's Global Database on Child Growth Standards (2006). In total, 1,307 and 1,140 children were weighted and measured, respectively, at baseline and end-line time, by SBK.

<sup>19</sup> Most of the IGRF loan were used for the farm activities.



increased by USD 13.0 per day (149% increase), compared to USD 3.0 per day for non-target households (181% increase on a lower base).

**Table 07 – Farm income growth compared to baseline  
(HH/ Season for Target and Non-Target Groups)**

Sources of Income	% Income growth Difference	
	Target group	Non-target group
Rice	88	65
Cash crops	26	61
Vegetables	19	23
Fruit	145	17

**Table 08 – Non-farm income, USD / HH/ day Target and Non-Target Groups**

Sources of Income	Baseline		End-line		USD Difference		% Difference	
	Target group	Non-target group	Target group	Non-target group	Target group	Non-target group	Target group	Non-target group
Small businesses	6.99	7.26	15.66	10.73	8.67	3.47	124.0%	47.8%
Access to common property resources	2.44	4.51	5.22	5.37	2.78	0.86	113.9%	19.1%
Day labor employment	4.1	4.79	6.85	6.03	2.75	1.24	67.1%	25.9%
Other sources	3.8	2.3	14.56	10.40	10.76	8.1	283.2%	352.2%
Total	8.72	5.55	21.72	15.62	13	10.07	149.1%	181.4%

Sources: SBK's surveys 2013-2017

108. With the support of MoWA and PDoWA women become active in eight business clusters (four each for chickens and handicrafts) and other 33 non-formal businesses groups. Training and capacity development to women contributed to more than 8,000 households reporting an increase in income through the these non-land-based activities.<sup>20</sup>
109. **Increased financial assets.** SBK's surveys showed 20% of target households were members of existing credit/ savings groups at base line compared to 10% of non-target households. At programme end, 70% of target households had become credit/ savings group members compared to 12% of non-target households. SBK's surveys also showed 93% of target households had access to PADEE's IGRF credit service, while only 6% of the non-target households had such access. Additionally, the programme made holding at least one share in an IGRF mandatory condition for cash transfers to beneficiaries. This provided beneficiaries a new household asset (a direct financial asset as well as a financial asset with which to lever loans). That 650 of 785 IGRFs increased the size of their initial fund by 30% or more, indicates not only successful growth of groups and their capacity to lend larger amounts, but represents an invaluable group/ individual asset for growing productive enterprise. The PCR mission also observed IGRFs made emergency loans available to members safeguarding member assets in difficult times (i.e., they would normally have to sell an asset to pay *inter alia* family illness, accidents, loss of crops, fines, etc.).
110. SBK's surveys also showed access to credit facilities operated by MFIs/banks remained unchanged for the target groups between baseline and end-line surveys. Importantly, the PCR mission found IGRF members prefer loans from their groups over MFIs/ banks for a variety of reasons even as group interest tended to be higher than those of formal financial institutions (e.g., and *inter alia*: (i) members ownership of IGRFs; (ii) group capital can grow to the benefit of members; and, (iii) shares withdrawal).

**Figure 4 – Increased opportunity can mean less rural outmigration**

A case study by FAO in January 2018 found that the combination of technical assistance for agricultural skills, enterprise skills development, and access to finance allowed a young farmer in Prey Veng Province to remain in his village and not seasonally migrate Phnom to feed the family as he had done before participating in PADEE.

<sup>20</sup> 2017 Gender Report, Project for Agricultural Development and Economic Empowerment, Ministry of Woman Affairs.

Access to formal credit from other non-MFI/ non-bank sources by both the target and non-target groups increased over the course of the project life, signalling a preference for informal financial services over formal.

111. **Increased household assets:** The value of household assets owned by participating households increased an average 180%, from USD 761 to USD 1,336 (target USD 951 or 125%). Assets owned by farm households are wide ranging from means of transport to farm machines and electronics.
112. **Agricultural productivity is rated satisfactory (5).** Agricultural productivity improvements by PADEE beneficiary households were supported primarily by increased access to finance, improved enterprise skills. Improvements are noted less in terms of increase productivity (e.g., average wet season paddy yield of targeted households per hectare which as unchanged at 2.2 tonnes) and more via diversity and production for household consumption.
113. IGRFs tracked loan by use of funds and found most loans were tied to specific agricultural value chains (e.g., chicken, ducks, fish, pig, cow, rice, maize, peanuts, mung bean, soy bean, chilli, eggplant, other vegetables, and fruit trees). Members received business plan support from PADEE for on-farm investments and IGRF leadership jointly decided on eligibility. Loans for rice production were the most numerous, with 59% or 31,788 of a total of 53,879 loan applicants approved in 2018.<sup>21</sup> Loan for pigs were the next with 5,129 or 9.5% of all loans. Production improvements were not tracked by the IGRFs but good repayment performance suggests loans for ongoing agricultural purpose at current levels of productivity remained important sources of income.
114. **Institutions and policies is rated satisfactory (5).** Technical assistance from PADEE helped to created strong member-owned IGRF. Over 84% of IGRF reached the target growing their funding base 30% or more, with the rest showing positive growth at project completion. IGRF committee leaders have shown gradual increases of confidence in managing the loans and group members because of financial literacy training, coaching and feedback from the project. Based on self-assessment results, 842 groups were identified as strong, while 138 were classified medium, with 4 groups being weak. All

#### Figure 5: E-PADEE

A Koran grant of USD 380 000 was provided for "e-PADEE" and approved by IFAD Executive Board in 2013. The Project was co-financing by the Grameen Intel Social Business and implemented under PADEE and had the objective of improving the livelihoods of target beneficiaries using Agriculture Expert System technology (AES). The AES employed soil testing kits, computerize extension mobile application and the tablet to increase rice farming productivity. Outcome included inter alia improved rice seed variety selection, fertiliser optimisation and pest and disease management. The AES was closely linked to PADEE's Sub-component 2.1. The AES was also supported by the Expert Group at General Directorate of Agriculture who designed the and update the platform content (i.e., new crop varieties, new fertiliser recommendations, insect pest and disease prevention and treatment, etc.).

Support to innovation in capacity building of the PADEE project and was piloted in selected provinces of PADEE where 97 Mobile Support Team (MST) members and 68 Farm Business Advisors (FBA) in 148 communes in the five-target province of PADEE employed the system. The system benefited 1,649 PADEE households over the wet season of 2015.

The AES pilot was assessed to verify whether PADEE beneficiaries participating in the pilot project both used the technical information made available, and if it improved rice productivity compared to other PADEE beneficiaries. The review found farmers were quickly able access accurate pest and disease management information with reduced/ no need for physical communication with technical specialists. Productivity increased as a result. Findings of the assessment also found: (i) technology adoption by the farmers is possible; (ii) the technology positively increased interaction between farmers and the extension officers; (iii) PADEE was an effective e-PADEE delivery vehicle; (iv) the private-public sector model between Grammen Intel, MAFF, and SNV was effective. And, (vi) the AES test messaging system between farmers and system experts was effective positive. Feedback from the e-PADEE pilot has been used in training materials and capacity building programmes under Component 2 of PADEE.

Some lessons learned through the piloting of e-PADEE include: (i) operationalization of the Grameen Intel software took much time and resources; (ii) procurement of tablets and soil testing kits took time and was challenging to import; (iii) roll out training for extension specialists took a good deal of time and required several training approach refinements; and, (iv) e-PADEE was initially delivered by the public sector effectively, but proved challenging for private delivery.

<sup>21</sup> Source: MB-Win database, the 2018 data is indicative of the earlier years.

984 IGRFs were formally registered in their commune, providing a level of formality which encouraged further business development and member confidence. Support and training of PDAFFs at the provincial level helped to maintain IGFR monitoring and coaching capacities for ongoing support for strengthening medium and weak groups.

115. **Market access is rated moderately satisfactory (4).** PADEE primary activities to support improved target household farm production market access the project were the development of produce collection points/ centres and value chain clusters.
116. PADEE helped to establish 5 collection points which were used by 2,184 farmers to sell vegetable produce.<sup>22</sup> A sample of 273 farmers supported by the programme's 368 Farmer Business Advisors (FBAs), sold through collection points and earned a profit of USD 1,445 or 114% of GDP per capital (2016 figure), or USD 3.95 per day (annualized) which is more income than all but 'small enterprise' sources of income.<sup>23</sup> (See Table 08 for comparisons)
117. The project established 15 Value Chain Clusters (VCCs) with 1,444 members in early 2017. All the VCCs have connection with either collectors or wholesalers, and some work through contracts. The buyer organized regular meeting and, in some cases, provided technical training to the producers. The project also provided backup technical support and contributed 40% buyer requirements costs. The impact of VCCs on programme beneficiaries was limited because this project started late due to challenges securing appropriately skilled technical assistance and to a 'learning-by-doing' approach. All VCCs should become sustainable and generate significant positive impact for members, assuming continued good leadership, business planning, and marketing.

#### Additional evaluation criteria

118. **Gender equity and women's empowerment is rated satisfactory (5).** PADEE made a significant contribution promoting gender equality and women empowerment. Achievements were made through: (i) a comprehensive gender mainstreaming approach supported at all levels of the programme and guided by a national gender strategic plan; (ii) gender targeting and resulting strong participation of women; and, (iii) a pro-active gender sensitive approach to supporting improved farm and non-land-based income generating activities.
119. *Comprehensive gender mainstreaming approach.* A Gender Action Plan and gender monitoring tool were developed by the programme as a comprehensive guide to support gender positive implementation of all programmatic activities. The project's gender mainstreaming was highly decentralized and was supported/ guided by resource and staff at all levels but was primarily implemented by the PDoWA and Commune Women and Children Focal Points (CWCFFPs) at the local levels. Gender empowerment training, including programme Gender Action Plan orientation, was provided to all project staff, as well as CWCFFPs and CEWs at the local level. Importantly, PADEE's monitoring and evaluation system provided timely gender disaggregated data to for managing the Gender Action Plan to gauge gender output and outcome target achievements.
120. *Linkage with the national gender strategic plan.* Empowering vulnerable women, their families, and communities while improving their livelihood are a key MoWA's priority. The ministry as well as the PDoWAs were active in PADEE and played a central role providing technical and operational support as well as ongoing guidance to the programme in cooperation with the Gender Mainstreaming Working Group of MAFF, other government implementing agencies, and other participating institutions.
121. PADEE's gender action plan, monitoring tools, and implementation approach, including monitoring and evaluation capacities, are being promoted by the RCG as a good practice approach to gender mainstreaming and learnings. They have also been integrated into the

<sup>22</sup> Five collection points, one per province. Four of them function well, however, the collection point in Kandal province has closed as the producer prefers to supply the vegetable directly to the buyer in Phnom Penh.

<sup>23</sup> Calculated on an annualize basis even though farm production rarely requires 365 days of labor. Source: Completion Report, Implementation Agencies to MAFF PSU, IDE.

MoWA-led Cambodia Gender Strategic Plan (2019-2023). The PADEE approach will be replicated and scaled in other RCG projects, and the MoWA and PDoWAs expressed a commitment to identifying and mobilizing financial and technical resources to support programme target groups after the completion of PADEE.

122. *Active participation of women in IGRFs.* As of May 2018, the overall proportion of female members in IGRF was of 64%, ranging from 55% in Svay Rieng to 74% in Kampot. On average, women held 51% of IGRF board positions, ranging from a low of 42% in Svay Rieng to a high of 58% in Kampot and Kandal. Women participated almost equally in IGRF training (47% to 53% for men). All IGRF members received gender equality and nutrition training.

Table 09: Women's representation in IGRFs									
Province	No. district	No. commune	No. village	No. member	Female member		Board member	Female BOD	
					Number	Percent	Number	Number	Percent
Kampot	5	36	144	7200	5358	74%	1008	587	58%
Kandal	5	36	144	7200	4781	66%	1008	586	58%
Prey Veng	11	86	344	17200	10807	63%	2408	1255	52%
Svay Rieng	4	30	120	6000	3274	55%	840	355	42%
Takeo	8	58	232	11600	7466	64%	1624	698	43%
<b>Total</b>	<b>33</b>	<b>246</b>	<b>984</b>	<b>49200</b>	<b>31686</b>	<b>64%</b>	<b>6888</b>	<b>3481</b>	<b>51%</b>

Data sources: Project's reports 2012-2018

123. *Access to credit.* Women had little to know access to financial services prior to PADEE. This is because of socio economic barriers and because financial institutions, including MFIs, required substantial collateral, in many cases land title. At the end of the project, 31,980 women were members of 984 IGRFs and accessed \$11.8 million in loans, which, coupled with share-savings (an additional 34%), enabled women to invest in housing, education, agriculture production and/or enterprises.
124. *Increased in women's decision making.* Access to micro-finance have enabled women to invest in farm and non-farm enterprises and has empowered women. Whereas men traditionally made economic decisions in the household, through a variety of programme sponsored gender training programmes and resource targeting, 52% of husbands and wives now make joint decisions on household resource use, an increase of 25%. Some 11% of households have male dominated decision making processes, and 34% of households are dominated by women. However, most of the workload in the house still falls on the women, and household members help each other more occasionally than frequently.

TABLE 10 – Most decision making influence (% of HHs)

	Endline					Baseline			
	TD	CD1-a	CD1-b	CD2	Total	TD	CD1	CD2	Total
Husband has most influence	11%	4%	9%	11%	10%	23%	26%	24%	24%
Equal between husband and wife	52%	73%	50%	42%	52%	27%	23%	32%	27%
Wife has most influence	34%	22%	34%	43%	35%	47%	48%	39%	45%
Other family member	3%	1%	7%	3%	3%	3%	4%	5%	4%
	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Data sources: Project End-line Survey, September 2017

125. *Income generation from non-land-based activities.* With the support of MoWA and PDoWA women become active players in four chicken clusters, four handicraft VC clusters and 33 non-clustered businesses. More than 8,000 households reported an increase in income from non-land-based activities.<sup>24</sup> Improved welfare, financial literacy, and access to finance, on and off farm production/enterprise development capacity has led to several positive socioeconomic changes for women and girls. Increased income resulting from IGRF membership has been invested in children's

<sup>24</sup> 2017 Gender Report, Project for Agricultural Development and Economic Empowerment, Ministry of Woman Affairs.

education and health, reducing rural-urban migration of women and girls and the risk associated with migrant labour (e.g., labor exploitation and human trafficking).

126. **Adaptation to climate change is rated moderately satisfactory (4).** Most agricultural production training and capacity building incorporated aspects of sustainable, climate-smart farming and livestock quality production enhancements (e.g., sustainable natural resource management, micro irrigation, and soil fertility testing etc.) This included income and production diversification meant to enhance climate resilience through increasing sources of household income. Climate smart production works to enhance biodiversity, increases soil fertility, and contributes to greenhouse gas (GHG) reduction.
127. The PADEE was supported by the Scaling-Up of Renewable Energy Technologies (S-RET) which promoted the use of renewable energy technologies and their applications to benefit smallholder agriculture and rural households. The End-line Survey showed use of solar electricity as the main means of beneficiary household power has increased from 10.4% to 14.2% (replacing car batteries and connection to the electric grid). The percentage of households using solar power is the highest in Svay Rieng and Prey Veng at 40% and 24% of households respectively, with increases of 29% in Svay Rieng and 19% in Prey Veng. Since the MTR, the percentage of households using firewood as the main source of cooking fuel has reduced from 91% to 85%. Some 14% of households now own a solar power cooking system, 67% own small solar electrical appliances, and 19% own improved cook stoves. All those who purchased S-RET technologies source them in their communities generating local economic multiplier effects. The work of S-RET has been transferred to the ASPIRE programme and will continue to support target group members in both PADEE and ASPIRE provinces.
128. **Environment and natural resource management is rated moderately satisfactory (4).** PADEE had no demonstrable adverse environmental impacts. Indeed, programme interventions led to a more resilient small holder agricultural sector which enhanced environmental/ natural resources. Target beneficiaries were given training in sustainable natural resource management, especially related to water harvest, micro irrigation, and soil fertility testing. Informed and reduced use of chemical fertilizers and pesticide were promoted. The PCR mission verified increase awareness of and use of environmental protection and resource conservation techniques and technologies.

### D.3. Targeting and outreach

129. **Targeting and outreach is rated satisfactory (5).** PADEE's targeting strategy and target population is aligned with IFAD's focus on the rural poor with largely agriculture-based livelihoods. Specifically, the programme targeted food insecure rural poor with the potential to take advantage of improved agricultural production and income generating activities. A geographic and participatory wealth ranking targeting method identified communes and village with the target population. Almost 90,000 households were served by the programme, exceeding the reduced mid-term target and meeting the original design target.
130. **Target at design.** PADEE activities were expected to directly benefit 90,000 households (or approximately 450,000 people) in 246 communes, in 33 districts, in five selected provinces, representing 20% of targeted commune households. The primary project target group were 49,000 IGRF member households who would benefit from the full package of project activities. Other beneficiary groups included: 25,000 member households of existing farmer organizations in the five project provinces; (700 groups of former IFAD CBRDP and RPRP programmes); 6,000 non-IGRF households/ participants targeted for on-farm trainings; 700 households receiving non-land based income generating trainings and development of off farm business ventures; 1,500 households/ farmers in the Small Rural Business Development pilot, 8,000; and, 4,000 households benefiting from pro-poor bio-digesters.
131. **Target at MTR (2015)** was reduced from 90,000 to 68,200 households, or approximately 341,000 people. The design target was thought to be overly optimistic given the challenges of supporting groups formed under RPRP and beneficiaries estimated to participate in non-land base activities.

The targets at MTR were reduced by: (i) 3,000 Group Revolving Fund Member of RPRP; (ii) 14,000 households on non-land base activities; and, (iii) the shift of the bio-digester activity for 4,000 households to the Scaling-Up of Renewable Energy Technologies (S-RET) Project.

132. *Indirect beneficiaries* included households from other projects or from other parts of the country participating in on and off-farm trainings, buyers and supply chain agents associated with the Small Rural Business Development ventures, as well as service providers from capacity building activities (500 CEWs, VAHWs and 200 FBAs). A larger number of indirect beneficiaries in target communes and districts benefited from multiplier effects and opportunities created by increased target population agricultural production and economic activities.
133. The first step in targeting was to identify geographic areas with concentrations of targeted households in the five target provinces. This resulted in identifying 246 (of a possible 535) communes with concentrations of target populations households, located in 36 districts out of a total of 50. Selection focused on those households in rural area with high number of poor smallholders (more than 200 poor families per commune), identified potential for improved agriculture (i.e., more than 500 hectares of rice cultivation), and high poverty rates (i.e., poverty headcount of over 19% and 26.4% at the district and commune level respectively).<sup>25</sup> Households were further defined as: (i) poorest, (ii) poor, and (iii) poor-medium households.<sup>26</sup> Geographic identification was followed by the selection of beneficiary households based on participatory wealth ranking exercises and willingness of households to participate project's activities with the objective of improving their livelihoods.

**Table 11: Targeting results (district and commune level)**

Province	Districts			Communes			Villages		
	Selected	Total	%	Selected	Total	%	Selected	Total	%
Kampot	5	8	63%	36	92	39%	204	482	42%
Kandal	5	11	45%	36	147	24%	295	1,083	27%
Prey Veng	11	13	85%	86	116	74%	921	1,137	81%
Svay Rieng	4	8	50%	30	80	38%	315	690	46%
Takeo	8	10	80%	58	100	58%	632	1,116	57%
<b>Total</b>	<b>33</b>	<b>50</b>	<b>66%</b>	<b>246</b>	<b>535</b>	<b>46%</b>	<b>2,367</b>	<b>4,508</b>	<b>53%</b>

Source: Project Design Report (2012)

**Table 12: Poor households, Poverty Rate and Rice Area**

Province	Households			Poor Households			Average Poverty Rate			Total Area in Rice (ha)		
	Selected	Total	%	Selected	Total	%	Selected	Total	Diff.	Selected	Total	%
Kampot	56,000	126,000	44%	13,600	25,500	53%	23.9	19.9	4	57,900	117,600	49%
Kandal	70,000	250,000	28%	16,500	43,300	38%	23.9	17.8	6.1	68,700	145,000	47%
Prey Veng	185,000	242,000	76%	52,500	65,200	81%	28.4	26.9	1.5	260,800	333,800	78%
Svay Rieng	51,000	121,000	42%	13,300	27,800	48%	25.9	22.9	3	77,200	170,900	45%
Takeo	108,000	186,000	58%	29,000	46,600	62%	27.0	25.3	1.7	153,400	248,300	62%
<b>Total</b>	<b>470,000</b>	<b>925,000</b>	<b>51%</b>	<b>124,900</b>	<b>208,400</b>	<b>60%</b>	<b>26.4</b>	<b>22.3</b>	<b>4.1</b>	<b>618,000</b>	<b>1,015,600</b>	<b>61%</b>

Source: Project Design Report (2012) and Project Completion Report

134. **Project Outreach at completion.** PADEE targeting effectively reached the three categories of resource-poor rural households (i.e., poorest, poor, and medium-poor households). The project directly served 88,986 households (99% of its original target and 130% of the target revised at MTR). Beneficiaries included 49,200 households from IGRFs (100% of target), 11,875 non-IGRF households, 580 additional households supported by the MoWA (83% of target), 1,534 in the

<sup>25</sup> The selection of communes is based on poverty figures from the Commune Database (CDB) for 2010 using the methodology developed by NCDD.

<sup>26</sup> Cambodia has the national poor categorization system as IDPoor1, IDPoor2, and non-poor which led by the Ministry of Planning. The project's participatory wealth ranking exercises were made by the project.

Rural Business Stimulus Facilities supported by SNV (102% of target), 8,280 non-IGRF households attending FFS diversification demonstration (104% of target), 1,444 households in 15 value chain clusters, and 16,073 benefiting from Farmer to Farmer extension activities. Women headed households represented more than half of these totals. With an average of five persons per household, the total of project individual beneficiaries was about 445,000 people, or close to the original target of 450,000 set by design and exceeding the MTR target of 341,000.

135. In addition to poor household beneficiaries, 1,221 local extension agents, 492 commune extension workers (CEWs), 90 mobile support team members (MSTs), 25 Master Trainers, 246 Commune Council Focal Point and 368 farm business advisors (FBAs) also benefited from the programme. Approximately 49% of these beneficiaries were women.
136. Increased rice production nationwide (through support of programs such as PADEE) have contributed immensely to poverty reduction in Cambodia, as highlighted by World Bank assessments. As value chains are developed in the sector, IFAD will ensure such value chains are pro-poor in orientation.

#### D.4. Innovation, replication and scaling-up

**Innovation is rated satisfactory (5) and scaling-up is rated moderately satisfactory. (4)**

137. PADEE introduced several technical and process innovations to Cambodia, some more successful than others but most offering the promise/ possibility of replication and scaling up via market or development programme supported diffusion. Some will be employed by the RCG through IFAD funded ASPIRE and AIMS programmes.
138. **Safe-food and CamGAP vegetable growing:** In vegetables production, many farmers would indiscriminately apply agro-chemicals due to lack of knowledge of potential impacts. The programme introduced and promoted CamGAP/ safe-food practice with good results. All target farmers were trained in safe-food production as part of the extension service training with over 90% adopting approximately 50% learned practice.<sup>27</sup> Given growing demand for safe-food, an increasing number of farmers are likely to adopt the practice both in programme targeted areas but also in non-target areas as well, particularly as market access also continues to grow. ASPIRE is currently supporting the CamGAP.
139. **Farmer-to-farmer extension:** Farmer-to-farmer extension services via Community Learning Centres employed local champion farmers successfully encouraged traditionally conservative farmers to consider and apply new farming methods and production. This method can be applied in other training and capacity building settings (e.g., in value chain interventions where champion input suppliers, distributors, processors, collectors and wholesalers are encouraged others in the chain to support interventions benefiting smallholder farmers). Farmer to farmer extension will be implemented in 24 Provincial Department of Agriculture in ASPIRE.
140. With regard to the scaling up of the extension framework developed under PADEE was directly scaled up in the national extension policy. This has also fed into the Agriculture Sector Master Plan 2030 which is currently being finalised. At a project level, the Asian Development Bank co-financing for the Tonle Sap model has also built on the PADEE extension model.
141. **Market linkage:** Cambodian small-scale farmers are typically unorganized and not market-oriented. Contract farming arrangements through collection points and value chain clusters have helped growers and buyers to work together to respond to market demands. Both parties were satisfied as the arrangements, indicating mutually beneficial market access interventions can be successful. The VCCs were adopted as a core part of AIMS Value Chain Cluster Approach.
142. **Energy and water-saving technologies:** The introduction of water saving techniques, particularly in vegetable production (e.g., plastic mulching, net/UV plastic housing, drip irrigation), helped farmers cope with climate change challenges and to promote efficient use of agricultural

<sup>27</sup> CamGAP supports good agricultural practice. Source: PADEE Progress Report 2017.

water. The number of farmers adopting these technologies ASPIRE target provinces is increasing indicating their potential.<sup>28</sup>

143. **Alternative source for cooking:** The introduction of biogas digesters has helped the rural households to cut down on use of fuel wood (even as they are not suitable for majority of the beneficiary households). The biogas digesters can also provide household with low-cost energy for purposes other than cooking (e.g., chick hatching, lighting etc.). SRET will be integrated into ASPIRE in 2018 and will scale up the National Biogas Digester Programme.
144. Another innovation under the PADEE project was the enhanced citizen engagement model. Farmers were sensitized on online availability of material and provided access to farmer hotlines (set up under the PADEE framework with FAO support). These models of citizen/ farmer engagement are being scaled up further across the provinces, through ASPIRE.

## E. Assessment of PADEE efficiency - Efficiency is rated *satisfactory* (5)

### E.1. PADEE costs and financing

145. **PADEE costs and financing.** The project achieved an overall disbursement rate of 89.9%, with IFAD loan disbursement rate at 93%. IFAD grant disbursement was 94% and IFAD additional financing was 67%. Government contributions were 95% and beneficiary contributions were 19%.<sup>29</sup> The shortfall in beneficiaries co-financing was due to a failure to monetize in-kind contributions complicated by poor communications on the issue between the monitoring and evaluation (M&E) and the financial teams.
146. The project is expected to achieve 95% of its financial target once all eligible expenditures in process are booked. Based on the consolidated financial data at 30 April 2018 (two months before completion), the project recorded total expenditures of USD 41.5 million. The IFAD loan, grant, and top up loan financed 39%, 40% and 5% of the project expenditures respectively, while the government provided 11% the beneficiaries accounted for 5%.

**Table 13: Project Budget and Actual Expenditure by Component (USD '000)**

Component	IFAD Loan		IFAD Grant		IFAD Loan Top Up		RGCCF		PIPs (FAO, iDE, SNV) and Ben.		Total	
	Appra.	Actual	Appra.	Actual	Appra.	Actual	Appra.	Actual	Appra.	Actual	Appra.	Actual
1.Improved Access to Financial Services	12,725	11,659	2,461	1,660	-	46	257	1	313	307	15,757	15,934
2. Improved Access to Technology and Markets	3,397	3,518	13,081	11,411	1,250	1,063	3,634	2,761	3,241	1,929	24,603	18,613
3. Project Coordination and Management	1,378	1,175	1,958	3,453	1,650	830	799	1,688	-	-	5,785	6,951
<b>Total</b>	<b>17,500</b>	<b>16,351</b>	<b>17,500</b>	<b>16,524</b>	<b>2,900</b>	<b>1,938</b>	<b>4,690</b>	<b>4,450</b>	<b>3,554</b>	<b>2,236</b>	<b>46,145</b>	<b>41,498</b>

147. **Timeliness of financing contributions.** Table 13 presents actual expenditure as percentage of the appraisal allocation. To 30 April 2018, RGC co-financing was 95% of its total commitment, with a notable 211% over-contribution in Component 3. Some 93% of the IFAD loan and 94% of its grant was expended, but only 67% of its top up loan. IFAD grant financed 176% appraisal estimate of Component 3. The programme implementation partners (PIPs) and beneficiaries contribution for Component 2 was 60% and 98% for Component 1, for 63% of their overall expected contribution.
148. **Revision of financing agreement.** A top up loan of USD 2.9 million was requested and agreed to by IFAD for scaling up activities around Value Chain Cluster and Farmer to Farmer Extension Approach (Component 2). The top up loan was provided in 2016 and at 30 April 2018, some 67% of the loan had been spent.

<sup>28</sup> ASPIRE Annual Report 2017.

<sup>29</sup> PADEE Financial Report as of 30 April 2018.

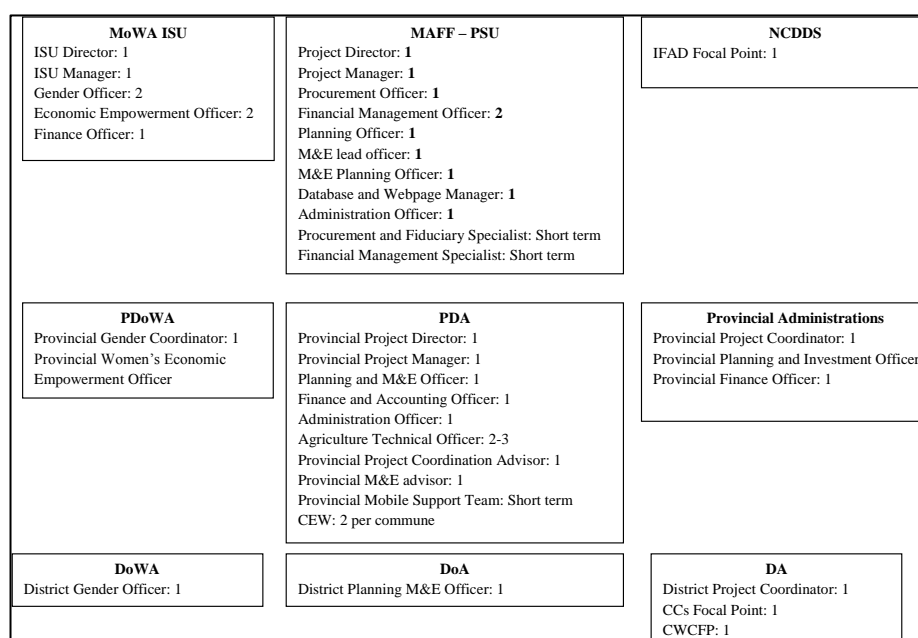


149. **Unit cost per beneficiary.** The project directly benefited 88,986 households with a total expenditure of USD 41.5 million. The unit cost per beneficiary household was USD 466 and per beneficiary USD 93. Compared to similar projects, Rural Livelihood Improvement Project in Upland Area (USD 183.20 per beneficiary) and Rural Poverty Reduction Project (USD 112.55 per beneficiary), PADEE per beneficiary costs is relatively low.
150. **Co-financing and leveraging IFAD funds.** Out of its total budget of USD 46.14 million, IFAD provided for USD 37.90 million. As of end April 2018, the IFAD funds amounted 83% of the total actual expenditure for a moderate co-financing leverage rate.
151. **Good cost efficiency.** The project had a management cost efficiency of 17% of total budget. This is a modest rate given the effective involvement of several ministries and levels of government (e.g., national, provincial, commune, village levels). The management cost is close to Rural Livelihood Improvement Project in Upland Area and Rural Poverty Reduction Project programmes which were 13% and 14.26% respectively but did not have the same complexity of management structures.

## E.2. Quality of PADEE management

152. **Responsive management and coordination.** The Programme Support Unit (PSU) had overall programme management and coordination responsibilities at the national level. Provincial Administrations (PAs) and District Support Teams (DSTs) had responsibility for project coordination implementation responsibility at their respective levels, including assigning technical staff. This structure managed to meet or exceed expected output and outcomes targets on time and budget. Despite a temporary slowdown of output delivery caused by the changing of senior PSU management in 2015, project management proved able to plan, budget, and execute while being responsive in a changing implementation environment (e.g., incorporating S-RET into PADEE). Recommendations made by supervision and implementation support missions were consistently followed up; helping to assure implementation met annual work plans and budgets.
153. **Adequate staffing at different levels.** In addition to a National Project Director and a Deputy National Project Director at the national or PSU level, sufficient technical and professional officers were assigned to ensure key M&E, financial, and operational management and administrative functions. There was no knowledge manager and Communication officer (KM) initially anticipated in designed. A national KM officer was recruited on the recommendation of the MTR but later resigned due to a lack of support/ guidance. Duties related to the KM function were partially covered by the M&E and management information systems officers but given other responsibilities were not as effective as a full time officer may have been.

Figure 6: PADEE management organizational chart



154. The Provincial Administration has contracted technical tasks to the Provincial Department of Agriculture (PDA) and to the Provincial Department of Women's Affairs (PDoWA) based on respective core competences and available staff. The PDA Provincial Support Team included a Provincial Project Director and a Project Manager (in Prey Veng and Takeo), a Planning and M&E Officer, a Finance Officer, as well as several technical staff. The PDoWA team consisted of a Gender and Economic Empowerment officers working full-time on PADEE (one each in every province). The PDoWAs also assigned two officials to work full-time on PADEE implementation at provincial level as part of the Provincial Support Team (PST). The PSTs were assisted by an Agriculture Adviser.
155. The District Support Teams consisted of one full time district PADEE focal point at both the District Agriculture Office and in the District Office of Women's Affairs. Additional technical staffs were employed as members of the Mobile Support Teams as necessary. The District Support Teams were coordinated by the District Project Director who was the senior official at the District Administration office. District Support Teams, together with the Commune Extension Workers (CEW), with the support of PDA technical specialists were responsible for the formation and support of IGRF groups including training facilitation. At the community level, Commune Councils supported PADEE implementation by participating in local activities and by coordinating activities with the Commune Extension Workers.
156. **The decentralized M&E system** was supported by a dedicated M&E team at the commune level by Commune Extension Workers, at the district level by a District M&E Officer, at the provincial level by the Provincial M&E Officer & Advisor, and finally, at the PSU level by the M&E unit officer. The M&E system, M&E result framework matrix, MBwin IGRF reporting system (introduced in 2013), and online MIS (operational in 2015) were fully functional monitoring tools providing PADEE management key data for operational, strategic planning, and management decision making.
157. **Meaningful project result reporting.** PADEE introduced and employed AWPBs, procurement plans, an M&E system, a management information system, and accounting system. Those tools were effective and produced timely results, particularly as the programme advanced up the IFAD processes and reporting curve.
158. The baseline, mid-term, and end line surveys, together with annual RIMS (to 2016) provided accurate and timely output and outcome level results reporting. The annual and cumulative financial and physical progress reports (by component, activity and implementing agency) were produced on time for PADEE's various reporting obligations. Impacts level reporting related to livelihoods, income, productivity, employment, economic empowerment were addressed by impact surveys (i.e., Baseline, Midterm and End-line surveys).
159. **Adequate action knowledge management.** Project design did not include an explicit knowledge management strategy. Rather, it outlined several example studies that could be produced for knowledge generation and sharing. This, and the lack of a KM and Communication officer with the mandate to strategically collect, package and distribute knowledge generated by the programme conspired to limit achievements in this area.
160. Despite limitations, several knowledge products were produced. An Agribusiness Cluster Development Manual was produced, several value chain clusters reports were compiled and a video clip of VCCs was produced. The project also shared its experiences on different knowledge platforms (e.g., the PADEE website, IFADAsia portal and IFAD ASIA, Facebook, via external events, workshops, exchange visits, online document library, etc.). Some good practices vegetable house net, peer-to-peer/ farmer-to-farmer training in Community Learning Centers were documented and shared with stakeholders, resulting in higher rates of practice adoption.
161. **Partnership efficiency.** Project management and coordination teams at both national and provincial levels established and maintained effective partnership/ coordination/ communications

with all implementing agencies/ partners and technical service providers. The implementation of PADEE technical components relied on partnerships with FAO, SNV, iDE and MoWA with highly satisfactory results both in physical and financial terms, including efficient and effective processes, operational norms, and standards of execution.

### E.3. Quality of financial management

162. **Satisfactory disbursement rate.** Total programme disbursement reached USD 41.49 million at closure or 89% of the appraised total project costs of USD 46.14 million (USD 43.24 million, plus USD 2.90 million, plus the additional IFAD top up loan). The total disbursement of IFAD financing was 99.4% or USD 37.37 million, of which USD 34.82 million was spent by the project. Disbursement of RCG funds was USD 4.45 million or 95.70% of its commitment. Disbursements by co-financiers and beneficiaries were USD 2.23 million against an appraisal budget of USD 3.55 million. The USD 1.32 million balances were due primarily to a smaller contribution from beneficiaries.<sup>30</sup> The financial performance of the project can be considered as satisfactory.

<b>Table 14: Actual &amp; appraised project expenditures by financier</b> (‘000 USD)				
Financier	Original Allocation		Actual expenditure	
	Amount	%	Amount	%
IFAD Loan	17,500	37.9%	16,351	93.4% <sup>31</sup>
IFAD Grant	17,500	37.9%	16,524	94.4% <sup>32</sup>
IFAD Additional Loan	2,900	6.2%	1,937	66.9%
RCG	4,690	10.2%	4,449	94.8%
FAO	313	0.7%	306	97.7%
SNV	668	1.4%	668	100%
iDE	378	0.9%	848	224%
Beneficiaries	2,193	4.8%	413	18.9%
<b>Total</b>	<b>46,142</b>	<b>100%</b>	<b>41,498</b>	<b>89.9%</b>

163. **Coherence between AWPBs and Execution** was moderately satisfactory, due to preparation of over ambitious budgets, and overall coherence was affected by the performance of the first AWPB (less than 5%). Aggregate AWPB budgets between 2012 and 2018 was USD 61 million or well beyond the total available programme financing. Annual AWPBs execution was not above 81%. (See Appendix 7 for AWPB details) Despite limited efficacy of AWPB as planning and monitoring tool, the programme financial performance was positive.

<b>Table 15: AWPB and actual expenditure by year</b> (‘000 USD)								
Year	2012	2013	2014	2015	2016	2017	2018	Total
<b>AWPB</b>	3 953	10 787	12 951	16 788	9 644	5 836	1 281	<b>61 243</b> <sup>33</sup>
<b>Actual</b>	188	7 516	10 537	10 265	7 844	4 595	550	<b>41 498</b>
% achieved	4.76%	69.67%	81.36%	61.15%	81.33%	78.75%	42.96%	67.76%

164. **Satisfactory financial management.** The presence of knowledgeable and experienced staff in the PADEE finance unit from programme start-up was key to the establishment of effective financial management (FM) systems. The accounting software was promptly procured and set up, and was able to produce required reports and withdrawal applications in a timely manner. The reporting modules for the system were satisfactory but did not allow for automatic reports on expenditures by component (all other reports could be automatically generated). Regular supervision and implementation support missions, together with the prompt implementation of finance team recommendations supported continuous FM improvement.

<sup>30</sup> See the PADEE Financial Report 2018 for details.

<sup>31</sup> In SDR the grant is 99.9% disbursed.

<sup>32</sup> In SDR the loan is 99.2% disbursed.

<sup>33</sup> The overall amount of the budget is higher than the total project cost because the portion of expenditures not executed in a certain period were added to the following one.

165. **Segregation of duties.** Asset management at central and provincial level was adequate with regularly updated asset status and custody registers. The *Standard Operations Procedures* for externally financed projects in Cambodia issued by MEF in 2012 (SOP) were applied. The programme budget was prepared every year in a timely manner but was often overly optimistic limiting its use as a planning and monitoring tool. (See above ¶ 67) At the completion, most financial recommendations issued by IFAD supervision missions had been implemented and PADEE financial management had been consistently assessed as a low risk.
166. **IFAD financing.** Funds flows to the programme have been regular and timely, with no cash shortages reported. The use of a “revolving fund” modality for the release of advances created some stress, particularly the need to provide substantial documentation for withdrawal justifications. The MAFF-PSU maintained three District Administration and Project accounts for the IFAD loan, IFAD grant, and IFAD top-up loan. Sub project accounts were maintained by implementing agencies and reconciliation of bank accounts were done regularly. The programme made over 100 withdrawal applications (WAs) to IFAD for disbursement and justification of advances. The quality of WAs was judged satisfactory and the supporting documentation was generally in good order. No expenses were declared ineligible and District Administration and project account reconciliations were found to be generally in good order. At the time of the PCR mission, approximately USD 1.3 million was available for use in the District Administrations and need to be justified before the project’s closing date.
167. **Satisfactory counterpart funding.** Counterpart funding from RGC was in the form of cash and in-kind contribution (office rent, utilities, etc.). RGC largely honoured its initial commitment of USD 4.7 million cash by providing to the project an overall amount of USD 4.45 million (95%) in tranches in accordance with the AWPBs. The other main partners (FAO, SNV and iDE) maintained initial commitments in full, with iDE contributing more than the double (224%) of its initial commitment of USD 313,000 to scale up activities in the field.
168. **Reduced beneficiary contribution.** At appraisal, beneficiary contributions were estimated at USD 2.19 million. The final amount mobilized was USD 0.41 million (19%). Only beneficiary cash contribution was recorded, and in-kind contributions were not accounted for due to a lack of coordination between the finance and M&E team.
169. **Improved Project Financial Statements (PFS).** PFS are prepared by the PSU Finance Unit using Cambodian International Accounting Standards (modified cash basis) as prescribed by SOP. The quality of financial statements notably improved over the course of the programme. At the beginning of the project, nine sets of audited PFS were submitted to IFAD with no consolidation. The 15 - 27 September 2013 supervision mission recommended training of the FM team to resolve this problem, after which PADEE began submitting consolidated PFS annually. In addition, PSU finance team regularly submitted six-monthly financial reports. The programme’s audited statements found an immaterial difference of USD 150,000 compared to financial statement due to *ex-post* adjustments (e.g., 0.37% difference on USD 41 million budgets).
170. **Satisfactory quality and timeliness of audit.** An external auditor audited the programme financial activities due to a lack of human resources at the National Audit Authority of the RGC. Annual audits were submitted on time with unqualified opinions. Audits were performed in accordance with International Standards on Auditing. The audit risk assessment of the project moved from medium in 2014 to low in 2015 and 2016. No major internal control issues were reported in the last two years. The audit for 2017 is ongoing and the report should be submitted to IFAD within the due date commitment, and the final audit for January-June 2018 will be submitted to IFAD by 30 September 2018.
171. During the winding up period, the PSU will retain their finance staffs who are also engaged in the administration of S-RET project. As part of project closure, the PSU has communicated a recovery plan which foresees submission of WAs for recovery of the loan which should be completed by project’s closing date (the current advance balance at the PSU is USD 1.1 million - the first WA of approximately USD 420 000 is currently awaiting approval and will be fully

recovered, and a second WA is under preparation). Residual advances to implementing partners will be either refunded (e.g., an advance to SNV of approximately USD 40,000 will be refunded to IFAD) or justified (e.g., PSU is awaiting the final report from FAO). All bank accounts will be closed and petty cash exhausted/ returned to bank. A final physical inventory of assets will be conducted and formalities for transfer of all assets to ASPIRE will be completed. Key documents will be scanned, electronic files will be backed-up, and all project documents labelled and archived.

#### **E.4. Partners' performance**

172. **Government performance is *rated satisfactory* (5).** The Ministry of Economy and Finance (MEF) as IFAD's window ministry on behalf of the Government, was responsible for the oversight of the project. MEF provided overall inter-agency coordination, processed withdrawal applications, approved procurement plans and other necessary financial documents. MEF was also in charge of ensuring timely and sufficient government matching funds.
173. As implementing agency hosting the PSU, MAFF complied with all finance covenants and followed up on most supervision mission recommendation. As of 31 May 2018, the financial contribution of the Government to PADEE was 95% of its appraisal commitment. RCG contributions were used in most major expense categories except for category II of technical assistance and category IV of group conditional transfer schemes. Staffs were stable and judged by supervision missions to be well-performing. Some RCG matching funds disbursements were moderately delayed in 2015 and supervisions missions recommended project management improvements. PADEE implemented corrective measures with resulting satisfactory financial and physical performance.
174. **Effective institutional support to PADEE at operational level.** Provincial Administrations (PAs), District Support Teams (DSTs) of both PDA and PDoWA and involved Commune Councils showed clear commitment to assigning key focal points and technical staff to support field implementation and to assisting operational coordination with other implementing partners and service providers. Additional technical staff from other service divisions or sections was successfully called in to support the project implementation when necessary.
175. **IFAD performance is *rated satisfactory* (5)** IFAD responded promptly to the request of the RGC to prepare the loan and grant-financing project. IFAD was proactive in bringing in the GEF-financed S-RET to support PADEE, expanding the programmes ability to address climate change challenges and bringing affordable/ sustainable renewable energy to programme beneficiaries. IFAD was also able to add USD 2.9 million in to financing for scaling PADEE's access to finance and market access components. Guidance from IFAD missions was beneficial and helped improve programme implementation, operational, financial, and fiduciary management. IFAD was flexible and responsive to the evolving implementation context and provided consistently good technical guidance from headquarter the country office in Cambodia. IFAD's response time on no objections, commitments, and follow-ups on withdrawal applications were within reasonable time limits. The IFAD CPM for Cambodia changed once during PADEE implementation, but IFAD guidance and support remained consistent.
176. **Underestimated TA need for value chain development.** A need to increased support for PADEE's value chain development activities was identified early in the implementation of Component 2. Unfortunately, SVN participation only began four years into the programme in 2016. Design failed to anticipate the effort required to put in place sufficient support capacity to effectively implement this component.
177. **Committed technical sound capacity building partners.** The implementation of PADEE technical components relied on partnerships with FAO, SNV, iDE, MoWA and PROCASUR. Responsible to the MAFF-PSU, implementation partners provided detailed operational plans and budgets, had timely execution, and presented on-time reporting. The physical and financial implementing partner performance was satisfactory, and they proactively worked with the programme and programme stakeholders.

## **E.5. Quality of supervision and implementation support**

178. **Constructive supervision and implementation support.** There were five annual supervision, a mid-term review, and four start-up and implementation support missions. Supervision missions were fielded on schedule by IFAD. These missions were part of IFAD direct supervisory responsibilities, but also provided opportunities for operational and technical guidance. Team composition was mostly consistent, combining IFAD headquarter staff, country team focal points, and local consultants. Based on feedback from the National Stakeholder Workshop, the supervision and implementation missions provided useful and constructive guidance/ input to the PSU and implementing partners. Mission recommendations demonstrably helped PADEE's overall implementation progress and performance.

## **E.6. PADEE internal rate of return**

179. **Approach and methodology of Economic and Financial Analysis (EFA).** The project appraisal provided EFA with interventions in crop production, animal raising, non-farm small businesses for target beneficiaries. The appraisal provided four rice crop budgets one each for wet season rice, irrigated dry season rice, lower input model rice, and higher input model rice. However, only wet season rice with inputs, and irrigated dry season rice with inputs have been practiced by farmers and reported on in the project's baseline and end-line surveys. The project design also included other crop budgets which were implemented during the life of the project (i.e., maize, cassava, mung bean, long bean, cucumber and watermelon, chicken and pig rising). Appraisal included six non-farm enterprises, which were ultimately not part of the project interventions. The project decided to support craftswomen/ men who make sedge mats, but no production details were recorded.
180. The EFA at completion employs the standard Cost-Benefit Analysis (CBA) method in accordance with the IFAD's Internal Guidelines for Economic and Financial Analysis for Rural Investment Projects (IFAD: August 2015). The project investment costs, all other investment costs and all quantifiable benefits were adjusted to 2017 prices applying the GDP deflator for Cambodia to estimate the net incremental benefits, which is the balance of incremental benefits and incremental costs incurred by carrying out the activities induced by or with the project (WP), against the Without Project (WOP) situation. The incremental net benefit streams taken over a period of 15 years are derived mainly from cost savings and higher yield in rice, corn, mung bean, chicken, and pig production, and from higher prices of vegetables due to the better and safer production practices/ products. These are the result of the application of improved technologies promoted by the project,
181. The EFA was based on nine production models representing project activities and the incremental net benefits accruing from the activities. They are based on data collected by the baseline and end-line surveys and other project surveys, with qualifications derived from the PCR mission and other consultations as applicable. The analysis maintained the result chain approach where the benefits of the intervention activities are included into the incremental cash flows only if the beneficiaries have a direct attribution or a linkage to project interventions (in some cases in terms of new knowledge and technologies). For this reason, EFA models focused on the major beneficiaries of the project (i.e. 55,431 households of the 88,986 beneficiary households which include 80% of the 49,200 IGRF members, and 16,071 non-IGRF members supported through all other partners/agencies such as MOWA, iDE, SNV, and Procasur). The nine models are wet and dry season paddy production, two kinds of representative vegetable production, other crops (mung bean, sweet corn, and water melon), and livestock (pig and chicken). The government PCR, which includes EFA, has developed financial budgets for these models, and the current analysis used these budgets with some revisions to reflect the observations made by the IFAD PCR mission and up to date information. Draft analysis shows the household, enterprise, and project level models all have positive benefits and high CBA indicator values.

182. **The Economic Analysis.** All market prices that are used for the financial analysis of NPV and IRR are adjusted to reflect their economic values in the economic analysis. Tradable commodities such as paddy and value of fertiliser have been priced at economic parities using border prices when applicable. Shadow wage rates and product prices were used to value all the labour, and standard conversion factor was used to value non-tradable goods in all the models when applicable. The results indicate positive values for all the CBA indicators. The financial NPV is USD 20.2 million, while the economic NPV is USD 15.7 million; the Benefit/ Cost Ratios are 1.37 and 1.3, respectively in financial and economic terms; FIRR is 26.2% and EIRR is 23.4%.

## E.7. Fiscal Analysis

183. The fiscal analysis is essentially to account for taxes incurred by farmers and consider the total amount as revenue for government, and therefore the project cost is reduced after subtracting the taxes, making the project relatively more attractive. In the case of PADEE, farmer surveys did provide costs reflecting taxes paid by the farmers. In fact, the Cambodian government has a tax exemption policy for agricultural inputs such as land, machinery, seeds, fertilizer, and pesticides. There are, however, informal fees on trade of fertilizer and pesticides, and import taxes on plastic nets, plastic mulch, steel, irrigation pipes/ tubes used for some vegetable farms. Businesses are also required to pay 10% VAT on sales (e.g., fertilizer, pesticides, animal feed, farm construction materials etc.). The costs incurred by farmers are divided into the costs without taxes, and the taxes that go to government. As a result, the net present value of the total tax estimate for the duration of the project (15 years) discounted at 12%, is USD1.99 million. While farmers benefit \$53 million in incremental income, society has a net benefit of USD 28 million, after government pays USD 24.9 million in project cost (USD 26.96 million less USD1.99 million in taxes earned).

**Table 16: Summary of analysis results**

	Financial	Economic
Net Present Value - NPV (USD), at 12% discount rate	20,213,822	15,793,082
Benefit/Cost Ratio – BCR	1.37	1.30
Internal Rate of Return (IRR)	26.2%	23.4%

**Table 17: Summary of benefits**

Type of beneficiaries	Benefits provided	# households counted as beneficiaries	# households counted for each production in EFA										
			Total hhs/ adoption rate	WS rice	DS rice	Mung bean	Sweet corn	Water melon	cucumber	Sponge gourd	Chicken	Pig	Small nonfarm business
Households in IGRF membership	Small loan and training in various value chains	49,200	39,360	23,616	6,298	2,362	2,755	1,574	7,085	5,904	23,616	8,659	2,755
% households found in Endline Survey			80%	60%	16%	6%	7%	4%	18%	15%	60%	22%	7%
Households benefiting from 15 value chain clusters (chicken, vegetable, handicraft, mushroom)	Significant grant and training in chicken, vegetable, handicraft and mushroom	1,444	1,155						520	266	693	-	347
% households estimated			80%						45%	23%	60%		30%
Households supported through MoWA (non-IGRF members only)	Grant and traing in handicraft, small business and chicken value chains	580	464								371		162
% households estimated			80%								80%		35%
Repeat clients (non-IGRF members only) through iDE FBAs	Training in rice and vegetable	11,875	8,313	4,988	1,330	499	582	-	1,330	1,247			
% households estimated			70%	60%	16%	6%	7%		16%	15%			
Households in 34 Rural Business Stimulus Facilities (RBSF) by SNV	Training in rice, vegetable, mushroom, fish and chicken&pig	1,534	1,227	552	184	-	-	-	245	123	307	245	-
% households estimated			80%	45%	15%				20%	10%	25%	20%	
Beneficiaries of FFD in 200 crop diversification demos by GDA (non-IGRF members only, 20.5% found to have adopted)	Training through FFD on corn, water melon, mung bean	8,280	1,697			679	645	424					
% households estimated			21%			40%	38%	25%					
Households benefiting from farm to farmer (F2F) by Procasur outside target areas	Study visits in commune learning centres (not considered for EFA)	16,073	3,215	1,929	482	-	-	-	482	321	-	-	-
% households estimated			20%	60%	15%				15%	10%			
<b>TOTAL NUMBER OF HOUSEHOLDS</b>		<b>88,986</b>	<b>55,431</b>	<b>31,085</b>	<b>8,294</b>	<b>3,539</b>	<b>3,982</b>	<b>1,999</b>	<b>9,662</b>	<b>7,861</b>	<b>24,987</b>	<b>8,905</b>	<b>3,264</b>
% households			62%	56%	15%	6%	7%	4%	17%	14%	45%	16%	6%

<b>Table 18 - Analysis of fiscal impact</b> ( <i>USD NPV discounted at 12%</i> )			
	<b>Society</b>	<b>Government</b>	<b>Farmers</b>
Income	\$84,116,317		\$84,116,317
Costs			
Production costs, no taxes	(\$28,917,189)		(\$28,917,189)
Taxes		\$1,998,205	(\$1,998,205)
Project costs	(\$26,963,712)	(\$26,963,712)	
Net benefits	\$28,235,416	(\$24,965,507)	\$53,200,923

## F. Assessment of sustainability

184. **Sustainability of PADEE results is rated moderately satisfactory (4)** due to the institutional sustainability in support of the core beneficiary IGRFs, social sustainability, technical and economic sustainability, environmental sustainability, and the project exit strategy. The roadmap for the integration of PADEE IGRFs, value chain clusters, and S-RET into ASPIRE was developed for the continuity of results. Their integration will be guided by detailed step by step plan geared to addressing IGRF and beneficiary development needs.
185. Institutional sustainability. The institutional sustainability of PADEE focused on IGRFs, which in turn, is based on a group evolution towards linkage with the formal financial sector. Increased access to finance, coupled with good agricultural practices, improved off-farm economic activities and decentralized agricultural extension/ MAFF services provision would create sustainable linkages between poor smallholders, buyers, and markets.
186. IGRFs leaderships and members articulated a strong interest in continuing group activities with some expressing a willingness to pay for services from group surpluses (although none have done so to date). The programme proposed six options for sustainably institutionalizing ICRFs, including: (i) amalgamation of the IGRFs with Cambodia Community Savings Federation; (ii) creation of a PADEE Federation of IGRFs under the purview of the National Bank of Cambodia; (iii) establishment of an independent PADEE Federation for the IGRFs; (iv) merger with Crédit Mutuel Kampuchea; (v) merger with existing MFIs; and, (vi) conversion of the IGRFs into Agricultural Cooperatives.
187. IFAD together with PADEE examined the viability of these options. There was no interest on the part of the National Bank of Cambodia for IGRFs becoming MFIs as there are already too many such institutions operating in the country to properly supervise. Amalgamation with the Cambodia Community Savings Federation would be difficult as credit unions are unregulated. A merger with Crédit Mutuel Kampuchea was investigated but would not result in a sufficient capital base to legally operate even if all IGRFs were amalgamated into a single mutual. Merging IGRFs into a single organization is the most attractive option but is not without substantial challenges. First, few IGRFs expressed interest in this option; second, such a merger would require at least three years of support to build the trust required to merge and to integrate systems, processes, and committees; and, third the NBC's indicated that merging even a small number of IGRFs would require credit operator license which it indicated would be unlikely at least for the foreseeable future.
188. The remaining option is converting individual IGRFs into agricultural cooperatives and considering the creation of a supporting apex organization. PADEE has initiated steps towards these ends to be continued under ASPIRE.



189. Social sustainability. The development of IGRF groups helped target beneficiary members grow and develop their self-esteem through supporting advances in both household economic and social development. Prior to the programme, poverty rates in target rural areas were over 90% plus. The rural poor had low technical capacity and were unable to easily change their traditional farming and or enterprise practice. Increasing their agricultural productivity and ability to market agricultural and non-agricultural products increased their incomes and assets, and in doing so, provided a greater sense of self confidence and security. This embolden beneficiaries to consider and invest in further change with much less risk to food and income security. Notably, improved, and diversified sources of income, decreased the need for seasonal/ permanent rural outmigration. Beneficiaries reported being able to stay with their families in the villages because of improved technical skills, access to finance, and improved income generating. This sense of individual confidence and empowerment was bolstered by group and community ownership and commitment of programmatic activities.
190. While there has been a recent push to enhance rural financial service coverage, high transaction costs, debt trap, and limited impact on poverty reduction have weakened the government's confidence in MFIs. On the other hand, IGRF is a more sustainable/community owned model that the government believes could be sustainable. The Asian Development Bank has gleaned lessons from the PADEE/ IFAD experience and is investing in scaling up IGRF models linking IGRFs to value chains. It should also be noted that IFAD has learned from the IGRF experience under PADEE, and is specifically working on developing value chain linkages and capacities before provision of financing under AIMS.
191. Under sustainability and scaling up, it should also be noted that the models developed under SRET are being continued under ASPIRE, with potential further scaling up under SAAMBAT (currently being designed). The SRET models are also being scaled up through the new design in India.
192. With regard to the sustainability of IGRFs, strong technical oversight, a well-functioning partnership structure, and results reporting helped the IGRFs function well under PADEE. PADEE created strong member-owned financial organizations. The T.A partner for the IGRF component, FAO, reported that over 84 percent of IGRFs' fund growth reached the set target of the project, and the rest also showed positive trends at project completion. IGRF committee leaders showed gradual increases of confidence in managing the loans and group members as a result of the financial literacy training, coaching and feedback from the project. Based on self-assessment results, 842 groups were identified as the strong groups, while 138 were classified as the medium and 4 groups as weak. All 984 IGRFs were formally registered at the commune level. The implementing PDAFFs at provincial level maintained strong monitoring and are coaching the medium and weak groups in order to improve their operational capacities. At the end of the programme PADEE assessed and initiated follow-up on options to ensure sustainable operation of the IGRFs in the future – both at the end of PADEE and in ASPIRE. These steps included some of those in the table detailed below:

Sustainability recommendation	Proposed steps
<p><b>1. Continue registration of IGRFs as agricultural cooperatives (ACs).</b>  <i>In the Cambodian microfinance context, the only viable option of such member-owned financial organizations to become more formal is to register as agricultural cooperatives. In this way, they are at least legally recognized and there are some guaranteed checks and balances on their operations following PADEE withdrawal.</i></p>	<p>1.1 Provide <b>technical assistance to the IGRFs</b> to support their registration processes as agricultural cooperatives</p> <p>1.2 Investigate a <b>partnership with the Cambodian Association of Cooperatives</b> to build on their experience and help in these next steps for the IGRFs</p> <p>1.3 <b>Support phasing out internal savings/credit operations for ACs wishing to operate primarily as agribusinesses</b> rather than as savings/credit groups. This avoids common risks of operating as multi-purpose cooperatives. Such support includes T.A for: stopping internal savings/credit operations; business planning; supporting management/committee capacity; and facilitating access to higher capital from the formal financial sector for financing business plans.</p>
<p><b>2. Further strengthen the IGRFs'/ACs' managerial and operational capacity</b></p>	<p>2.1 <b>Define a capacity building strategy for IGRFs that will be registered as ACs</b> based on a study on how ACs operate</p> <p>2.2 <b>Develop and commit to an action plan for continuing with the financial management and literacy capacity building of the IGRFs/ACs</b> and their members, including better management of repayment delinquencies</p> <p>2.3 Support <b>refresher courses</b> for groups</p> <p>2.4 <b>Involve all members further in transactions</b> to increase group learning</p> <p>2.5 <b>Strengthen understanding on savings and household financial management</b></p> <p>2.6 <b>Provide incentives and opportunities to exchange managerial support</b> from strong group(s) to weaker group(s) within the same commune</p>
<p><b>3. Continue federating new agricultural cooperatives into member-owned unions.</b> <i>To continue supervision, oversight and facilitation, whilst also developing other member services. The union could also oversee the performance of the external service provide - PCG - and help continue monitoring of their facilitators, the MFAs. It would also help ensure payment continues from the IGRFs/ACs for services.</i></p>	<p>3.1 <b>Set clear responsibilities between ACs and their Unions including for the following tasks:</b></p> <p>3.1.1 <b>External facilitation/T.A</b>, including quality control and payment for such services</p> <p>3.1.2 <b>Supervision and oversight</b></p> <p>3.1.3 <b>External audit</b> of the IGRFs/future ACs</p>

193. Technical and economic sustainability. With support from MAFF, line departments and technical implementing partners, PADEE continues to empower the poor and the women through IGRFs, GDA, PROCASUR, and FBAs, non-land-based economic activity trainings, access to financial

services, and improved market linkage opportunities. While not all these activities will be continued by MAFF, some interventions in whole or in part will continue and the processes/ lessons learned will provide sustainable guidance for future interventions and support activities. Many IGRFs continue to operate either as currently formed, or as agricultural cooperatives. In either case, experience in Cambodia and other countries suggest 60% should remain active over the long run. This will ensure sustainable access to finance for many rural poor, which, along with MAFF/ other programme intervention technical support to on and off farm enterprise, will provide sustainable economic impacts to beneficiary members.

194. **The exit strategy.** The continued success and sustainable outcomes of PADEE's will rely on three pillars: (i) building institutions of smallholder and poor farming households by helping them to organize themselves, build social capital and access micro-finance services; (ii) empowering local farmers through knowledge and technology transfer to sustainably improved productivity; and, (iii) improved market access/ linkages. The local authorities including Commune Administration, Provincial and District Administration have committed to support IGRF by *inter alia*: (i) encouraging transformation IGRF into agricultural cooperatives; (ii) supporting monthly meetings and Banking Day; (iii) assigning a staff member to be responsible for IGRF/ AC development; (iv) coordinating with other donors to secure ongoing support; and, (v) merging IGRF activities into Commune Development Plan.
195. **Roadmap for the integration of PADEE activities into ASPIRE.** ASPIRE is currently active in 5 PADEE provinces and action plan has been developed to transition/ replicate/ scale up some PADEE activities in the programme, including most notably developing value chain clusters. ASPIRE will also support the operation of IGRFs and their transition to agricultural cooperatives, as well as developing the Agricultural Cooperative Union of Revolving Fund (ACURF) (246 IGRFs have made the transition). PADEE's is recommending ASPIRE support the transition of the remaining 738 IGRFs with the following actions:
  - Support transformed IGRFs into Agricultural Cooperative and strengthen the ACURF;
  - Support IGRF/ ACs formed under PADEE on institutional and individual capacity building for management, business orientation, marketing, and other required training;
  - Continue to use MBwin and PADEE MIS for information collection monitoring and supervision; and
  - Employ the same IGRF regulations used in PADEE.

**Table 19: Roadmap for transferring PADEE's IGRFs to Agriculture Cooperatives**

Province	Total IGRFs	AC	Remain IGRFs	Target				HH
				2018	2019	2020	Total	
PVG	344	86	258	30	40	16	86	4,300
SVR	120	30	90	8	10	12	30	1,500
KAM	144	72	72	25	25	22	72	3,600
KDL	144	50	94	20	20	10	50	2,500
TAK	232	50	182	20	20	10	50	2,500
<b>Grand Total</b>	<b>984</b>	<b>288</b>	<b>696</b>	<b>103</b>	<b>115</b>	<b>70</b>	<b>288</b>	<b>14,400</b>

Source: Roadmap on Integration of PADEE provinces and S-RET into ASPIRE.

196. To avoid interruption of project management, performance-proven PADEE TAs and CEWs will be transferred to ASPIRE (contracts effective from July 2018). All PADEE assets will be transferred to ASPIRE as a part of the commitment to support PADEE and SRET target provinces/ beneficiaries (effective from July 2018).

## G. Lessons learned and knowledge generated

197. The PADEE generated several good practices and lessons meriting replication and scaling up consideration in ASPIRE, as well as other IFAD, donor, and government programming.
198. *Strong partnership development*. PADEE programme management and oversight worked both effectively and efficiently, coordinating a relatively large number of RGC's agencies (MAFF, MoWA, PDAFFs, PDoWAs and PAs) and NGOs (iDE, SNV and PROCASUR) as well as FAO. Despite multiple interests and capacities, PADEE was an innovative collaboration and was able to lever substantial complementarity and synergy from the participation of participating agencies.
199. *Policy engagement*. The IGRF model is consistent with RGC decentralized policy and a preference for multi-disciplinary approach to extension at the provincial and district levels. PADEE also contributes to the RGC's policy to increase paddy rice production and milled rice export 2010 through increased yields (despite the effects of drought and flooding in some project areas). In addition, MoWA successfully proved and promoted "the value of the integration of gender and nutrition into agricultural development approach" to the extent that is now path of the new Cambodian five-year gender strategic plan (2019-2023).
200. *PADEE's targeting*. The PADEE targeting logic was an evolution of past IFAD projects (RPRP, CBRDP and RULIP) which first identified geographical concentrations of target groups, then using objective poverty measurement criteria, engaged a participatory wealth ranking exercise to select programme beneficiaries.
201. *Local grassroots extension services* by CEWs, F2F, and CLC proved to be an effective means to transfer agricultural technology. Being readily accessible and close to the farmers created beneficiary confidence in the programme and improved communications among between farmers and extension workers.
202. *Good practices of PADEE's M&E*. The project applied several innovative methods/ technologies to facilitate effective and efficient M&E including: (i) using tablet and laptop to collection and input data from the farmer and IGRF into MIS and MB-Win system; (ii) project partners tracked implementation/ received reports via a central M&E system and associated MIS; (iii) mobile field officer used tablets for inputting farm data and recommendations under e-PADEE; and, (iv) use of mobile phone technology to track beneficiary meeting attendance and satisfaction with training delivery, complementing real time IGRF performance data.
203. *Incentive scheme*. A beneficiary incentive scheme was developed to improve training quality. The incentives included: (i) cash transfers to beneficiaries through the Group Conditional Cash Transfer Scheme attending and applying select training and productive use of funds;<sup>34</sup> (ii) use of mobile phone technology to track beneficiary training attendance and satisfaction; and, (iii) annual rewards to the best farmer group initiatives and common interest groups performance.
204. *Improved capacity building features* in design include: (i) the adoption of a modular demand driven approach to training; (ii) a combination of training and use of funds transferred; (iii) more in-depth and applied training approach for common interest groups; (iv) an enhanced role for district teams as key trainers and added support through a mobile technical team at provincial level; (v) the development of training materials was validated by MAFF; (vi) learning opportunities given for outstanding farmers performance to learn agricultural value chain practices from neighbouring countries like Thailand and Viet Nam; and, (vii) creating a partnership with iDE for expansion of the FBA network to ensure supply of high quality inputs and allow them access to sustainably extension services.

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<sup>34</sup> The GCCTS is the transfer of funds mechanism to IGRFs over a three year period conditional on performance: Year 1, the transfer is USD 80/ member if members opened a savings account and took financial literacy training; Year 2, it was USD80/ member and members had to take technical training; and, Year 3 it was USD80/ member on the condition that loans granted in Years 1 and 2 must be on schedule and/ or repaid on time.

205. Improved IGRF's modality including: (i) IGRFs retained functions GRFs managed well while outsourcing to professionals those that were more complicated (e.g., accounting, record keeping and reporting); (ii) improving household's financial literacy levels and ability to interact with MFIs; (iii) promoting savings through training and opening individual accounts with MFIs; and, (iv) evolving CEW roles from supporting IGRF operations and accounts towards mentoring and supporting household and interest groups.
206. The contract farming works very well with organic farming and good agricultural practices where value chain improvement techniques are applied and replicated (i.e., creating marketing opportunities).
207. Low-cost early childhood nutrition promotion system through Mother2Mother (M2M) network was an effective social marketing tool, helping to showcase and promote child nutrition and good sanitation among rural women.

**Key lessons:**

208. Allow for a longer value chain market access learning curve especially if implementation is a learning-by-doing intervention and particularly if related to non-land-based activities (even if supported by external, expert service providers).
209. Supply-driven savings/ credit group sustainability considerations are key. IGRFs run the risk of being unsustainable unless their long-term profitability is considered at design, including a well-researched assessment of the future rural financial service sector supply and demand.
210. Lack of fully effective loan collection mechanism among IGRFs remains a concern especially the cases of member relocation or death.
211. Knowledge sharing requires a knowledge management strategy and knowledge management and communication officer.
212. Change in senior management affected the project implementation. Senior project management consistency/ stability is crucial to implementation success, and great care must be taken if management must change during the programme;
213. The hiring of skilled and experienced FM staff is key for early and effective financial management systems development.
214. More accurate annual budgets enhance use of budget as planning and monitoring tool.
215. Improved coordination between M&E and finance staff allows record keeping of in-kind contributions from beneficiaries.
216. Better customization of the FM reporting in the accounting system (e.g., to include all required reports, especially those required by government).

## H. Conclusions and recommendations

217. PADEE achieved its development objective of improved agricultural productivity and diversification of income sources for the rural households living in poverty in the five project provinces. The project was effectively implemented and exceeded revised outreach target by reaching more than 88,986 direct beneficiary households. Targeting was also effective, and the project was able to successfully help the poorest, the poor, and the medium poor improve access to financial services, adopt appropriate production and enterprise techniques and technology, and enhance access to markets.
218. The project investment coherence was good, with observable links from outputs to expected outcomes, leading to anticipated impacts. Achievement of key outputs under the two technical components led to improved access to financial services, increased agricultural productivity and income, and increased physical and financial assets among the target groups. The project demonstrably strengthened human and social capital and empowerment and improved food

security. With over 50% of women as participants and beneficiaries, the programme notably enhanced sensitivity to and positive action on gender equity and women's empowerment.

219. The project achieved an acceptable overall disbursement rate of 89.9% and demonstrated good cost efficiency with management costs of 17% and a cost per beneficiary household and per beneficiary cost of USD 466 and USD 93 respectively. Financial management, accounting, procurement, fiduciary audit functions contributed to overall programme effectiveness and efficiency. The programme EIRR at completion was calculated at very positive 22.7%.
220. The prospects of PADEE interventions achieving lasting effects and some degree of sustainability are good, with some activities requiring ongoing support being transferred to the new ASPIRE programme. Knowledge generated by the programme and lessons learned are a positive legacy for the IFAD Cambodia country programme, some of which have notable potential for replication and scaling-up in the country and in the region
221. **Recommendations.**
- An institutional approach for rural financial services should be considered to improve sustainability potential;
  - The value chain cluster approach implemented under PADEE should be replicated by other IFAD-supported projects, including individual support packages, in-country and international learning and sharing, and South-South exchange/ cooperation;
  - Design and execute technical assistance with an agenda and roadmap, including explicit actions to transfer knowledge to participating technical agencies as part of the institutional capacity building;
  - Set explicit and measurable goals and linkages between technical components to ensure maximum synergies;
  - Organize communities into marketing groups/ clusters before IGRF are formed (e.g., before the financing mechanism);
  - Factor the in costs of programme implementation convergence/ coordination among various levels of managers/ partners (e.g., at the provincial and community level). This will enhance institutional sustainability beyond the project completion.
222. The PADEE achieved its impact, outcome, and outreach targets. This mission recommended **a satisfactory rating (5)** for the overall project achievement at completion.

## **Appendix 1: Terms of Reference of the completion review mission**

**06 – 19 June 2018**

### **A. Background of the Project**

#### **Country Context**

1. Agriculture in Cambodia has been an engine of Growth and it still provides an important albeit decreasing share of rural incomes. Poverty rates are dropping fast and are at a historical low. The diversification of the Cambodian economy and the transformation of its agriculture have been two mutually reinforcing trends over the past two decades, supported by public policies that promote market-driven growth, open trade and private investments. Agri-businesses are developing and need more products of better quality to be supplied on the markets (rice, bio/organic products, cashew, maize, vegetables, cassava, ginger, turmeric etc.).
2. The main thrusts of the cooperation between the RGC and IFAD have been to build human, physical and financial assets of rural households, to protect people from shocks and to improve the delivery of extension services at scale while investing in inclusive commodity chain and market development.
3. Compared to the previous COSOPs, the 2013-2018 Country Strategic Opportunity Programme (COSOP) shifted the focus from a livelihoods approach to a market orientation, from promoting decentralization of public services to a broader concept of pro-poor rural service delivery involving non-government actors, and a more explicit focus on the resilience of poor rural households.
4. Previous IFAD strategies that characterized the 1980s until the mid-1990s had combined building financial capital, extension services and rural infrastructure in a single operation. As from 2012, it was decided that IFAD had a better comparative advantage in focusing on rural finance and extension rather than on rural infrastructure.

#### **Project Background**

5. An IFAD Loan of SDR 11.3 million (equivalent to approximately USD 17.5 million) and an IFAD Grant of SDR 11.3 million (equivalent to approximately USD 17.5 million) under the Debt Sustainability Framework (DSF) was approved by the Executive Board of IFAD on 3 April 2012 for financing the Project for Agricultural Development and Economic Empowerment (PADEE, IFAD loan 870-KH and DSF Grant 8101-KH). The Financing Agreement was signed on 8 June 2012 and became effective on the same date. The goal of PADEE is to improve the livelihoods of the poor rural people in the target communes of Kampot, Kandal, Prey Veng, Svay Rieng and Takeo provinces. The development objective (PDO) is to improve agricultural productivity and diversify the sources of income of around 90,000 rural households living in poverty in the selected provinces.
6. The Project Completion Date is 30 June 2018 and the Closing Date is 31 December 2018. The following data collection arrangements that have been made for the Project Completion Process:
  - Completion of Annual Outcome Survey in late 2016
  - Last Supervision mission conducted from 06 – 18 July 2017
  - Completion of the Provincial Annual Refection Workshop in late 2017
  - Completion of the Project Baseline, Midterm and Completion Survey in December 2017
  - Province Stakeholder Workshop completed in May 2018.
  - Project exit strategy completed in 2018
  - Draft of project completion report in May 2018

## B. Mission Objectives

7. At IFAD, Project completion is considered a process, undertaken by the Borrower in order to report on the implemented activities, describe the results achieved, critically reflecting on the implementation performance of all project partners, promote accountability, elicit lessons learned and define an appropriate hand-over strategy.<sup>35</sup> The learning dimension of the completion process is regarded as the foundation for improvements in future project design and implementation arrangements.

8. Outputs from the completion process include:

- elaboration of lessons learned,
- definition of specific actions for ensuring sustainability,
- identification of the main success factors and shortcomings that affected project implementation,
- promotion of accountability among all stakeholders for successes and setbacks, and the development of exit strategies.

9. The objective of the mission is to assist the government and the project management to validate and finalise the Project Completion Report. A Project Completion Report (PCR) will be elaborated at the end of the completion process that brings together the key findings of the completion phase and that can be considered as a guide for post-project sustainability.

## C. Mission Composition

10. The Project Completion Review mission will comprise of a Mr. Meng Sakphouseth (Country Programme Officer, Team Leader), Mr. Peter Situ (Agronomist, Mission Leader), Mr. Chan Sophal (Economist), Mr. Srey Chanthy (Implementation Performance Specialist), Ms. Wanaporn Yangyuentham (Programme Analyst), and Ms. Emily Coleman (Rural Financial Services).

11. The Project Lead Agency may also nominate representatives from the Government counterpart agency to participate in the mission. The mission will work under the supervision of the CPM of IFAD.

## D. Key Mission Tasks

12. The first task for the Mission will be familiarity with IFAD's guidelines for Project Completion. The Mission will initiate a discussion with project staff on the various tasks to be completed during the Mission's presence in country and develop an agreed work plan. The mission will take a participatory approach to the project completion review and assess the availability of key information regarding the project and assess how any remaining gaps in information could be filled. The project M&E system will be considered as the main source of information for the completion. The project will provide all available information to the Mission including the results of any baseline survey or any other special surveys and research studies undertaken.

13. The specific tasks that the Mission will undertake will include the following:

- a) **Conduct interviews with all stakeholders** at national, provincial, district, commune and village levels, including concerned government institutions, NGOs, service providers and project beneficiaries;
- b) **Undertake field visits** to the Project area and obtain first-hand information and validation of the data presented in the draft PCR from the government.
- c) **Assess the success in the implementation of different components**, identification of the overall strategy and approach, its relevance, efficiency, effectiveness, impact and sustainability, innovation, scaling up, performance of partners and lessons learnt.
- d) **Assess the extent to which the project succeeded in reaching its objectives and eventually its goal** supported by a justifiable and coherent representation of the linkage among the various components - how they together contributed to achieving the stated objectives.
- e) **Recalculation of the economic rate of return** showing actual costs by component and an updated estimation of projected benefits, reflecting changes made during implementation, actual coverage and any changes in economic prices and market conditions. The analysis should include a

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<sup>35</sup> Guidelines for Project Completion Report, Programme Management Department, IFAD. Nov 2015



discussion on the impact on NPV/ROR of varying the most critical underlying parameters (such as inputs, world prices, yields)? The sensitivity analysis should be based on alternative scenarios associated with specific risks, rather than a mechanical xx% change in costs.

- f) Include an *analysis of the actual Project activities on the environment*, negative or positive.
- g) Include any additional issue or information deemed necessary with respect to the Project which needs to be identified and analyzed as part of the Project completion Process. This may be presented in the form of an *additional annex to the main report*.
- h) **Hold a stakeholder workshop** as part of the completion process to provide a broad spectrum of stakeholders with the opportunity to assess project performance. In case required host supplementary workshops to facilitate the participation of particular segments of the beneficiary population or civil society (e.g. indigenous groups, ethnic minorities, service providers, etc.)
- i) **Prepare an Aide Memoire** for discussion with the Government at the end of the Mission highlighting the key findings of the Mission.
- j) Discuss the main conclusions of the PCR at the wrap-up and agree on the **post project responsibilities and the modalities** associated with hand-over and exit of Project assets, activities and responsibilities.
- k) Prepare a Project Completion Report highlighting the key findings of the Mission.

### E. Key Mission Deliverables

The Project Completion Mission will be responsible to deliver the Mission AM, Project Completion Report and the appendices.

#### Country Programme Officer (CPO) – Team Leader

Full Name: Meng Sakphouseth

Specialization: Agriculture Economist

Division/Department: PMD/APR

Location: Cambodia

Reports to (name and title): Thomas Rath, Country Director and Head of Mekong hub

The CPO will represent IFAD and oversight the mission. Especially he will:

- (a) Brief the mission team on key strategic and policy issues linked to the COSOP implementation
- (b) Liaise with government, project stakeholders and partners.
- (c) Direct the mission based on in-country experience, knowledge about development policies and strategies and lesson learnt from the experience of other donor agencies.
- (d) Oversight the outputs of the mission
- (e) Clear the mission AM before sharing with government
- (f) Represent IFAD in all consultations, pre-wrap up and wrap-up meeting with key government representative and stakeholders.
- (g) Participate in the IFAD internal quality review process
- (h) Lead on sections E3 and Appendix 1 & 5

Expected Outputs:

- Aide memoire
- Project Completion Report and its appendixes

Required Completion Date:

07 July 2018

#### Mission Leader

Full Name: Peter Situ

Specialization: Agricultural Specialist

Expected Start Date of Assignment: 5 June 2018

Expected End Date of Assignment: 28 June 2018

Division/Department: PMD/APR

Location: Cambodia

Reports to (name and title): Thomas Rath, Country Director and Head of Mekong hub

- (a) Organize and coordinate team work and outputs, in order to ensure that the overall objectives of the mission are met;
- (b) Lead drafting the mission AM before pre-wrap up and wrap up meeting;
- (c) Lead overall completion draft of project completion reporting and its annex and appendixes in line with IFAD cooperate requirements and coordinate team members inputs;
- (d) Lead on revision of chapters A, B, C and sections E2, E4 and E5 in PCR template. And section H and Appendix 3 with inputs from the full team;
- (e) Any additional tasks as requested by the CPM.

Expected Outputs:

- Draft Aide memoire
- Draft Project Completion Report and its appendixes

Required Completion Date:

28 June 2018

### **Financial Management and Economist**

Full Name: Chan Sophal

Specialization: Economist

Expected Start Date of Assignment: 5 June 2018

Expected End Date of Assignment: 19 June 2018

Division/Department: PMD/APR

Location: Cambodia

Reports to (name and title): Peter Situ, Mission Leader

- (a) Recalculation of the Economic and Financial Analyses at the completion point;
- (b) Lead on sections E1 and E6, Appendix 7 & 10, and support Deputy Team Leader in other relevant sections as required;
- (c) Contribute to mission AM
- (d) Propose ratings and justifications on sections under responsibility, in line with appendix 3 matrix and its score descriptors.
- (e) Any additional tasks as requested by the ML.

Expected Outputs:

- Contribution to Draft Aide memoire
- Draft Project Completion Report: Session E1 & E6
- Appendix 7 & 10

Required Completion Date:

19 June 2018

### **Programme Analyst**

Full Name: Wanaporn Yangyuentham

Specialization: Programme Analyst

Expected Start Date of Assignment: 5 June 2018

Expected End Date of Assignment: 19 June 2018

Division/Department: PMD/APR

Location: Cambodia

Reports to (name and title): Peter Situ, Mission Leader

- (a) Lead on revision of sections F & G, Appendix 4, 8 & 9 with inputs from other team members;
- (b) Contribute to mission AM
- (c) Propose ratings and justifications on sections under responsibility, in line with appendix 3 matrix and its score descriptors.
- (d) Any additional tasks as requested by the ML.

Expected Outputs:

- Contribution to Draft Aide memoire
- Draft Project Completion Report: Section F & G

Required Completion Date:

19 June 2018

- Appendices: 4, 8 & 9

### Implementation Performance Specialist

Full Name: Srey Chanthy  
 Specialization: Agricultural Economist  
 Expected Start Date of Assignment: 5 June 2018  
 Expected End Date of Assignment: 19 June 2018  
 Division/Department: PMD/APR  
 Location: Cambodia  
 Reports to (name and title): Peter Situ, Mission Leader

- (a) Support to all team member for all section of the draft PCR
- (b) Lead on revision of Section D, Appendix 2, 6, 11, 12 & 13
- (c) Contribute to mission AM
- (d) Propose ratings and justifications on sections under responsibility, in line with appendix 3 matrix and its score descriptors.
- (e) Any additional tasks as requested by the ML.

Expected Outputs:

- Contribution to Draft Aide memoire
- Draft Project Completion Report: Section D
- Appendixes: 2, 6, 11, 12 & 13
- Case study

Required Completion Date:  
 19 June 2018

### Rural Financial Services

Full Name: Emily Coleman  
 Specialization: Rural Finance Specialist  
 Division/Department: PMD/APR  
 Location: Cambodia  
 Reports to (name and title): Peter Situ, Mission Leader

- (a) Review PADEE project component 1 – Improved Access to Financial Services
- (b) Review the sustainability of the IGRF
- (c) Contribute to mission AM
- (d) Propose ratings and justifications on sections under responsibility, in line with appendix 3 matrix and its score descriptors.
- (e) Any additional tasks as requested by the ML.

Expected Outputs:

- Contribution to Draft Aide memoire

Required Completion Date:  
 19 June 2018

## F. MISSION PROGRAMME

Tue, 05 Jun	2:00 PM: Mission assemble at IFAD office
Wed, 06 Jun	8:00 – 12:00: Kick off at MAFF PSU (mission introduction and Review M&E data available at MAFF PSU) 2:00 – 03:00 PM: Meeting with SNV for data collection and reporting 3:30 – 5:00 PM: Meeting with iDE for data collection and reporting
Thu, 07 Jun	Kandal Province: 1. Vegetable VC cluster: Svay Proteal village, Saang district 2. Collection point: Saang Phnom 3. IGRF: Tanu village, Saang District 4. Nutrition: Saang Phnom

	8:00 – 12:00 AM: Field visit (1 site) 2:00 – 5:00 PM: Field visit (1 site) 5:00: Travel to Svay Rieng Province
Fri, 08 Jun	Svay Rieng Province: <ol style="list-style-type: none"> <li>1. Vegetable package for export to super markets in Phnom Penh and Casino in Bavet City by Svay Rieng Agro-Product Cooperative (SAC)</li> <li>2. IGRF: Trapang Thlork Village, Potireach Commune, Svay Chrum District (include MFI, MFA)</li> <li>3. Chicken raising and hatching demonstration: Ang Sala village, Chambak Commune, Svay Chrum District</li> <li>4. Cricket raising: Angkouch village, Doung Commune, Remeas Hek district</li> </ol> 8:00 – 12:00 AM: Field visit (1 site) 2:00 – 5:00 PM: Field visit (1 site) 5:00: Travel to Prey Veng Province
Sat 09 Jun	Prey Veng Province: <ol style="list-style-type: none"> <li>1. Mushroom: Kraing Svay village, Preah Sdach district</li> <li>2. CLC: Romchek village, Preah Sdach district</li> <li>3. Handicraft: Prey Khnesh village, Mesang district</li> <li>4. Vegetable: Kouk Kong Lech village, Kanchreach district</li> <li>5. AC: Cheukach village (include MFI and MFA)</li> </ol> 8:00 – 12:00 AM: Field visit (1 site) 2:00 – 5:00 PM: Field visit (1 site)
Sun 10 Jun	8:00 – 5:00 PM: National Stakeholder Workshop, at Prey Veng province
Mon 11 Jun	8:00 – 5:00 PM: National Stakeholder Workshop, at Prey Veng province 5:00: Travel back to Phnom Penh
Tue – Thu 14 Jun	Internal meeting, writing, and individual specific mission member meeting / visit
Fri 15	AM: Deliver draft AM PM: Pre-Wrap-up meeting
Tue 19 June	PM: Wrap up meeting

## Appendix 2: List of person met and mission's programme

### LIST OF PERSON MET

No.	Name	Gender	Title	Organization/Province	Telephone
01	Pen Vuth	Male	MAFF Advisor and Project Manager	MAFF/PSU	012835151
02	Seng Tuy	Male	MAFF Deputy Director / Deputy Project Manager	MAFF/PSU	011959280
03	Mao Narith	Male	M&E Advisor	MAFF/PSU/PADEE	092518866
04	Say Prumny	Male	Officer	MAFF/PSU/PADEE	
05	Kheng Thavy	Female	Finance Officer	MAFF/PSU/PADEE	
06	Hak Chanthavy	Female	Staff	MAFF/PSU/PADEE	
07	Phol Somaly	Female	Administration Officer	MAFF/PSU/PADEE	017795522
08	Chhieu Naroth	Female	M&E Officer	MAFF/PSU/PADEE	
09	Kong Kea	Male	Senior Officer	GDA/MAFF	017959727
10	Prak Cheatho	Male	Deputy Director-General / Project Manager	TSSD/GDA	
11	Kaeut Kitineath	Male	Officer	GDA	070919111
12	The Chhunhak	Male	Deputy Secretary-General	MoWA	012988841
13	Preap Phalla	Female	Officer	MoWA	
14	Sam Sophanna	Female	Deputy Director	MOC	012545269
15	Chhim Sopeak	Male	Chief of Unit	MOC	012259997
16	Roth Panna	Female	PDoWA Officer	Takeo	010555607
17	Nhep Sorn	Male	PDAFF Director	Takeo	012255041
18	Ngon Kim-eng	Female	Commune Extension Worker	Takeo	095615158
19	Tit Kim	Female	IGRF Treasurer	Takeo	089761052
20	Lach Khly	Male	Provincial Manager	PADEE, Takeo	0962811683
21	Nou Somaly	Female	Commune Extension Worker	Takeo	0717101229
22	Meas Sreymom	Female	Commune Extension Worker	Takeo	012300128
23	Mey Sahn	Male	Commune Councilor	Takeo	012850024
24	Doeuk Da	Female	Farmer	Takeo	0888145403
25	Duk Chenda	Female	Farmer	Takeo	015548748
26	Nut Choy	Male	IGRF Leader	Takeo	078241449
27	Chhoeng Mom	Female	Farmer	Takeo	0719747061
28	Khav Aun	Female	Commune Councilor	Takeo	089908769
29	Uch Sorn	Male	Farmer	Takeo	0972836720
30	Soar Sam	Male	Technical Officer	Takeo	012713638
31	Part Saroeun	Male	Community Learning Center Member	Takeo	010705566 / 092440992
32	Phum Khoeun	Male	Farmer	Takeo	012813824
33	Prum Chharn	Male	Farmer	Takeo	077933400
34	Chav Noeng	Male	M&E Advisor	Takeo	012449501
35	Un Oeun	Male	Farmer	Takeo	092286093
36	Kae	Male	Farmer	Kandal	015370960

	Chhiengmeng				
37	Ly Kimsan	Male	Farmer	Kandal	012383715
38	San Sunly	Male	Net House Promoter	Kandal	077543755
39	Hor Sophal	Male	PDAFF Deputy Director	Kandal	012954253
40	Duong Kimchhean	Male	M&E Advisor	Kandal	098224555
41	Laing Haingleng	Male	Extension Worker	Kandal	012365623
42	Chum Mongsreng	Male	Farmer	Kandal	0121795349
43	Moeng Soknthy	Male	Advisor	Kandal	012664685
44	Puok Sreysuor	Female	Commune Extension Worker	Svay Rieng	0976185227
45	Paong Saman	Male	Commune Extension Worker	Svay Rieng	0719719611
46	Hul Thy	Male	IGRF Treasurer	Svay Rieng	097444209
47	Nuon Hoeun	Male	Commune Council Chief	Svay Rieng	0974848188
48	Chet Sary	Female	Commune Council Chief	Svay Rieng	0977503599
49	Chap Phalla	Male	Buyer	Svay Rieng	0979348591
50	Ros Samon	Male	Farmer and Agro-Input Seller	Svay Rieng	0975091026
51	Kong Savorn	Male	Farmer	Svay Rieng	0979990081
52	Nay Thol	Male	Farmer	Svay Rieng	0978814729
53	Loek Por	Male	Farmer	Svay Rieng	0978902171
54	Chan Sok	Female	Buyer	Svay Rieng	0718850300
55	Nov Saret	Male	Head of CLC	Svay Rieng	0974649703
56	Mao Sitha	Female	IGRF Chair	Svay Rieng	015259076
57	Pha Sroy	Male	M&E Advisor	Svay Rieng	077915567
58	Thach Ratana	Male	Director	PDAFF, Svay Rieng	011443013
59	Mey Sophay	Male	Buyer	Svay Rieng	0974906240
60	Mey Sat	Female	Farmer	Svay Rieng	
61	Mitt Phalla	Female	Farmer	Svay Rieng	0716060492
62	Oum Dara	Male	PDAFF M&E Officer	Svay Rieng	011950990
63	Eun Sophoan	Male	PDAFF Admin Officer	Svay Rieng	092326662
64	Ouk Chantha	Male	PPCA	Svay Rieng	012838586
65	So Leakhena	Female	Finance Officer	Svay Rieng	
66	Chhim Saotheaney	Female	PDoWA Gender Officer	Svay Rieng	
67	Kong Samai	Male	PDoWA Officer	Kampot	093886626
68	Sok Kunthea	Female	Commune Extension Worker	Kampot	0978247247
69	Saor Sreytouch	Female	Commune Extension Worker	Kampot	0968924097
70	Nuon Keo	Female	Community Representative	Kampot	0714992725
71	Ses Sarorn	Male	IGRF Representative	Kampot	0976757928
72	Keo Leakhena	Female	Chicken Value Chain Cluster's Member	Kampot	0978139543
73	Khem Pinna	Male	Commune Extension	Kampot	0976584421

			Worker		
74	Khem Touch	Male	Bamboo Supplier	Kampot	0975250216
75	Chhouk Mom	Female	Chicken Buyer	Kampot	0883227102
76	Sim Tol	Female	Bamboo Fish Trap Buyer	Kampot	0712790137
77	Noeun Voeun	Female	Handicraft Value Chain Cluster's Member	Kampot	0965737042
78	Saeb Nak	Male	Supplier of Animal Medicines and Feeds	Kampot	0973534490
79	Lay Hoansothea	Female	Value Chain Cluster Officer	Kampot	010769668
80	Oeng Sarun	Female	Vegetables Producer	Kampot	015562634
81	Dy Sona	Female	Technical Officer	Kampot	098449415
82	Sam Sovanna	Male	Provincial Project Manager	Kampot	017842403
83	Nop Sophary	Female	M&E Advisor	Kampot	012442806
84	Kan Rithy	Male	PDAPP Director	Kampot	017803007
85	Em Mee	Male	Farmer Trainer	Kampot	011446140
86	Phaen Phoeun	Male	Commune Councilor	Kampot	017399501
87	Hiev Kong	Male	Facilitation Advisor	Kampot	012225045
88	Nhaem Chhut	Male	Head of Community Learning Center	Prey Veng	015852234
89	Lay Siep	Male	Commune Council Chief	Prey Veng	0976876640
90	Nhoy Sarat	Male	Commune Councilor	Prey Veng	087948809
91	Vong Phay	Male	IGRF Leader	Prey Veng	081521704
92	Chhun Sovannareth	Male	Unit Chief	Prey Veng	012786635
93	Ty Sophat	Male	Buyer	Prey Veng	
94	Chham Sienghorn	Male	Commune Extension Worker	Prey Veng	0976525949
95	Srien Sreu	Male	Vegetables Value Chain Cluster's Member	Prey Veng	0712097333
96	Chea Rithy	Male	Commune Extension Worker	Prey Veng	087367766
97	Khun Kimlun	Female	Unit Chief	Prey Veng	010444945
98	Chea Sakarn	Female	Farmer	Prey Veng	0966056431
99	Bun Samnang	Male	Buyer	Prey Veng	0967438535
100	Chep Chan	Female	Farmer	Prey Veng	015521550
101	Sok Makara	Male	M&E Officer	Prey Veng	
102	Sam Sereyvathana	Male	M&E Officer	Prey Veng	012764911
103	Chhim Sambath	Male	Technical Officer	Prey Veng	017605187
104	Tep Sareth	Male	M&E Officer	Prey Veng	092258251
105	Oeun Liv	Male	Chicken Buyer	Prey Veng	0962317271
106	Yoy Thy	Female	Farmer	Prey Veng	0975921110
107	Mut Chanthorn	Female	Animal Feed Supplier	Prey Veng	012452056
108	Bon Chhom	Male	Finance Officer	Prey Veng	0888896996
109	Ren Pisey	Male	Buyer	Prey Veng	

110	Keo Sarom	Male	Community Leader	Prey Veng	
111	Mae Vanmoyly	Female	Finance Officer	Prey Veng	011971197
112	Moan Kob	Male	Collector Representative	Prey Veng	017256999
113	Var Samnang	N/A	N/A	N/A	N/A
114	Sry Lyhieng	Male	Mobile Financial Agent	PCG	092222453
115	Heng Sela	Male	Mobile Financial Agent	PCG	099222678
116	Huot Long	Male	Branch Manager	Lors Thmey	092717275
117	Suon Vichet	Male	Unit Manager	Alba	012938800
118	Toch Varany	Female	Admin and Finance Assistant	SACRED Organization	092732872
119	Ke Samoeun	Male	Advisor	SNV	099999290



## Appendix 3: PCR rating matrix

<b>PROJECT NAME: Project for Agricultural Development and Economic Empowerment (PADEE)</b>	
<b>PROJECT ID: 1100001559</b> (Grant No. I-DSF-8101-KH) (Loan No. I-870-KH) (Additional loan financing No. 2000001394)	
<b>BOARD APPROVAL DATE: 03 April 2012</b>	
<b>ENTRY INTO FORCE: 08 June 2012</b>	
<b>PROJECT COMPLETION DATE: 30 June 2018</b>	
<b>LOAN CLOSING DATE: 31 December 2018</b>	
<b>IFAD LOAN AND GRANT: SDR13,400,000 in loan, SDR 11,300,000 in grant</b>	
<b>TOTAL PROJECT FINANCING: USD 43.244 million</b>	
<b>IMPLEMENTING AGENCY: Ministry of Agriculture, Forestry and Fisheries</b>	
<b>Criterion</b>	<b>PCR Rating</b>
<b>Project Performance</b>	
– Relevance	5
– Effectiveness	5
– Efficiency	5
– Sustainability	4
<b>Rural poverty impact</b>	
– Households' incomes and assets	5
– Human and social capital and empowerment	5
– Food security	4
– Agricultural productivity	5
– Institutions and policies	5
– Overall rural poverty impact	5
<b>Additional evaluation criteria</b>	
– Gender equity and women's empowerment	5
– Access to markets	4
– Innovation	5
– Potential for scaling up	4
– Environment and natural resource management	4
– Adaptation to climate change	4
– Targeting and outreach	5
<b>Partners performance</b>	
– IFAD's performance	5
– Government performance	5
<b>Overall project achievement:</b>	<b>5</b>

## PCR SCORES DESCRIPTORS

### Project Performance

**Relevance** *is rated satisfactory (5), as* PADEE design and implementation were highly relevant in providing support to the country policies and strategies, aligned itself with IFAD strategic framework and consistent with previous and current COSOPs. The project further confirmed its relevance in achieving implementation of investing in capitalization of the rural poor in financial, physical, human and social assets. While the project revolving fund model faces some challenge of institutional sustainability at completion, the IGRFs did grow and contributed to financial capitalization of the fund recipients. The proposed project activities could therefore be considered as appropriate mostly as they intervened either directly or triggered immediate actions and changes among the target groups at household level.

**Effectiveness** *is rated moderately satisfactory (4), as* PADEE achieved in applying an effective and poor-focused targeting in reaching mainly the target poor households. The project has directly served 88,986 households (99% of its original target and 130% of its target revised at MTR36). More than half of these household are represented by women. Outputs were mostly achieved under component 1. Overall, PADEE made significant achievements in setting up and operationalizing the IGRFs which almost all remain operational and performed well by project completion. IGRF membership increased steadily with strong female participation. However, despite the growth, the IGRFs' likelihood of sustainability should be further revisited. Mixed physical achievement of outputs was observed under component 2. Output targets were met under Support to innovation in Capacity building, but under-achieved under applied training and capacity building, and Small rural business due to the

demand driven request from beneficiaries. Links were observables between outputs and outcomes achieved, leading to some positive impacts on rural poverty reduction.

**Efficiency** *is rated satisfactory (5).* As overall disbursement rate achieved at 89.9%, with IFAD loan disbursement rate at 93% IFAD grant at 94%, IFAD additional financing at 67%, Government contributions at 95% and beneficiary contributions at 19% as of 30 April 2018. PADEE is expected to achieve about 95% of its financial target once the eligible expenditures under process are consolidated. The project was able to demonstrate good cost efficiency, with management component cost maintained at 17% (USD6.95/USD41.498). The unit cost per beneficiary household is USD 466 and the unit cost per beneficiaries USD 93, which are low. The overall satisfactory progress rates in financial and physical terms, leading to achieving the expected outcomes and impacts would be the best indication of the project management's efficiency. The project management was responsive to the changes of implementation environment, capable to request, plan and budget necessary resources to meet with the emerging needs, for example incorporating S-RET into PADEE implementation and applying additional financing for scaling up the good practices of innovative potential. Recommendations made by missions of supervision and implementation support were generally well followed up. Project management tools were introduced and applied. Most of these tools were effective. And the PCR EIRR is calculated at 22.7%.

**Sustainability** *is rated moderately satisfactory (4).* Sustainability was achieved in views of institutional sustainability in particular to the core beneficiary IGRFs, social sustainability, technical and economic sustainability, environmental sustainability and the project exist strategy. The roadmap for the integration of PADEE activities mainly IGRFs, value chain clusters and S-RET into ASPIRE was developed for the continuity of results and it would need to be carefully accompanied by a series of support actions based on the IGRF

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<sup>36</sup> The target at MTR was reduced from 90,000 to 68,200 HHs due to i) the high realization of GRF under Rural Poverty Reduction Project (RPRP) at design and the exclusion of bio-digester beneficiaries.

maturity and beneficiary needs. While PADEE's IGRFs will continue under ASPIRE, there is regulatory bottleneck for its genuine development of institutional sustainability. The revolving fund itself owned by the group members has the tendency of becoming a constraint for further expansion due to the members' reluctance of sharing the financial assets obtained.

### **Rural poverty impact**

**Household's income and assets** *is rated satisfactory* (5). PADEE directly and indirectly contributed to increasing assets for 49,200 households who were members of the IGRFs. Following the conditional cash transfers, it was made compulsory for each member to hold at least one share within the group. This can be considered as an increase in household assets compared to before the project. The PCR mission observed that emergency loans available to members in need at the discretion of the IGRFs seemed to be effectively used to ensure that members in difficulty could presumably avoid the alternative of selling their existing assets or sacrificing their income gains under the project.

**Human and social capital and empowerment** *is rated satisfactory* (5) with regards to capacity building, knowledge generation, positive changes in farming practices, diversified income sources and employment opportunities created for targeted rural poor households. Capacity building through grassroots agents and empowerment was applied as the cornerstones of the project approach to targeting. The project has enabled direct beneficiaries and external people to join different community-based groups such as IGRFs and CIGs and to participate in project activities. Empowerment of the targeted households, especially IGRFs, was remarkable. Members appreciated the equality in participation and decision making among men and women at the groups and the households' level. Many IGRF groups showed self-esteem, solidarity in the groups and communities as well as a high level of ownership, enthusiasm and commitment to continue the group revolving funds with an

interest to graduate to agricultural cooperatives.

**Food security** *is rated moderately satisfactory* (4), with regards to reverse results in food consumption value due to the unrealistic targets and assumptions set at design, i) good result the key project indicator on chronic malnutrition (from 28% to 12.6%) with all three types of malnutrition among children of PADEE HHs measured were lower compared to non-target HHs, and ii) project's goal aimed at helping the beneficiary households to attain food security and nutrition for their families through a social marketing approach and to improve nutrition under the partnership between MoWA's Department of Women and Health and Ministry of Health (MoH) instituted. A strategy and a roadmap for continued implementation of the nutrition activities were developed. Networks between CWCFFPs and M2MNs and the emerging collaboration between MoWA's and MOH will strengthen and sustain the nutrition initiatives.

**Agricultural productivity** *is rated satisfactory* (5). IGRF loans likely contributed to improved agricultural productivity. PADEE did not track if access to finance in component 1 directly translated into improved production. However, the IGRFs are required to track loan by purpose. Most loans were tied to specific agricultural value chains as follows: chicken, ducks, fish, pig, cow, rice, maize, peanuts, mung bean, soy bean, chilli, eggplant, other vegetables, fruit trees. Members received business plan support from PADEE for their on-farm investments and IGRF leadership jointly decided on eligibility

**Institutions and policies** *is rated satisfactory* (5). PADEE created strong member-owned financial organizations. Apart from the creation of new IGRFs, these institutions were strengthened with strong technical support during the project. FAO reported that over 84 percent of IGRFs' fund growth reached the set target of the project, and the rest also showed positive trends at project completion. PADEE also experimented different modalities of grassroots-level extension services that have positively influenced the MAFF consideration

in its institutional support system, reflected in more focused investments in ASPIRE.

**Overall rural poverty impact** *is rated moderately satisfactory (5)* with quantified outreach targets met, increased household productive assets and income recorded, agricultural productivity increased and supported by diversified and more responsive extension support at field level, and food and nutrition security improved.

#### **Additional evaluation criteria**

**Gender equity and women's empowerment** *is rated satisfactory (5)*. PADEE made a significant contribution in promoting gender equality and women empowerment. The unique features of gender achievements in PADEE were: i) the project's comprehensive gender mainstreaming approach supported at all levels from national to local gender agent with the linkage to the national gender strategic plan, ii) an inclusive gender targeting and high participation of women (64% of total IGRF and at least 50% overall), and iii) integrated income generation approach and outstanding results both from farm and non-land based activities.

**Market access** *is rated moderately satisfactory (4)*. Market access for farmers was arranged by the project through two interventions: (i) collection points/centers, and (ii) value chain clusters. Farmers, served by the FBAs, especially those who have access to the collection centers, had good linkage with markets for their produce, to a large extent. Their connection with the markets was mainly through the collection centers. However, not all of the farming households that worked directly with the project had such a linkage. It is estimated that roughly 2,184 farmers used the collection points to sell their vegetables produce. An iDE's record of 273 famers who had link to the markets showed that each generated an average profit of USD 1,445.0 per season from his/her sales.

**Innovation** *is rated satisfactory (5)*. A number of innovations were introduced in the context of the project's target provinces. Certain of them were successful, while others were still

at their early stage of trials, but promising. The innovations will be replicated and scaled up by the Government through, specifically ASPIRE, and possibly AIMS that have been financed by IFAD.

**Potential for scaling up** *is rating satisfactory (5)* as knowledge generated and good practices from the PADEE implementation have captured strong interest of the government and some have been replicated or adapted in the design of ASPIRE and AIMS. Scaling-Up of Renewable Energy Technologies (S-RET) was embedded under the PADEE framework and has been transferred to ASPIRE to continue the intervention in both PADEE and ASPIRE provinces.

**Environment and natural resource management** *is rated satisfactory (5)*. There is no evidence found on adverse environmental impacts and project interventions lead to a more climate resilient sector. Training was provided in sustainable natural resource management, especially in technologies related to water harvest, micro irrigation, and soil fertility testing for improved productivity. Informed and reduced use of chemical fertilizers and pesticide were promoted; the mission's field observations confirmed the trend of increased and improved awareness of the target groups on approaches and techniques related to environment protection and resource conservation.

**Adaptation to climate change** *is rated satisfactory (5)*. The project has been supporting the rural households to diversify their income generating activities, especially on-farm production. Activities implemented under PADEE focused on the establishing climate-smart coping farming system and sustainable livestock enhanced quality production, adoption of improved technologies and improved market access. The PADEE is supported by the S-RET that works on supporting proposals for renewable energy technologies and their applications with potential benefits for smallholder agriculture that can enhance biodiversity, increase yields and soil fertility as well as contribute to reducing greenhouse gas (GHG) emissions.

**Targeting and outreach** *is rated satisfactory (5)* in views of: i) the alignment with IFAD's targeting in reaching out the intended targets of rural poor who experienced in food insecurity, but have potential to take advantage of improved access to assets and opportunities for agricultural production and rural income generating activities, ii) the PADEE's targeting approach based on geographical targeting and participatory wealth ranking exercises, and ii) the high quantitative target achievement of direct beneficiaries recorded reaching a total of 88,986 households which exceed the revised targeted at MTR.

### **Partners performance**

**IFAD's performance** *is rated satisfactory (5)* in view of its consistent and committed support. In line with its COSOP 2007-2012, IFAD responded promptly to the request of the government to prepare this loan and grant-financing project. Later on, IFAD was proactive in bringing in GEF-financed S-RET to support PADEE in response to climate change challenge and needs for sustainable renewable energies in the project area, and additional financing of USD 2.9 million to help scale up PADEE's good practices of innovative potential. The Guidance from Head Quarters (HQ), regarding financial management and fiduciary aspects was very adequate and useful. IFAD was flexible and responsive to the evolving implementation context and provided implementation support in combination with technical staff from HQ participating in the annual supervision missions, and consistent technical guidance from its country team led by the ICO in Phnom Penh. Actions and follow-ups on withdrawal applications were mostly within reasonable time limit. The PADEE witnessed the change of IFAD CPM in the country during its implementation and IFAD guidance and support to PADEE remained consistent. Need for growing support in PADEE's value chain development was identified since the implementation of component 2 started and effective TA by SNV came on board in 2016 only. If the design did not anticipate such growing need, implementation support could

have been organized to timely accompany the beneficiaries' efforts in this regard.

**Government performance** *is satisfactory (5)*, as strong government commitment was maintained during the entire period of implementation. The Ministry of Economy and Finance (MEF) as IFAD's window ministry on behalf of the Government, provided overall inter-agency coordination, processed withdrawal applications, approved procurement plans and other necessary financial documents. MEF was also in charge of ensuring timely sufficient government matching funds. MAFF as implementing agency hosting the PSU, lived up with the majority of the financing covenants and followed up on most of the recommendations of supervision missions. The assigned staffs were mostly stable and performing, either at full-time or part-time basis. And institutional support to PADEE at operational level was consistent and effective. Maybe the achieved outcome and impacts targets are the best indication of the government performance, accompanied by the satisfactory progress rates in both financial and physical terms.

**Overall project achievement** *is rated as satisfactory (5).*



## Appendix 4: PADEE logical framework

### Progress and Target against the Project Logical Framework

Narrative Summary	Key Performance Indicators (KPIs)	Progress
<b>Project Goal</b>		
Improved livelihoods for poor rural people in the target of Kampot, Kandal, Prey Veng, SvayRieng and Takeo Provinces	1. Value of Households assets owned by participating households (49,200HHs) increased in average by 25% [RIMS indicator].: 951USD	1363\$ (143%)
	2. Decrease in prevalence of malnutrition in children under five which are part of the HHs benefitting from the project baseline <sup>37</sup> to 10% [RIMS indicator].	12% (80%)
	3. Average annual per capita food consumption by targeted households increased by 25% <sup>38</sup> : 374	265 (71%)
<b>Project Objectives</b>		
Improved agricultural productivity and diversification of income sources for rural households living in poverty in the five provinces	Around 68,200 households directly benefiting from project activities by PY6 <sup>39</sup> (RIMS indicator)	88,986 (130%)
	Average wet season paddy yield of targeted households increased by 15% from baseline (or average of 2.2t/ha to average of 2.5t/ha) (RIMS indicator) : 2.3 t/ha	2.2 (95%)
	Average dry season paddy yield of targeted households increased by 15% from baseline (or average of 3.2t/ha to average of 3.7t/ha) (RIMS indicator) : 4.6t/ha	4.3 (93%)
	Average labour productivity of target households increases by 15% from an average of USD 4.5 per labour day across project beneficiaries <sup>40</sup> : 7.94 USD	USD 8.28 (104%)
<b>Component 1. Improved Access to Financial Services Outcomes<sup>41</sup></b>		
<b>Objective:</b> Targeted households improve financial literacy and increase level of investment and/or savings	Outcome 1: 984 IGRFs established by PY4 and functional by PY 6 [PDA], as indicated by the volume of savings and loan transactions and loan losses below 5% of loans outstanding as recorded through MBWIN and the records on MFA visits. (RIMS indicator)	981(99%)
	Outcome 2: By the end of PY 6, all IGRF groups have completed financial literacy training and have complied with at least two thirds of the conditions set for each transfer.	984 (100%)
	Outcome 3: IGRF groups paid at least 95% of the amount due within 30 days of due date to the external service provider (MFAs).	981(99%)
	Outcome 4: 785 IGRFs increase the size of their initial fund by 30% after three years	650 (82%)
<b>Outputs</b>		

<sup>37</sup> Results from the 2010 RIMS survey for RPRP, the prevalence of chronic malnutrition in children under five of 30% have been used as complimentary to baseline survey of 18%.

<sup>38</sup> Food consumption is to be expressed in real terms. The Cambodia Socio-Economic Survey (2009) indicates that rural households on average spend USD 27 monthly (USD 324 annually) on food and non-alcoholic beverages.

<sup>39</sup> Target drop down from 90,000 at MTR as initial target to support existing group under PRPR was unrealistically high and the recent survey of these groups indicate a target of around 3,000 households from about 125 GRF group is more realistic. This includes 49,000 IGRF members; RPRP existing group member 3,000; outstanding farmer of iDE 6,000; additional household supported by MoWA 700; Small Rural Business Development 1500; and demonstration on crop diversify 8,000.

<sup>40</sup> Labour productivity is measured as return to total labour in USD terms.

<sup>41</sup> Indicators elaborated to avoid confusion of interpretation and redefined where necessary to fit with adjusted approach to IGRF development and sustainability. Additional indicators added for client satisfaction and complaints/feedback mechanism for MFA services to IGRFs as this is critical to future sustainability.

Narrative Summary	Key Performance Indicators (KPIs)	Progress
	Output 1: Contract with specialist service provider for accounting, record keeping and reporting finalized successfully [FAO].	984 (100%)
	Output 2: Contract with specialist service provider for capacity building in financial literacy finalized successfully [FAO].	984 (100%)
	Output 3: 49,200 beneficiaries registered as members of an IGRF and trained in financial literacy by PY4 (of which at least 50% are women) [MAFF-PSU].	49,200 (100%)
	Output 4: All IGRFs have female committee members, and women account for at least 25% of elected committees [PDA]. : 1,722	3,196 (185%)
<b>Component 2. Improved Access to Technology and Markets</b>		
<b>Outcomes</b>		
<b>Objective:</b> Targeted households use improved production technologies, establish market linkages, and diversify income sources	70% of trained farmers still adopt <sup>42</sup> recommended technology two years after project intervention: 70	95 (135%)
	10% of IGRF members engaged in new or scaled-up non-land based income generating activities by PY5. : 4,920	5,080 (103%)
	34 small rural business matching grants approved and implemented efficiently by PY6.	34 (100%)
	Land and non-land based training packages developed (minimum 10 and 4 respectively), updated and endorsed by MAFF and MOWA by PY2	5 (100%)
	Around 200 Farmer Business Advisors providing extension services and supply of farm inputs to approximately 20,000 beneficiaries in a sustainable way by the end of the project period.: 200	368 (184%)
	The aggregate value of sales of each of the four priority VC products increases by 20% (in real terms) by IGRF members in the VC cluster areas within 3 years of starting VC activities in that cluster.	35% (175%)
	20% of IGRF benefit from e-PADEE intervention : 9,840	1,649 (17%)
<b>Outputs</b>		
	490 CEWs trained and working by PY4, of which 50% are women	492 (101%)
	49,000 beneficiaries trained in first and second year packages by PY5	49,200 (101%)
	6,000 outstanding farmers trained in first and second year packages by PY5	8,280 (138%)
	3,800 beneficiaries trained in non-land based income generating activities, of which at least 70% are women by PY5	3,870 (102%)
	400 improved seed variety demonstrations conducted by PY5	400 (100%)
	400 crop diversification demonstrations conducted by PY5	400 (100%)
	Low costs early childhood nutrition promotion systems to be developed and tested in each province in 2015 and then reviewed/refined before wider roll-out to all districts from 2016.	100%

<sup>42</sup> adoption defined as " at least half of the main changes/components of the technology covered in the training are applied"



Narrative Summary	Key Performance Indicators (KPIs)	Progress
<b>Component 3. Project Coordination and Management</b>		
<b>Outputs</b>		
<b>Objective:</b> Efficient management and coordination by MAFF and all other implementing agencies to support satisfactory project implementation	MAFF PSU working effectively to coordinate national and sub-national project implementation	100%
	Capable project manager appointed through transparent and competitive process	100%
	All M&E and gender activities implemented in a timely and efficient way by project implementing institutions	100%
	Project implementing institutions complete the hiring of external specialist services in a timely and effective manner as required for project execution	100%



## Appendix 5: Dates of supervision mission and follow-up missions

No.	Type of the mission	Dates for the Mission	Team	Position
1	Project Start Up workshop	19-20 July 2012	Mr. Khalid El Harizi	CPM
			Mr. Shankar Achuthan Kutty	Senior Procurement Officer
			Mr. Meng Sakphouseh	CPO
			Mr. Claudio Mainella	IFAD Finance Officer
2	Supervision Mission	15 - 27 September 2013	Mr. Khalid El Harizi	CPM
			Mr. Nuno Santos	Mission Leader
			Mr. Claudio Mainella	Financial Specialist
			Mr. Nigel Smith	Project Implementation Specialist
			Ms. Yoshiko Ishihara	Targeting and Gender specialist
			Mr. Benjamin O'Brien	Extension Specialist
			Ms. Blanca Amado	Project Economist and Monitoring and Evaluation Specialist
			Mr. Meng Sakphouseh	Procurement Specialist
3	Implementation Support Mission	21 - 28 October 2014	Mr. Benjamin O'Brien	Mission Leader
			Mr. Meng Sakphouseh	M&E Specialist
4	Supervision Mission	28 April - 9 May 2014	Mr. Khalid El Harizi	CPM
			Mr. Benjamin O'Brien	Mission Leader
			Mr. Julian Abrams	Implementation Specialist
			Mr. Amar Mishra	Financial Management and Procurement Specialist
			Mr. Karan Sehgal	Renewable Energy Technology Specialist
			Mr. Meng Sakphouseh	CPO
			Mr. Yvonne Diethelm	M&E Specialist
5	Mid Term Review Mission	15 March - 5 April 2015	Mr. Benoit Thierry	Mission Leader
			Mr. Nigel Smith	Team Leader
			Mr. Brett Ballard	Agricultural and Rural Development Specialist
			Mr. Michael Marx	Senior Credit and Rural Finance Officer
			Mr. Claudio Mainella	Financial Officer
			Mr. Shankar Kutty	Procurement Specialist
			Mr. Meng Sakphouseh	Country Programme Officer
			Ms. Yvonne, Diethelm	M&E Specialist
6	Implementation Support Mission	14 - 22 October 2015	Mr. Benoit Thierry	CPM
			Mr. Meng Sakphouseh	Mission Leader
			Mr. Nigel Smith	Value Chain and Institutional Support Specialist
			Mr. Srey Chanty	Planning & M&E Specialist
7	Supervision	05 - 17	Mr. Benoit Thierry	Mission Leader

	Mission	June 2016	Mr. Nigel Smith	Team Leader
			Mr. Tawfiq El Zabri	M&E Specialist
			Mr. Phan Duy Toan	Procurement Specialist
			Ms. Nguyen Thu Hoai	Financial Management Specialist
			Mr. Hans Van Zoggel	Management Specialist
			Mr. Meng Sakphouseth	Rural Finance Specialist
8	Implementation Support Mission	26 Feb - 10 March 2017	Mr. Meng Sakphouseth	Team Leader
			Mr. Emmanuel Jouve	Agronomist
			Mr. Amar Raj Mishra	Financial Specialist
9	Supervision Mission	06 – 18 July 2017	Mr. Peter Situ	Team Leader
			Ms. Yangyuentham Wanaporn	M&E and Social Specialist
			Mr. Srey Chanthay	Agronomist/Economist
			Mr. Bashu Aryal	Management Specialist
			Mr. Amar Raj Mishra	Finance / Procurement Specialist
			Mr. Dara Rat Moni Ung	Agronomist
			Mr. Karan Sehgal	Renewable Energy specialist

## Appendix 6: Summary of amendments to the financing agreement

Approval Date of Amendment	Approved changes in the loan clauses
21 July 2015	<p>Reallocation for both loan and grant.</p> <ul style="list-style-type: none"> <li>- Loan 870: Equipment, group conditional transfer scheme, operating costs and allowances, and activities implemented by PIPs. No change to loan clauses.</li> <li>- DSF grant 8101: Technical assistance, consultancy services and training, operating costs and allowances, and activities implemented by PIPs.</li> </ul>
29 June 2016	<p>Additional financing.</p> <ul style="list-style-type: none"> <li>- Additional loan of SDR 2,100,000.0.</li> <li>- Inclusion on the 'cover page' "Loan No. I-870-KH and Loan 2000001394, Grant No. I-DSF-8101-KH".</li> <li>- Amendments to A, Section A paragraph 3, Section B paragraph 1, Section B paragraph 7, Schedule 1 (for Sub-component 1.3, Sub-component 2.2, Sub-component 2.3, Sub-component 3.2), and Schedule 2 (as Schedule 2bis).</li> </ul>
29 March 2017	<p>Amendment to the Letter to the Borrower/Recipient to include provisions associated to S-RET, IFAD/GEF funded project. The amendment related to instructions to the financial management of S-RET resources: disbursement procedures, designated account and project accounts, statement of expenditures, start-up costs, procurement, and financial reporting and auditing.</p>

## Reallocation of 21 July 2015

LOAN 870						
Category	Original Allocation	Disbursed	%	Available Balance	Revision (+/-)	Revised Allocation
ADVANCE OF FUNDS	0.00	1 916 214.42	0.00	-1 916 214.42		
ADVANCE OF FUNDS FAO CONTRACT	0.00	85 897.49	0.00	-85 897.49		
ADVANCE OF FUNDS IDE CONTRACT	0.00	66 286.03	0.00	-66 286.03		
ADVANCE OF FUNDS SNV CONTRACT	0.00	89 160.37	0.00	-89 160.37		
I. EQUIPMENT	150 000	84 187.07	56.00	65 812.93	-65 000	85 000
IV. GROUP CONDITIONAL TRANSFER SCHEME	6 890 000	2 556 385.53	37.10	4 333 614.47	1 260 000	8 150 000
V. OPERATING COSTS AND ALLOWANCES	1 520 000	541 536.29	36.00	978 463.71	-945 000	575 000
VI. RURAL BUSINESS STIMULUS FACILITY	140 000	0.00	0.00	140 000.00	-140 000	0
VII. ACTIVITIES IMPLEMENTED BY PIPS	1 470 000	731 362.57	50.00	738 637.43	1 020 000	2 490 000
UNALLOCATED	800 000	0.00	0.00	800 000.00	-800 000	0
UNALLOCATED-SOFT COMMITMENT FOR CAT. VII - PIPS	330 000	0.00	0.00	330 000.00	-330 000	0
<b>TOTAL</b>	<b>11 300 000</b>	<b>6 071 029.77</b>	<b>53.73</b>	<b>5 228 970.23</b>	<b>0</b>	<b>11 300 000</b>
DSF GRANT 8101						
Category	Original Allocation	Disbursed	%	Available Balance	Revision (+/-)	Revised Allocation
ADVANCE OF FUNDS	0.00	2 087 182.62	0.00	-2 087 182.62		
ADVANCE OF FUNDS FAO CONTRACT	0.00	109 324.74	0.00	-109 324.74		
ADVANCE OF FUNDS IDE CONTRACT	0.00	84 366.01	0.00	-84 366.01		
ADVANCE OF FUNDS SNV CONTRACT	0.00	111 503.83	0.00	-111 503.83		
II. TECHNICAL ASSISTANCE	1 760 000	1 290 795.27	73.00	469 204.73	-30 000	1 730 000
III. CONSULTANCY SERVICES AND TRAINING	5 310 000	3 856 343.46	73.00	1 453 656.54	1 365 000	6 675 000
V. OPERATING COSTS AND ALLOWANCES	1 250 000	438 652.04	35.00	811 347.96	-400 000	850 000
VII. ACTIVITIES IMPLEMENTED BY PIPS	1 850 000	932 660.55	50.00	917 339.45	195 000	2 045 000
UNALLOCATED	800 000	0.00	0.00	800 000.00	-800 000	0
UNALLOCATED-SOFT COMMITMENT FOR CAT. V - PIPS	330 000	0.00	0.00	330 000.00	-330 000	0
<b>TOTAL</b>	<b>11 300 000</b>	<b>8 910 828.52</b>	<b>78.86</b>	<b>2 389 171.48</b>	<b>0</b>	<b>11 300 000</b>

## Appendix 7: Actual PADEE costs

**Table 7a: Financial performance by financier, as of 30 April 2018**

Financier	Original Allocation		Actual expenditure	
	Amount	%	Amount	%
IFAD Loan	17,500	37.9%	16,351	93.4% <sup>43</sup>
IFAD Grant	17,500	37.9%	16,524	94.4% <sup>44</sup>
IFAD Additional Loan	2,900	6.2%	1,937	66.9%
RGC	4,690	10.2%	4,449	94.8%
FAO	313	0.7%	306	97.7%
SNV	668	1.4%	668	100%
iDE	378	0.9%	848	224%
Beneficiaries	2,193	4.8%	413	18.9%
<b>Total</b>	<b>46,142</b>	<b>100%</b>	<b>41,498</b>	<b>89.9%</b>

**Table 7b: Financial performance by component by financier, as of 30 April 2018**

Components	IFAD Loan	IFAD Grant	IFAD Top-up	Government	Beneficiaries	FAO	SNV	iDE	Total	Appraisal targets	% Achieved
1.Improved Access to Financial Service	11,658,723	1,659,531	45,555	737	-	306,651	-	-	13,671,196	15,757,000	0.87
2. Improved Access to Technology and Markets	3,517,572	11,411,310	1,062,616	2,760,802	412,420	-	668,510	847,994	20,681,225	24,603,000	0.84
3. Project Coordination and Management	1,174,722	3,452,982	829,552	1,688,443	-	-	-	-	7,145,699	5,784,500	1.24
<b>Total</b>	<b>16,351,016</b>	<b>16,523,823</b>	<b>1,937,724</b>	<b>4,449,982</b>	<b>412,420</b>	<b>306,651</b>	<b>668,510</b>	<b>847,994</b>	<b>41,498,121</b>	<b>46,144,500</b>	<b>0.90</b>

<sup>43</sup> In SDR the grant is 99.9% disbursed

<sup>44</sup> In SDR the loan is 99.2% disbursed

**Table 7c: Expenditures by Cost Categories – All  
Financiers (in '000 USD)**

No	Categories	2012	2013	2014	2015	2016	2017	2018	Total	Appraisal Estimates	% Achieved
1	Cat I. Equipment	-	162	266	92	-	-	-	523	968	54%
2	Cat II. Technical Assistance	5	710	1 006	893	267	-	-	2 883	2 981	97%
3	Cat III. Consultancy Services and Training	99	2 283	3 248	2 485	1 407	1 182	378	11 086	11 441	97%
4	Cat IV. Group Conditional Transfer Scheme	-	923	3 052	3 892	2 982	830	-	11 682	10 670	109%
5	Cat V. Operating Costs and Allowances	82	648	906	1 047	972	701	81	4 440	5 463	81%
6	Cat VI. Rural Business Stimulus Facility	-	-	57	2	546	916	90	1 612	916	176%
7	Cat VII. Activities Implemented by PIPS	-	1 910	1 715	1 645	1 667	965	-	7 904	9 173	86%
8	Cat VIII. Vehicles and Motorcycles		875	282	206	-	-	-	1 364	1 026	133%
	Unallocated								-	3 500	
		<b>188</b>	<b>7 516</b>	<b>10 537</b>	<b>10 265</b>	<b>7 844</b>	<b>4 595</b>	<b>550</b>	<b>41 498</b>	<b>46 140</b>	<b>90%</b>



**Table 7d: Project Expenditure by financier by year (in '000 USD)**

Financier	2012	2013	2014	2015	2016	2017	2018	Total	Appraisal Estimates	% achieved
IFAD Grant	136	3 697	5 387	4 523	2 642	136		<b>16 523</b>	500 <sup>17</sup>	94%
IFAD Loan	386	1 606	4 224	4 962	3 845	1 655	17	<b>16 351</b>	500 <sup>17</sup>	93%
IFAD Add Loan					136	1 399	401	<b>937<sup>1</sup></b>	900 <sup>2</sup>	67%
RGC	13	1 128	655	509	878	1 133	131	<b>449<sup>4</sup></b>	690 <sup>4</sup>	95%
FAO		206	100					<b>306</b>	313	98%
SNV		606	62					<b>668</b>	668	100%
iDE		270	107	184	181	103		<b>847</b>	378	224%
Ben			-	85	159	168		<b>412</b>	193 <sup>2</sup>	19%
<b>Total</b>	<b>188</b>	<b>7 516</b>	<b>10 537</b>	<b>10 265</b>	<b>7 844</b>	<b>4 595</b>	<b>550</b>	<b>41 498</b>	<b>140<sup>46</sup></b>	<b>90%</b>

**Tables 7e I – IV: Detailed expenditures by financier component wise (in '000 USD)**

**I.IFAD Loan (I-870-KH)**

No	Components	2012	2013	2014	2015	2016	2017	2018	Total	Appraisal Estimates	% achieved
1	1.Improved Access to Financial Service	-	900	3 052	3 892	2 982	830	-	11 658	12 725	92%
2	2. Improved Access to Technology and Markets	32	540	921	737	685	601	-	3 517	3 397	104%
3	3. Project Coordination and Management	6	166	250	332	177	223	17	1 174	1 378	85%
	<b>Total</b>	<b>38</b>	<b>1 606</b>	<b>4 224</b>	<b>4 962</b>	<b>3 845</b>	<b>1 655</b>	<b>17</b>	<b>16 351</b>	<b>17 500</b>	<b>93%</b>

## II.IFAD Grant (I-8101-KH)

No	Components	2012	2013	2014	2015	2016	2017	2018	Total	Appraisal Estimates	% achieved
1	1.Improved Access to Financial Service	-	22	579	824	233	-	-	1 659	2 461	67%
2	2. Improved Access to Technology and Markets	114	2 922	3 885	2 768	1 640	80	-	11 411	13 080	87%
3	3. Project Coordination and Management	22	752	922	931	768	56	-	3 452	1 957	176%
									-		
	<b>Total</b>	<b>136</b>	<b>3 697</b>	<b>5 387</b>	<b>4 523</b>	<b>2 642</b>	<b>136</b>	<b>-</b>	<b>16 523</b>	<b>17 500</b>	<b>94%</b>

## III.IFAD Loan Top Up (2000001394)

Sr No	Components	2012	2013	2014	2015	2016	2017	2018	Total	Appraisal Estimates	% achieved
1	1.Improved Access to Financial Service	-	-	-	-	-	24	21	45	-	
2	2. Improved Access to Technology and Markets	-	-	-	-	133	854	74	1 062	1 250	85%
3	3. Project Coordination and Management	-	-	-	-	3	521	305	829	1 650	50%
									-		
	<b>Total</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>136</b>	<b>1 399</b>	<b>401</b>	<b>1 937</b>	<b>2 900</b>	<b>67%</b>

## IV.RGCCF

No	Components	2012	2013	2014	2015	2016	2017	2018	Total	Appraisal Estimates	% achieved
1	1.Improved Access to Financial Service	-	-	-	-	-	-	-	-	257	0%
2	2. Improved Access to Technology and Markets	9	954	327	325	435	642	66	2 760	3 634	76%
3	3. Project Coordination and Management	3	173	328	184	442	490	65	1 688	798	211%
									-		
	<b>Total</b>	<b>13</b>	<b>1 128</b>	<b>655</b>	<b>509</b>	<b>878</b>	<b>1 133</b>	<b>131</b>	<b>4 449</b>	<b>4 690</b>	<b>95%</b>

## V. Other financiers

No	Components	2012	2013	2014	2015	2016	2017	2018	Total	Appraisal Estimates	% achieved
1	FAO - Component 1	-	206	100	-	-	-	-	306	313	98%
2	Beneficiaries - Component 1 & 2	-	-	-	85	159	168	-	412	2 193	19%
3	SNV - Component 2	-	606	62	-	-	-	-	668	668	100%
4	iDE - Component 2	-	270	107	184	181	103	-	847	378	224%
	<b>Total</b>	<b>-</b>	<b>1 083</b>	<b>269</b>	<b>269</b>	<b>340</b>	<b>271</b>	<b>-</b>	<b>2 235</b>	<b>3 554</b>	<b>63%</b>

## Tables 7f – I: Detailed expenditures by financier category wise

### I. IFAD Loan (I-870-KH)

No	Categories	2012	2013	2014	2015	2016	2017	2018	Total	Appraisal Estimates	% achieved
1	Cat I. Equipment	-	49	79	1	-	-	-	130	232	56%
2	Cat II. Technical Assistance	-	-	-	-	-	-	-	-	-	-
3	Cate III. Consultancy Services and Training	-	-	-	-	-	-	-	-	-	-
4	Cate IV. Group Conditional Transfer Scheme	-	900	3 052	3 892	2 982	830	-	11 658	10 670	109%
5	Cate V. Operating Costs and Allowances	38	292	398	460	282	223	17	1 714	2 353	73%
6	Cate VI. Rural Business Stimulus Facility		-	-	2	-	-	-	2	216	1%
7	Cate VII. Activities Implemented by PIPS		363	693	605	580	601	-	2 844	2 276	125%
8	Cate VIII. Vehicles and Motorcycles		-	-	-	-	-	-	-	-	-
	Unallocated		-	-	-	-	-	-	-	1 750	-
		<b>38</b>	<b>1 606</b>	<b>4 224</b>	<b>4 962</b>	<b>3 845</b>	<b>1 655</b>	<b>17</b>	<b>16 351</b>	<b>17 500</b>	<b>93%</b>



## Appendix 8: Physical progress table

Physical progress measured against AWPB and appraisal targets

Project Activities	IAs	Unit	Appraisal target	Cumulative actual (2012-2017)	% (cumulative)
<b>Component 1: Improved Access to Financial Services</b>					<b>68%</b>
<b>Sub-component 1.1: GCCT Scheme</b>					<b>79%</b>
<b>A. Conditional Capital Transfers to IGRFs</b>	<b>PDA</b>				<b>100%</b>
<b>1. First year GCCT</b>	<b>PDA</b>	<b>group</b>	<b>984</b>	<b>984</b>	<b>100%</b>
Group form in 2015	PSU	group			na
<b>2. Second year GCCT</b>	<b>PDA</b>	<b>group</b>	<b>984</b>	<b>984</b>	<b>100%</b>
Group form in Feb 14	PSU	group			na
Group form in June 14	PSU	group			na
Group form in 2015	PSU	group			na
<b>3. Third year GCCT</b>	<b>PDA</b>	<b>group</b>	<b>984</b>	<b>984</b>	<b>100%</b>
Group form in Aug 13	PSU	group			na
Group form in Feb 14	PSU	group			na
Group form in June 14	PSU	group			na
Group form in 2015	PSU	group			na
<b>2. Formalization of the group</b>	<b>PDA</b>	<b>LS</b>			<b>na</b>
<b>3. Support the provincial network</b>	<b>PDA</b>	<b>LS</b>			<b>na</b>
<b>B.1 Specialist Service Provider</b>	<b>PSU</b>				<b>100%</b>
Additional funds training - service provider staff	PSU	LS	2	0	na
CB of HHs, group leadership and CEWs	PSU	LS	-	0	na
Value of contract with service provider	PSU	class	4069	4,069	100%
Taxation of Value of contract with SP	PSU	time	0	1	na
Follow up IGRFs and MFA	PSU	time	0	7	na
Semester meeting IGRFs	PSU	time	0	1	na
Orientation Internal Rule/Group Statute to CEDAC	PSU	time	0	1	na
<b>B.2 Specialist SP for IGRF and selected GRF accounts</b>	<b>FAO</b>			-	<b>56%</b>
<b>1. Technical support on rural finance (FAO)</b>	<b>FAO</b>			-	<b>11%</b>
FAO administration costs	FAO	LS	76,53	35	45%
International procurement advisor	FAO	per-mon		8	na
National rural finance coordinator	FAO	per-mon		53	na
Travel costs of national coordinator and consultant	FAO	per-mon		531	na

<b>2. Selection and CB of SPs (FAO)</b>	<b>FAO</b>			<b>-</b>	<b>na</b>
a. International TA for selection and support of SSP (ongoing activities )	FAO	person-month		18	na
b. Refresher training/training of MFAs	FAO	# training		16	na
c. Mater Trainer on Mbwin to LFAs by inter. expert	FAO	# training		2	na
d. Master Trainers train to LFAs	FAO	# training		4	na
e. Online Training tool for Local Field Agents		# tool			
<b>3. Installing and maintaining a central IT system</b>	<b>FAO</b>			<b>-</b>	<b>na</b>
Computers, central servers and hardware	FAO	LS		1	na
3rd party software-servers & client access licenses	FAO	LS		1	na
Laptop and printer	FAO	unit		30	na
Software licenses (FAO-Mbin license) per agent	FAO	unit		30	na
Software licenses (FAO-Mbin) fixed costs	FAO	LS		3	na
MBWin software maintenance cost and internet	FAO	LS		3,001	na
Training in Bangkok for whole training	FAO	LS		1	na
<b>4. Service Provider Operating Costs</b>	<b>FAO</b>	<b>LS</b>	<b>11,554,0</b>	<b>11,554</b>	<b>100%</b>
<b>5. IGRF group audit</b>	<b>FAO</b>	<b>group</b>		<b>212</b>	<b>na</b>
<b>6. Control quality of CEDAC trainers - to IGRFs</b>	<b>FAO</b>	<b>group</b>		<b>36</b>	<b>na</b>
<b>C. Support to savings by IGRF members</b>	<b>FAO</b>			<b>-</b>	<b>na</b>
1. Transfers to savings account	FAO	person	49200	-	na
<b>D. Studies (FAO)</b>	<b>FAO</b>			<b>-</b>	<b>60%</b>
1. International TA for study preparation	FAO	LS	21	22	103%
2. Review of rural access to finance	FAO	LS	95	32	34%
3. Survey of existing GRFs	FAO	LS	1	1	100%
4. Study on interactions between savings led finance groups and IGRFs	FAO	LS	100	4	4%
5. Study impact of MFI growth on poverty	FAO	LS	NATS	1	na
<b>1. External Accounting System</b>				<b>776</b>	<b>na</b>
<b>a. Cost of the MFA for the 1st CCT</b>				<b>-</b>	<b>na</b>
212 Group formed in Dec 15 (Jan-Nov 16)	FAO	Visit		2,120	na
Introductory visit for 212 group	FAO	Visit		212	na
<b>b. Cost of the MFA for the 2nd CCT</b>				<b>-</b>	<b>na</b>
134 Group formed in Feb 14 ( Jan-Feb 16)	FAO	Visit		268	na
373 Group formed in June 14 (Jan-June 16)	FAO	Visit		2,238	na
40 Group formed in Sep 14 ( Jan-Sept 16)	FAO	Visit		360	na
212 Group form in 2015 (Dec 16-Oct 17)	FAO	Visit		212	na

<b>c. Cost of the MFA for the 3rd CCT</b>				-	<b>na</b>
225 Group formed in Aug 13 (Jan-Aug 16)	FAO	Visit		1.800	na
134 Group formed in Feb 14	FAO	Visit		1.340	na
373 Group formed in June 14	FAO	Visit		2.238	na
40 Group formed in Sep 14	FAO	Visit		120	na
212 Group form in 2015 (Nov-Dec 17)	FAO	Visit		-	na
<b>2. Selection and CB of SPs (FAO)</b>				-	<b>na</b>
International TA for selection and support of SSP	FAO	per-mon		23	na
International TA for customization of reports	FAO	per-mon		11	na
Refresher training/training of MFAs	FAO	training		3	na
Mbwin package training for Database Administrator	FAO	person		1	na
Mater Trainer on Mbwin to LFAs by inter. expert	FAO	# training		-	na
Master Trainers train to LFAs	FAO	# training		-	na
Online Training tool for Local Field Agents	FAO	# tool		1	na
<b>3.Support the functioning-IGRF&amp;MFA services</b>				-	<b>na</b>
Printing vouchers of cash in for IGRF	FAO	book		2.000	na
Printing loan application and contract	FAO	book		500	na
Produce zinc box for new IGRFs included tranportation	FAO	group		212	na
<b>Sub-com 1.2: CB in FL and linkages with MFI</b>	<b>FAO</b>			-	<b>57%</b>
<b>A. FAO TCP</b>	<b>FAO</b>			-	<b>57%</b>
<b>1. International TA</b>	<b>FAO</b>			-	<b>100%</b>
Preparation of TORs and selection of training provider	FAO	LS	1	1	100%
Backstopping for training materials development	FAO	LS	1	1	100%
Travel costs	FAO	LS	1	-	na
<b>2. National rural finance coordinator</b>	<b>FAO</b>			-	<b>81%</b>
Fee	FAO	per-mon	24	14	59%
Travel costs	FAO	LS	120	110	92%
Computer	FAO	unit	2	2	100%
Other expenditures	FAO	LS	2	1	75%
<b>3. Curriculum development</b>	<b>FAO</b>			-	<b>141%</b>
Identification existing training materials	FAO	LS	1	1	100%
Development training materials for beneficiaries	FAO	LS	1	1	100%
Development methodology and materials for beneficiary exams/ assessment	FAO	LS	11	12	105%
Field testing and evaluation training materials	FAO	LS	1	2	200%
Development training materials for trainers/MFA	FAO	LS	1	1	100%
Finalization training materials	FAO	LS	1	1	100%

Reproduction training materials for beneficiaries	FAO	LS	1	3	285%
<b>4. Training of trainers (SP staff)</b>	<b>FAO</b>	<b>LS</b>	<b>55,42</b>	<b>4</b>	<b>7%</b>
<b>5. TCP support costs</b>	<b>FAO</b>	<b>LS</b>	<b>43,526</b>	<b>6</b>	<b>13%</b>
				<b>-</b>	<b>0%</b>
<b>1. IGRF sustainability including improved recording, merge, saving, and AC</b>					
Workshop-FAO, MFAs&PDAs staff on development options	FAO	WS		1	na
TOT package for development options of IGRFs, NTA	FAO	per-day		-	na
Training of CEWs&PDA staff on development options	FAO	course		8	na
	FAO			-	na
CEW facilitation of commune discussions on IGRF development		commune			
<b>2. Promote savings products for MFIs to IGRFs group</b>				<b>-</b>	<b>na</b>
Printing saving promotions materials	FAO	# sheet		50.000	na
Promote saving products of MFIs to all IGRF groups	FAO	# group		984	na
	FAO			-	na
Quarterly lucky draw to encourage members to save with MFIs		# person			
<b>3.Dev. of IGRF self-assessment tools</b>				<b>-</b>	<b>na</b>
	FAO			-	na
a. Training to CEWs and PDAs staff about self-assessment tools		course			
<b>4.Client Satisfaction Survey</b>				<b>-</b>	<b>na</b>
a. Annual client satisfaction survey by phone	FAO	# time		1	na
System log of complaints on MFA's services	FAO	# month		12	na
<b>5.Backstop CEDAC Trainers</b>				<b>-</b>	<b>na</b>
a. Control quality of trainers delivered to IGRFs	FAO	trainer		36	na
	FAO			5	na
Refresh PDAs Officers on key points to support group's committee & Self-assessment tools		# training			
<b>6. IGRF linking with Bank for 50 groups in TAK and KAM</b>	<b>FAO</b>			<b>-</b>	<b>na</b>
a. ITA for bank linkages	FAO	per-day		-	na
b. District roundtable discussions	FAO	meeting		-	na
c. Legal services to draft MoUs with Bank	FAO	agreement		-	na
	FAO			-	na
d. Training of groups on the linkage operations trained by linkage facilitator		course			
g. Salary of linkage facilitator	FAO	Month		-	na
<b>7.First time Audit of IGRF</b>	<b>FAO</b>			<b>625</b>	<b>na</b>
a. Re-audit of group failed for the first time	FAO	group			
<b>8. Various Study</b>	<b>FAO</b>			<b>-</b>	<b>na</b>
Project completion report	FAO	study		1	na
Tax (VAT, WHT, etc)	FAO	study		-	na



<b>9. Overall technical support on rural finance</b>	<b>FAO</b>			<b>-</b>	<b>na</b>
a. FAO administration costs (13% of delivery)	FAO	LS		1	na
b. International TAs (including the travel)	FAO	per-day		137	na
c. Rural Finance Coordinator, Op. Support staff	FAO	per-mon		58	na
d. Travel cost (Rural Finance, and Driver+gasoline )	FAO	per-day		437	na
e. MBWine Software maintenance cost	FAO	per-day		56	na
f. MBWine Software maintenance cost	FAO	year		2	na
g. Internet and office supply	FAO	Month		21	na
h. Office equipment for linkages coordinator	FAO	LS		-	na
<b>Sub-component 1.3. Support to existing GRFs</b>	<b>FAO</b>			<b>-</b>	<b>na</b>
a. GRF visits through consultant, screening process, mergers etc.	FAO	per-day		-	na
<b>Com 2: Improved Access to Technology and Markets</b>	<b>PSU</b>			<b>-</b>	<b>64%</b>
<b>Sub-component 2.1: Support to innovation in CB</b>	<b>GDA</b>			<b>-</b>	<b>74%</b>
<b>A. Support to innovation in 'LB' CB</b>	<b>GDA</b>			<b>-</b>	<b>57%</b>
<b>1. Development of LB CB packages</b>	<b>GDA</b>			<b>-</b>	<b>82%</b>
Development of training modules	GDA	module	10	15	150%
Dev. of training modules - carry over	GDA	module		-	na
Validation WS for training modules	GDA	workshop	10	4	40%
Study and documents for best practices	GDA	study		-	na
Development of FFS standard	GDA	standard		-	na
Selection and CB for outstanding farmers	GDA	course		5	na
Indicative budget for publication of training materials	GDA	set		-	na
Curriculum development WS for ToT (4+5 packages of basic training developed)	GDA	workshop	0	2	na
Publish new package and extension books	GDA	set	0	40.000	na
Handbook (5 packages - 5000 books/ package)	GDA	set	0	30.000	na
Leaflet for farmers (13 topics)	GDA	set	0	25.000	na
Agricultural extension methodology	GDA	book	0	4.000	na
Communication and facilitation skills	GDA	book	0	4.000	na
Climate change adaptation in agriculture	GDA	set	0	4.000	na
Training leadership to MST	GDA	course	0	3	na
Updating of training modules	GDA	unit	16	-	0%
Training and updating of Master Trainers	GDA	TOT	6	6	100%
Training of Mobile Support Teams	GDA	course	6	6	100%
Mid-season technical reflection forum with all MST	GDA	forum		1	na
Refresher training for MST	GDA	group	12	12	100%

<b>2. Support to LB research and demos</b>	<b>GDA</b>			<b>-</b>	<b>31%</b>
Multilocation trials (CARDI)	CARDI	demo	60	-	0%
Materials and supply	CARDI	demo	0	10	na
Trial management	CARDI	demo	0	10	na
Farmer field day	CARDI	field day	0	1	na
M&E	CARDI	trip	0	3	na
Improved seed variety demos (CARDI)	CARDI	demo	400	250	63%
Materials and supply	CARDI	demo	0	250	na
Trial management	CARDI	demo	0	250	na
Farmer field day	CARDI	field day	0	8	na
M&E	CARDI	trip	0	18	na
Diversification demonstrations (GDA)	GDA	demo	0	235	na
Training and demos on crop diversification				-	na
Orientation				-	na
M&E ongoing FFS & interest group training	GDA	day	0	335	na
<b>3. Support to rice seed production</b>	<b>CARDI</b>			<b>-</b>	<b>59%</b>
<b>a. Working capital for seed production</b>	<b>CARDI</b>			<b>-</b>	<b>59%</b>
Certified seed	CARDI	LS	20	21	103%
Foundation seed	CARDI	LS	10	1	14%
<b>b. Seed for use in base package demos</b>	<b>CARDI</b>			<b>-</b>	<b>18%</b>
Commercial seed (GDA)	CARDI	ton	280	80	29%
Foundation/certified seed (CARDI)	GDA	kilo	8300	600	7%
Certified seed	GDA	kilo	0	3.200	na
Good seed	GDA	kilo	0	47.200	na
<b>c. Seed cleaning equipment</b>	<b>GDA</b>	<b>unit</b>	<b>4</b>	<b>4</b>	<b>100%</b>
Flat bed dryer	GDA	unit	0	4	na
<b>d. Establishment of seed producer association</b>	<b>GDA</b>	<b>Ass</b>		<b>-</b>	<b>na</b>
4. Innovation plan organic farm clinic	<b>PSU</b>			<b>-</b>	<b>na</b>
Producer and buyer link to market (CB/WS)	PSU	time	0	-	na
Improve awareness on safty food product	PSU	time	0	1	na
Support to farmer community learning center	PSU	time	0	4	na
<b>B. Knowledge management and dissemination</b>	<b>GDA</b>			<b>-</b>	<b>90%</b>
<b>1. Extension workshops ('Land' and 'NLB')</b>	<b>GDA</b>			<b>-</b>	<b>90%</b>
Annual national extension workshops	GDA	LS	5	4	80%
Leaflet for successful stories	GDA	set		-	
Selection of participants for CEW	GDA	LS	0	209	na

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Monitoring and technical back stopping	GDA	trip		54	
Extension working groups	GDA	unit	208	208	100%
Refresher training for CEW	GDA	course	0	24	na
Quarterly reflection meeting with MST	GDA	meeting		12	
M&E of CEWs	GDA	LS	0	52	na
Extension activities training/workshop	GDA	course		-	na
Technical video produciton 5 topics	GDA	set		3	na
Stakeholder WS on agricultural extension	GDA	ws		1	na
Basic technical training for CEWs (5 packages)	GDA	course		13	na
<b>2. Information and communication</b>	<b>PSU</b>			-	<b>na</b>
Mobile show to inspire farmer	PSU	village	NATS	-	na
Training proof farmer material	PSU	village	NATS	-	na
<b>Sub-component 2.1: Support to innovation in CB</b>	<b>SNV</b>			-	<b>69%</b>
<b>A. Support to innovation in 'LB' capacity building</b>	<b>SNV</b>			-	<b>83%</b>
<b>1. Technical assistance and coordinatio</b>	<b>SNV</b>			-	
International consultancy for CB and extension	SNV	per-mon	22	10	45%
National consultancy for CB and extension	SNV	per-mon	46	31	66%
Publications and learning materials	SNV	unit	18	25	139%
<b>B. Support to innovation in 'NLB' CB</b>	<b>SNV</b>			-	<b>49%</b>
<b>1. Technical assistance and coordination</b>	<b>SNV</b>			-	<b>49%</b>
Inter. consultancy for CB on 'NLB' activities of all activities related to LB and NLB components	SNV	LS	22	15	66%
National consultancy for CB/support to MoWA of NLB activities	SNV	LS	46	15	32%
<b>2. Development of 'NLB' CB packages</b>	<b>ISU</b>			-	<b>na</b>
Study on new opportunity for NLB activities	ISU	time	0	2	na
WS with stakeholders to present the finding and CB to DoWA on NLB	ISU	time		0	na
National WS on improved market&business	ISU	time		-	na
Development for existing NLB	ISU			-	na
Development of training materials	ISU	unit	na	250	na
Publishing the manual on development process of SME	ISU	book	na	200	NA
Publishing the manual on NLB activities	ISU	book	na	-	NA
Updating of training modules	ISU	unit	na	-	NA
Non-land base support				-	NA
<b>a. Implementation support from MOWA on NLB intervention</b>				-	<b>na</b>

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Orientation WS on NLB at national	ISU	meeting		-	na
Technical Support (Outsource)	ISU	LS		-	na
Field Visit ( DSA &Transportation)	ISU	per-day		170	na
<b>b. NLB intevention 20% IRR, 20,000HH, IGRF</b>	<b>ISU</b>	<b>CIG</b>		-	<b>na</b>
Nutrition support				-	na
Self sustain social marketing support to child nutrition and HH water sanitation support	ISU	meeting		-	na
03-day national WS on nutrition to discuss approach and capacity building	ISU	meeting		2	na
Orientation WS on nutrition with piloted DoWAs and CWCFFPs at provincial levels	ISU			-	na
Follow up (reflection) meetings on nutrition (2 times)	ISU			-	na
Field visits (DSA &Transportation)	ISU	per-day		220	na
Nutrition impact survey with control group	ISU			-	na
<b>C. Knowledge management and dissemination</b>	<b>SNV</b>			-	<b>76%</b>
<b>1. Extension WSs ('Land' and 'NLB')</b>	<b>SNV</b>			-	<b>na</b>
Initial national extension workshop	SNV	unit	1	-	na
<b>2. Studies and surveys (SNV)</b>	<b>SNV</b>			-	<b>95%</b>
Methodology design	SNV	LS	1	0	10%
Qualitative review of Applied training approach	SNV	LS	2	1	70%
Surveys of Applied training beneficiaries	SNV	LS	4	8	205%
Training needs assessment	SNV	LS	1	0	10%
Extra budget line: Logistical support for field visits, monitoring and assessments	SNV	month		8	na
<b>E. Taxes payment(VAT, WHT, Tax on Salary,.....etc):</b>					
SNV PADEE administrator-Vathna (Tax on payroll)	SNV	10%			
National assistance to VCD (100%) (MAFF)	SNV	10%			
National assistance to VCD (100% support)	SNV	10%			
National assistance to VCD (100%) (MoWA)	SNV	15%			
Transport/logistics-Vehicle rental(WHT)	SNV	15%			
International senior assistance to VCD (Bernard)	SNV	10%			
Inter. senior assistance to VCD School fee (Ber.)	SNV	20%			
National assistance M&E (consultant)	SNV	15%			
National assistance data collection and analysis	SNV	15%			
<b>3. Other support to CB innovations</b>	<b>SNV</b>			-	<b>57%</b>
Grants for innovation in CB	SNV	LS	4	2	46%
Internship program	SNV	person	20	13	67%

<b>Sub-com 2.2: Applied training &amp; CB</b>	<b>PDA</b>			<b>-</b>	<b>68%</b>
<b>1.Overall coordination Support</b>				<b>-</b>	<b>na</b>
Team leader strategic	SNV	Month		2	na
Team leader operational/project management, quality control, donor relationship, identifying relevant partnerships (20%)	SNV	Month		1	na
SNV PADEE administrator	SNV	Month		16	na
<b>2. Facilitation and support F2F learning</b>				<b>-</b>	<b>na</b>
Technical Assistance	SNV	LS		-	na
TA to Knowledge Development	SNV			-	na
International assistance to Knowledge Development (F2F exchange methods) (10%)	SNV			1	na
National assistance to Knowledge Development (F2F exchange methods) (50%)	SNV			1	na
Transport/logistics	SNV			9	na
<b>3. Nutrition support</b>	<b>SNV</b>			<b>-</b>	<b>na</b>
Technical Assistance	SNV	LS		-	na
International assistance to Nutrition (20%)	SNV	Month		2	na
National assistance to Nutrition	SNV	Month		5	na
Transport/logistics	SNV	LS		13	na
<b>A. Group formation and orientation meetings (5 PA/PDAs)</b>	<b>PDA</b>			<b>-</b>	<b>88%</b>
Orientation meetings for district staff	PDA	district	0	32	na
Orientation meetings for establishing IGRFs	PDA	group	984	984	100%
Group maturity (RPRP)	PDA	group	500	381	76%
Financial Literacy	PDA			-	na
Basic financial literacy	PDA	class	0	1.864	na
Support existing group (RPRP)	PDA	class		-	NA
Advance financial literacy	PDA	class	0	2.128	NA
Refresher course on group statute	PDA	group	0	772	NA
TOT course training on group statute	PDA	course		6	NA
Initial training on group status - new group	PDA			244	na
Follow up IGRFs by district staff and CEWs	PDA			822	na
Support IGRF network at province (board meeting)	PDA			5	na

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Support IGRF network (member meeting)	PDA			-	na
Contingency plan for disaster (50% of total groups)	PDA	group	0	35	na
<b>B. Applied training and capacity building</b>	<b>PDA</b>			<b>-</b>	<b>32%</b>
<b>1. CB of beneficiaries on on-farm topics</b>	<b>PDA</b>			<b>-</b>	<b>42%</b>
Basic training package	PDA	group	1968	1.170	59%
Basic training package (carry over)	PDA		0	84	na
Plus One training package	PDA	group	1968	15	1%
Demos-iDE by FBA (veg, corn, rice)	PDA	demos	0	253	na
Demos-iDE by CA (veg, corn, rice)	PDA	demos	0	323	na
Establishment FBA	PDA	person	0	1.130	na
Establishment CA	PDA	person	0	25	na
FBA training	PDA		0	3.637	na
FBA clients	PDA		0	3.524	na
RA (Research Agronomist)	PDA		0	65	na
Farmer Training	PDA		0	2.716	na
Year Two Interest Group Package	PDA	group	1968	4	na
CIG-1st training	PDA		0	487	na
CIG-1st training carry over 2014	PDA		0	434	na
CIG-2nd training	PDA		0	318	na
Exposure visits	PDA	village	984	710	72%
Farmer awards	PDA	village	984	333	34%
Support drum seeder to IGRFs	PDA	group	0	96	na
Support farmer commune learning center	PDA	center	0	2	na
Refresher training on farm business plan	PDA	group	-	760	na
Pilot on linking group production to market	PDA		0	-	na
Mapping analysis producer and buyer	PDA	meeting	0	6	na
Form and capacity building producers	PDA	district	0	-	na
Interaction and discussion between producer and buyer	PDA	district	0	2	na
<b>2. CB of interest groups on 'NLB' activities</b>	<b>PDoWA</b>			<b>-</b>	<b>22%</b>
CB of 'NLB' activity interest groups	PDoWA	group	329	74	22%
NLB group formation	PDoWA	group	-	102	na
Refresher of NLB activity interest group	PDoWA	group	0	-	na
Workshop and meetings	PDoWA	unit	-	46	na
Orientation WS off farm (2 days at province)	PDoWA	workshop	-	7	na
Orientation meeting with CCFPs, DFPs & interest group (1 day/commune)	PDoWA	group	-	107	na
Training on market development to existing NLB group	PDoWA	course		2	na

<b>3. CB for gender mainstreaming and nutrition</b>	<b>PDoWA</b>			<b>-</b>	<b>na</b>
Training on gender concept and analysis at provincial level	PDoWA	course	0,0	3	na
TOT nutrition training, report format to PDoWA and DoWA at national level	PDoWA	course	0,0	6	na
Nutrition training with demos, reporting format to CEW and CWCFFP	PDoWA	course	0,0	4	na
Nutrition training with demos to IGRF	PDoWA	group	0,0	290	na
Nutrition kits for new district	PDoWA	set	0,0	4	na
Training on extension and monitoring tools to CCFPs	PDoWA	course	0	5	na
Gender mainstreaming to district staff at province	PDoWA	course	0	5	NA
Gender mainstreaming to CCFPs, CEWs at district	PDoWA	district	0	26	NA
Gender mainstreaming to IGRFs member at village	PDoWA	district	0	32	NA
Outside province study tour	PDoWA	time	0	5	NA
Meeting with CCFPs, district, provincial staff	PDoWA	meeting	0	16	na
Gender awareness material	PDoWA	group	0	74	na
<b>C. CB and Implementation Support</b>	<b>PDA</b>			<b>-</b>	<b>74%</b>
<b>1. Equipment</b>	<b>PDA</b>			<b>-</b>	<b>98%</b>
<b>a. Vehicles</b>	<b>PDA</b>			<b>-</b>	<b>95%</b>
Pick-up 4WD	PDA	unit	5	-	0%
Motorcycles	PDA	unit	22	42	191%
<b>b. Office equipment</b>	<b>PDA</b>			<b>-</b>	<b>104%</b>
Computer with UPS	PDA	unit	27	35	130%
Laptop	PDA	unit	10	10	100%
Digital camera	PDA	unit	NA	5	NA
GPS	PDA	unit	NA	4	NA
LCD projector & screen	PDA	unit	NA	5	NA
Phone & internet installation	PDA	unit	NA	4	NA
Photocopier	PDA	unit	NA	5	NA
Printer	PDA	unit	15	13	87%
Other office equipment	PDA	unit	5	5	100%
<b>2. Technical Assistance</b>	<b>PDA</b>			<b>-</b>	<b>23%</b>
Pro. project coordination advisor (PPCA)	PDA	per-mon	360	80	22%
Provincial M&E advisor (PMEA)	PDA	per-mon	320	75	23%
Provincial Project Financial Mgt Coordinator	PDA	per-mon		-	na
<b>3. ToT and capacity building</b>	<b>PDA</b>			<b>-</b>	<b>70%</b>
Specialist technical services on agricultural themes	PDA	time	na	866	NA
CB of provincial project staff on M&E	PDA	LS	20	25	125%

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Annual outcome review to district M&E	PDA	survey	0	48	NA
Training on PRA tools and refresher of TM1 for M&E process to CEW	PDA	course	0	109	NA
PRA implement at village level	PDA	village		607	na
Workshop and meeting	PDA	time	na	147	na
Training of district PDA staff	PDA			-	57%
Dev./adaptation of training materials	PDA	LS	5	-	0%
Training of district staff	PDA	LS	41	47	115%
Training of CEW	PDA			-	96%
Initial & refresher training for commune staff	PDA	person	492	778	158%
MIS training	PDA	person	0	435	na
MIS training to new CEW	PDA	course		6	na
External specialist training costs (TOT business plan)	PDA	commune	738	252	34%
<b>Training of VAHW</b>	<b>PDA</b>			<b>-</b>	<b>40%</b>
Initial training of VAHW	PDA	VAHW	984	389	40%
Refresher training of VAHW	PDA	VAHW	984	392	40%
Kit for VAHW	PDA	VAHW	0	308	na
<b>Study tour outside province</b>	<b>PDA</b>	<b>person</b>	<b>na</b>	<b>203</b>	<b>NA</b>
<b>D. CB &amp; implementation support - PDA (33 districts)</b>	<b>PDA</b>			<b>-</b>	<b>92%</b>
<b>1. Equipment</b>	<b>PDA</b>			<b>-</b>	<b>123%</b>
<b>a. Vehicles</b>	<b>PDA</b>			<b>-</b>	<b>na</b>
Motorcycles	PDA	unit	66	66	100%
<b>b. Office equipment</b>	<b>PDA</b>			<b>-</b>	<b>128%</b>
Computers with UPS	PDA	unit	66	68	103%
Printers	PDA	unit	33	35	106%
Other office equipment	PDA	LS	33	58	176%
<b>2. Technical Assistance</b>	<b>PDA</b>			<b>-</b>	<b>34%</b>
Mobile support team	PDA	per-year	552	187	34%
MST meeting	PDA	person		1.422	na
<b>3. Meetings and workshops</b>	<b>PDA</b>	<b>time</b>	<b>684</b>	<b>816</b>	<b>119%</b>
<b>4. Capacity building for PDA staff</b>	<b>PDA</b>	<b>LS</b>		<b>2</b>	<b>NA</b>
<b>E. CB and implementation support - Commune</b>	<b>PDA</b>			<b>-</b>	<b>79%</b>
<b>1. Equipment</b>	<b>PDA</b>			<b>-</b>	
Motorcycles	PDA	unit	492	492	100%
Equipment	PDA			-	NA
Other equipment	PDA	commune	246	290	118%
<b>2. Meetings and workshops</b>	<b>PDA</b>			<b>-</b>	<b>NA</b>
Meetings and workshops	PDA	commune	738	147	20%



<b>3. Staff cost</b>	<b>PDA</b>			-	
CEW remuneration	PDA	per-mon	na	13,294	NA
<b>G. CB and implementation support - PDoWA</b>	<b>PDoWA</b>			-	<b>60%</b>
<b>1. Equipment</b>	<b>PDoWA</b>			-	
Motorcycles	PDoWA	unit	10	10	100%
Office equipment	PDoWA	unit		-	50%
Laptop	PDoWA	unit	NATS	5	NA
Computers with UPS	PDoWA	unit	10	5	50%
Photocopier	PDoWA	unit	NATS	5	NA
Digital camera	PDoWA	unit	NATS	5	NA
Printers	PDoWA	unit	10	5	50%
Other office equipment	PDoWA	LS	10	5	50%
<b>H. CB and implementation support - District PDoWA (33 districts)</b>	<b>PDoWA</b>			-	<b>49%</b>
<b>1. Equipment</b>	<b>PDoWA</b>			-	<b>49%</b>
Vehicles	PDoWA			-	80%
Motorcycles	PDoWA	district	41,25	33	80%
Office equipment	PDoWA			-	
Computers with UPS	PDoWA	unit	41,25	36	87%
Printers	PDoWA	unit	41,25	-	0%
Other office equipment	PDoWA	unit	41,25	-	0%
<b>1. Land base support</b>				-	<b>na</b>
LB intervention with 20% IRR for 25,000HH, IGRF	PDA	CIG		915	na
Support the FFS (1st follow up for new CIG)	PDA	FFS		822	na
Support the FFS (1st follow up old CIG)	PDA	FFS		1.080	na
Support the FFS (2nd follow up for old CIG)	PDA	FFS		-	na
LB intervention with 20% IRR for 10,000HH, IGRF	PDA	CIG		678	na
Chick hatching	PDA	CIG		66	na
On the job training on cost and benefit analysis for LB intervention and M&E	PDA	CIG		1.749	na
CIG assessment	PDA	CIG			
<b>2. Non land base support</b>	<b>PDA</b>			-	<b>na</b>
NLB intervention with 20% IRR for 20,000HH, IGRF	PDoWA	CIG		-	na
Support NLB CIG (Handicraft and food processing )	PDoWA	CIG		136	na
Support NLB base CIG (Chick hatching)	PDoWA	CIG		15	na
Support NLB CIG (Handicraft and food processing)	PDoWA	CIG		192	na
Support the NLB CIG (Chick hatching)	PDoWA	CIG		-	na
Orientation WS on NLB with DoWA and CWCP	PDoWA	Person		543	na

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Follow up meetings at provincial level	PDoWA	Time	723	na	
Field visit (DSA and trasportation)	PDoWA	Time	370	na	
b.On the job training on cost and benefit analysis for NLB intevention and M&E	PDoWA	CIG	192	na	
4. Inclusion of ID Poor			-	na	
Incentive scheme for inclusion of ID poor of non IGRF in the CIG	PDA	HH	2.324	na	
Continued supporting ID poor	PDA	HH	-	na	
Updated wealth ranking of existing group	PDA	Group	1.004	na	
5. Facilitation and support F2F learning			-	na	
Travel allowance for CCs and CWCFF	PDA	per-mon	2.520	na	
Existing CEW (1/commune from 2016 onward)	PDA	per-mon	3.035	na	
New CEW	PDA	per-mon	1.756	na	
Additional fuel for CEW	PDA	per-mon	1.678	NA	
F2F learning activity including FCLC	PDA	Commune	28	na	
Incentive to CEWs for MIS data entry	PDA	CEW	61	NA	
6. Facilitation and support F2F learning			-	na	
Self sustain social marketing support to child nutrition & HH water sanitation support	PDA	Commune	147	na	
HH water sanitation support (old commune)	PDA				
Orientation WS on Nutrition with DoWA and CWCP	PDA	per day	364	na	
Follow up meetings at provincial level	PDA		257	NA	
Field visit (DSA and trasportation)	PDA		288	NA	
6.Training Meeting and workshop	PDA		-	NA	
General training/meeting/workshop for PDA	PDA	LS	9	NA	
Forum of provincial for ASDP	PDA	LS			
General training/meeting/workshop for PDoWA	PDA	LS	9	NA	
General training/meeting/workshop for PA	PDA	classs	4	NA	
IGRFs Network	PDA	IGRF	-	NA	
IGRFs assessment	PDA	IGRF	984	NA	
Sub-component 2.2: Applied training and CB	iDE		-	49%	
KAMPOT	iDE		-		
F. Support to FBA	iDE		-	50%	
1. Management & support to FBA network	iDE	LS	92	18	20%
1.1. Country director	iDE	per-mon	0	24	na
1.2. Agricultural program director	iDE	per-mon	0	24	na
1.3. National sale manager	iDE	per-mon	0	24	na
1.4. Program assistant	iDE	per-mon	0	24	na

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1.5. M&E coordinator	iDE	per-mon	0	24	na
1.6. Stock controller	iDE	per-mon	0	72	na
1.7. Sales and logistic officer	iDE	per-mon	0	60	na
1.8. FBA field office costs	iDE	month	0	12	na
1.9. Office expense	iDE	month	0	16	na
2. FBA establishment (36 FBA)	iDE	LS	45	45	100%
2.1. FBA recruitment (22 FBAs)	iDE	FBA	0	51	na
2.2. Demos establishment (25 demos)	iDE	demos	0	55	na
2.3. Materials	iDE	LS	0	4	na
3. FBA capacity building (36 FBA)	iDE	LS	187,2	57	30%
3.1. Field sales manager	iDE	per-mon	0	96	na
3.2. Commercial agronomists	iDE	per-mon	0	240	na
3.3. Research agronomist	iDE	per-mon	0	36	na
3.4. FBA training	iDE	training	0	51	na
<b>KANDAL</b>	<b>iDE</b>			-	
<b>F. Support to FBA</b>	<b>iDE</b>			-	<b>35%</b>
1. Management & support to FBA network	iDE	LS	92	14	15%
1.1. Country director	iDE	per-mon	0	24	na
1.2. Agricultural program director	iDE	per-mon	0	24	na
1.3. National sale manager	iDE	per-mon	0	24	na
1.4. Program assistant	iDE	per-mon	0	24	na
1.5. M&E coordinator	iDE	per-mon	0	24	na
1.6. Stock controller	iDE	per-mon	0	72	na
1.7. Sales and logistic officer	iDE	per-mon	0	60	na
1.8. FBA field office costs	iDE	month	0	12	na
1.9. Office expense	iDE	month	0	28	0%
2. FBA establishment (36 FBA)	iDE	LS	38	38	100%
2.1. FBA recruitment (28 FBAs)	iDE	FBA	0	48	na
2.2. Demos establishment (32 demos)	iDE	demos	0	39	na
2.3. Materials	iDE	LS	0	4	na
3. FBA capacity building (36 FBA)	iDE	LS	187,2	44	24%
3.1. Field sales manager	iDE	per-mon	0	108	na
3.2. Commercial agronomists	iDE	per-mon	0	249	na
3.3. Research agronomist	iDE	per-mon	0	97	na
3.4. FBA training	iDE	training	0	42	na
<b>PVG</b>	<b>iDE</b>			-	
<b>F. Support to FBA</b>	<b>iDE</b>			-	<b>53%</b>

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1. Management & support to FBA network	iDE	LS	92	36	39%
1.1. Country director	iDE	per-mon	0	24	na
1.2. Agricultural program director	iDE	per-mon	0	24	na
1.3. National sale manager	iDE	per-mon	0	24	na
1.4. Program assistant	iDE	per-mon	0	24	na
1.5. M&E coordinator	iDE	per-mon	0	24	na
1.6. Stock controller	iDE	per-mon	0	72	na
1.7. Sales and logistic officer	iDE	per-mon	0	60	na
1.8. FBA field office costs	iDE	month	0	12	na
1.9. Office expense	iDE	month	0	24	na
2. FBA establishment (51 FBA)	iDE	LS	60	60	100%
2.1. FBA recruitment (30 FBAs)	iDE	FBA	0	57	na
2.2. Demos establishment (35 demos)	iDE	demos	0	78	na
2.3. Materials	iDE	LS	0	4	na
3. FBA capacity building (51 FBA)	iDE	LS	260,4	51	20%
3.1. Field sales manager	iDE	per-mon	0	114	na
3.2. Commercial agronomists	iDE	per-mon	0	252	na
3.3. Research agronomist	iDE	per-mon	0	45	na
3.4. FBA training	iDE	training	0	36	na
<b>SVR</b>	<b>iDE</b>			-	
<b>F. Support to FBA</b>	<b>iDE</b>			-	<b>58%</b>
1. Management & support to FBA network	iDE	LS	92	33	36%
1.1. Country director	iDE	per-mon	0	24	na
1.2. Agricultural program director	iDE	per-mon	0	24	na
1.3. National sale manager	iDE	per-mon	0	24	na
1.4. Program assistant	iDE	per-mon	0	24	na
1.5. M&E coordinator	iDE	per-mon	0	24	na
1.6. Stock controller	iDE	per-mon	0	72	na
1.7. Sales and logistic officer	iDE	per-mon	0	60	na
1.8. FBA field office costs	iDE	month	0	12	na
1.9. Office expense	iDE	month	0	25	na
2. FBA establishment (15 FBA)	iDE	LS	32	32	100%
2.1. FBA recruitment (11 FBAs)	iDE	FBA	0	29	na
2.2. Demos establishment (13 demos)	iDE	demos	0	46	na
2.3. Materials	iDE	LS	0	4	na
3. FBA capacity building (15 FBA)	iDE	LS	155,4	58	37%
3.1. Field sales manager	iDE	per-mon	0	93	na
3.2. Commercial agronomists	iDE	per-mon	0	240	na

3.3. Research agronomist	iDE	per-mon	0	48	na
3.4. FBA training	iDE	training	0	43	na
<b>TAKEO</b>	<b>iDE</b>			-	
<b>F. Support to FBA</b>	<b>iDE</b>			-	<b>51%</b>
1. Management & support to FBA network	iDE	LS	92	21	23%
1.1. Country director	iDE	per-mon	0	24	NA
1.2. Agricultural program director	iDE	per-mon	0	24	NA
1.3. National sale manager	iDE	per-mon	0	24	NA
1.4. Program assistant	iDE	per-mon	0	24	NA
1.5. M&E coordinator	iDE	per-mon	0	24	NA
1.6. Stock controller	iDE	per-mon	0	72	NA
1.7. Sales and logistic officer	iDE	per-mon	0	60	NA
1.8. FBA field office costs	iDE	month	0	12	NA
1.9. Office expense	iDE	month	0	34	NA
2. FBA establishment (58 FBA)	iDE	LS	47	47	100%
2.1. FBA recruitment (39 FBAs)	iDE	FBA	0	50	NA
2.2. Demos establishment (45 demos)	iDE	demos	0	76	NA
2.3. Materials	iDE	LS	0	4	NA
3. FBA capacity building (58 FBA)	iDE	LS	302,7	94	31%
3.1. Field sales manager	iDE	per-mon	0	129	na
3.2. Commercial agronomists	iDE	per-mon	0	243	na
3.3. Research agronomist	iDE	per-mon	0	43	na
3.4. FBA training	iDE	training	0	85	na
<b>Lunching PPP followed ASPIRE extension framework</b>				-	<b>na</b>
a. Piloting PPP model with iDE with minimum 40% IRR for 8,000 IGRF HHs and 12,000 non IGRF HH	iDE	CIG		-	na
FBA Training (recruitment; FBA & farming training)	iDE	LS		12	na
Country Director	iDE	per-mon		12	na
Agriculture Program CEO	iDE	per-mon		12	na
National Sales Manager	iDE	per-mon		12	na
Project Manager	iDE	per-mon		2	na
M&E Manager	iDE	per-mon		12	na
Branch Manager	iDE	per-mon		37	na
Sales Trainer	iDE	per-mon		12	na
Commercial Agronomist	iDE	per-mon		190	na
Regional Research Agronomist	iDE	per-mon		12	na
Senior Research Agronomist	iDE	per-mon		6	na
Research Agronomist	iDE	per-mon		15	na

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Branch Office Coordinator	iDE	per-mon		42	na
Sale & Logistics Officer	iDE	per-mon		36	na
Deputy Agriculture Program Director	iDE	per-mon		12	na
Finance Manager	iDE	per-mon		12	na
Finance Officer	iDE	per-mon		12	na
Finance/Administrative Assistant	iDE	per-mon		12	na
Accountant	iDE	per-mon		12	na
Procurement Officer	iDE	per-mon		12	na
Demo Costs	iDE	Demo		377	na
Collection Points	iDE	Location		48	na
Market Facilitator	iDE	per-mon		21	na
Market Collector	iDE	per-mon		21	na
Field office costs	iDE	LS		48	na
b. Overall technical support from iDE on PPP model and potential absorbtion of the CEWs				-	na
Management Supports	iDE	per-mon		108	na
Finance and Admin Supports	iDE	per-mon		60	NA
c. IDE overhead cost				12	NA
Tax (VAT,WHT.etc)	iDE	LS			
Facilitation and support farmer to farmer learning	iDE	LS		-	NA
Drum seeders promotion activity (Buy 1, get 2 free)	iDE	set/group		323	NA
1. Land base support				-	na
b. Implementation support from GDA on LB intevention	GDA			-	na
Monitoring and technical back stopping	GDA	trip		-	na
Refresh Training new 110 CEWs	GDA	Course		-	na
Bi-monthly meeting with MST	GDA	meeting		-	na
c. Seed Production and CARDI	GDA	LS		-	na
5. Facilitation & support F2F learning				-	na
f. Support Farmer Network including activity linked to MTCF	PSU	LS		-	na
<b>Sub-component 2.3: Small rural business development</b>	<b>SNV</b>			-	<b>60%</b>
<b>A. Stimulus facility for rural business development</b>	<b>SNV</b>			-	<b>100%</b>
1. Stimulus facility subprojects	SNV	LS	2	2	100%
2. Business plan development	SNV	unit	10	10	100%
3. Screening of business plans	SNV	unit	1	1	100%
4. Grant selection committee meetings	SNV	unit	1	1	100%
<b>B. Preliminary studies and knowledge management</b>	<b>SNV</b>			-	<b>41%</b>
1. Mapping and analysis of associations and supply chains	SNV	consultant	12	7	61%
2. Study validation workshops	SNV	WS	12	4	33%

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3. Case studies on farmer organizations	SNV	consultant	5	1	28%
<b>C. Technical assistance, CB and networking</b>	<b>SNV</b>			<b>-</b>	<b>64%</b>
1. Int. integrated value chain specialist	SNV	per-mon	22	17	75%
2. National integrated VC specialists	SNV	LS	46	32	68%
3. CB of provincial, district and commune staff	SNV	LS	3	2	50%
Support to business linkages (advise on contracting, certification, etc)	SNV	LS		-	na
<b>D. Development of pro-poor bio-digesters (SNV)</b>	<b>SNV</b>			<b>-</b>	<b>36%</b>
<b>1. Preparatory for pro-poor technology adaptation and capacity building</b>	<b>SNV</b>			<b>-</b>	<b>51%</b>
R&D on technology	SNV	LS	17,5	7	42%
Capacity development	SNV	training	6	4	68%
Marketing and promotion	SNV	LS	8	6	71%
Carbon financing and markets	SNV	consultant	10	2	23%
<b>2. Pro-poor bio digester program roll-out</b>	<b>SNV</b>			<b>-</b>	<b>0%</b>
MFI management fee for credit	SNV	LS	10	-	0%
Construction of bio digesters (IFAD)	SNV	plant	1600	-	0%
Construction of bio digesters (Beneficiaries)	SNV	plant	2400	-	0%
Quality control and sales monitoring	SNV	LS	8	-	0%
Slurry extension programme	SNV	LS	3	-	0%
<b>3. Technical assistance and NBP programme management</b>	<b>SNV</b>			<b>-</b>	<b>58%</b>
International Technical Assistance	SNV	per-mon	18	15	82%
National Technical Assistance	SNV	per-mon	24	1	4%
NBP staff and office running costs	SNV	LS	24	21	88%
<b>1. Market and Value Chain Support</b>				<b>-</b>	<b>na</b>
a. Value Chain Specialist team 1	GDA	per-mon		-	na
c. VC facilitation activity for team 2	ISU	per-mon		-	na
Value chain facilitation activity for team 2	ISU	LS		10	na
Support value chain development in 7 cluster	GDA	LS		6	na
1. Exposure visit in Nepal	SNV	LS		1	na
2. Technical Assistance	SNV	LS		-	na
	SNV			24	na
a. International assistance to VCD (short-term, incl. transport/logistics)		day			
b. International senior assistance to VCD (long term)	SNV	month		5	na
c. International assistance to VCD (60%)	SNV	Month		12	na
d. National assistance to VCD 100% (MAFF)	SNV	Month		12	na
e. National assistance to VCD 100% (MoWA)	SNV	Month		14	na
f. National assistance to VCD 100% (support)	SNV	Month		3	na

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g. National assistance M&E	SNV	month		na
h. Transport/logistics	SNV	LS	179	na
National assistance and data collection and analysis	SNV	month		na
Establishment of the KM Unit	SNV		-	na
Most significant Change, Best Practice, and compiling longitudinal analysis of 40 cases studies	SNV	LS	1	na
Travel costs IS short term	SNV	day	10	na
Flight IS short term	SNV	LS	-	na
Equipment	SNV	LS	-	na
Management fee (14% total direct)	SNV	LS	-	na
9. Activities supporting value chain	SNV		-	na
Value chain and cluster development	SNV		-	na
a.Rapid mapping including pre-assessment	PDoWA	Meeting	1	na
b. Validation workshops	PDoWA	Meeting	21	na
c. Multi-stakeholder platform	PDoWA	Meeting	14	na
d. Support cluster plan	PDoWA		-	na
TOT to sb-national staff (MSP facilitation and otheer relevant topics)	PDoWA	Training	-	na
Capacity building to select clusters (groups management, technical, business skills	PDoWA	Training	24	na
Support cluster process and development (private sector linkage, improve quality control mehamism standard)	PDoWA	Training	16	na
Sector co-investment	PDoWA		-	na
Multi-stakeholder platform assessment	PDoWA	cluster		
10. Activities supporting by iDE			-	na
Drum Seeder	iDE	Unit	404	na
Demo	iDE	Demo	175	na
Collection point	iDE	Location	2	na
Land based common interest groups training activities(Carried Over from 2015)	iDE	Classe	395	na
Support existing (Carried Over from 2015)	iDE	Classe	333	na
11. Carried over activities				
Land base intevention with minimum 20% IRR for 25,000HH of IGRF	PDA			
Support to the existing FFS (1st Folow up for new CIG)	PDA			
Support to the existing FFS (1st Folow up for old CIG)	PDA			
<b>Component 3: Project Coordination and Management</b>	<b>PSU</b>		<b>-</b>	<b>89%</b>
<b>Sub-component 3.1: MAFF-PSU</b>	<b>PSU</b>		<b>-</b>	<b>79%</b>
<b>1. Establishment of the KM Unit</b>			<b>-</b>	<b>NA</b>



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a. KM and Communication Officer	PSU	per-mon		9	na
b. National MIS specialist	PSU	per-mon		2	na
	PSU			0	na
c. Communication Product: film, brochure, booklet, photo contest, fairs		LS			
d. Refresher training on M&E on the training activity	PSU	province		5	na
	PSU			-	na
e. On the job training on cost and benefit analysis for LB intervention and M&E		province			
f. MIS database and webpage	PSU			-	na
Cloudserver rental	PSU	LS		6	na
MIS International Consultant	PSU	working day		81	na
g. Story Video Production (Firm)	PSU	LS		-	na
h. Internship (national and international ) to help the project on M&E and impact assessment	PSU	LS			
<b>A. Equipment</b>	<b>PSU</b>			<b>-</b>	<b>77%</b>
1. Peachtree financing software	PSU	unit	1	1	100%
2. Vehicles	PSU	unit	3	-	0%
3. Computers - desktops with UPS	PSU	unit	10	-	0%
4. Computers - laptops	PSU	unit	8	8	100%
5. Printers with scanner	PSU	unit	8	9	113%
6. LCD projector	PSU	unit	2	2	100%
7. LCD project for GDA	PSU	unit	1	1	100%
8. Photo/video camera	PSU	unit	1	1	100%
9. Photocopier	PSU	unit	1	1	100%
10. Phone and internet installation	PSU	unit	1	1	50%
11. Scanner	PSU	unit	0	1	na
12. Furniture & miscellaneous	PSU	LS	45	36	80%
13. Dock (for CPO-IFAD)	PSU	unit	0	1	NA
14. Printer color (Team MIS)	PSU	unit		-	na
15. External hard disk	PSU	unit		28	na
<b>B. Technical assistance</b>	<b>PSU</b>			<b>-</b>	<b>53%</b>
1. Procurement and fiduciary specialist - international	PSU	per-mon	24	-	0%
2. Procurement specialist - national	PSU	per-mon	-	18	na
3. Financial management specialist - national	PSU	per-mon	18	23	128%
4. Financial management specialist - international	PSU	per-mon	-	-	NA
5. National M&E specialist	PSU	per-mon	NA	45	NA
6. Training in PeachTree financial management software	PSU	group	4	-	0%
7. Provincial project coordination adviser	PSU	per-mon	360	230	64%
8. Provincial M&E adviser	PSU	per-mon	320	230	72%

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9. Financial coordinator (PVG&SVR)	PSU	per-mon		38	na
Executive assistant	PSU	per-mon		12	na
Finance assistance	MEF	per-mon		6	na
10. Internal Auditor	PSU	22 day		-	na
11. Consultant output base	PSU	LS	-	13	na
12. National communication specialist	PSU	per-mon		-	na
<b>C. Support at MEF</b>	<b>PSU</b>			<b>-</b>	<b>58%</b>
1. Computers - laptops	PSU	unit	3	1	33%
2. Computer - desktop				-	na
3. Computers - Template PC	PSU	unit	1	1	100%
4. Scanner	PSU	unit	1	1	100%
5. Vehicles	PSU	unit	1	-	0%
<b>D. Equipment M&amp;E</b>	<b>PSU</b>			<b>-</b>	<b>57%</b>
Vehicles	PSU	unit	1	-	0%
Computers - desktops with UPS	PSU	unit	4	-	0%
Computers - laptops	PSU	unit	2	2	100%
Software and servers for MIS	PSU	unit	1	1	100%
Printers with scanner	PSU	unit	6	2	33%
Photo/video camera	PSU	unit	1	1	100%
Mobile phones for national monitoring	PSU	unit		-	na
Mobile phones for commune monitoring	PSU	unit	492	324	66%
<b>E. International TA M&amp;E and MIS</b>	<b>PSU</b>				<b>125%</b>
MIS specialist	PSU			-	na
International MIS specialist	PSU	per-mon	5	10	203%
National MIS specialist	PSU	per-mon	12	22	183%
Software developer	PSU	per-mon	3	-	0%
MIS database and webpage manager	PSU	per-mon		-	na
M&E advisor international	PSU	per-mon	13	12	88%
<b>F. Training M&amp;E</b>	<b>PSU</b>	<b>LS</b>	<b>2,0</b>	<b>3</b>	<b>150%</b>
<b>G. Studies and surveys M&amp;E</b>	<b>PSU</b>			<b>-</b>	<b>26%</b>
1. Main impact study	PSU			-	
Main impact survey	PSU	time	3	2	51%
Taxation contract service	PSU	time	0	2	NA
Annual outcome survey	PSU	LS		-	na
Auditing	PSU	LS		1	na
Taxation of auditing	PSU	LS		1	na
Exit strategy	PSU	LS		-	na

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Survey work including RIMS	PSU	LS	0	1	NA
Mainstreaming PADEE into CDP	PSU	time/ province		-	na
2. Mid-term and completion review studies	PSU			-	na
Additional studies	PSU	LS	2	-	0%
<b>H. Knowledge sharing M&amp;E</b>	<b>PSU</b>			<b>-</b>	<b>160%</b>
1. WS at national and provincial level	PSU	time	5	8	160%
M&E training including study visit (national & international)	PSU	LS		1	NA
2. Publication and knowledge dissemination costs	PSU	LS	5	-	NA
Leaflet	PSU	leaflet		-	NA
Hip-pocket	PSU	book	0	3.000	NA
Group statute	PSU	book	0	3.000	NA
<b>I. Other operating cost</b>	<b>PSU</b>			<b>-</b>	<b>na</b>
1. Audit	PSU	time	0	3	na
2. Taxation-audit firm	PSU	time	0	2	NA
3. Training, WS (planning, evaluation)	PSU	LS	0	2	NA
a. Finance training - study visit (national & international)	PSU	LS		1	NA
b. Training on programme budgeting, SOP, FMM and financial format	PSU	WS		2	na
4. Policy guidance and technical meeting	PSU	time	0	12	na
a. General training/meeting/WS for MAFF PSU	PSU	LS		5	na
e. PGM meeting	PSU	meeting		3	na
f. Study tour/Training outside country	PSU	LS		1	na
g. Support to e-PADEE	PSU	LS		-	na
h. Support to COSOP	PSU	LS		0	na
Staff follow up	PSU	LS		0	
i. Learning Route with Procasur	PSU			-	na
l. Support to Innovation Dev. Plan	PSU			-	na
Demo-Training by new CLC	PSU			5	na
CLC best practice of F2F for PDAs	PSU	award		-	
CLC technical support	PSU	LS		1	na
Crop diversification	PSU	congress		-	
Follow up F2F	PSU	LS		0	
Project closing workshop	PSU	time			
5. Staff training	PSU	LS	0	-	na
6. NCDD focal point training	NCDD	person	0	4	na
J. Activities support by Korean Grant	PSU	LS	0,0	1	na
K. Support ASPIRE Programme	PSU			1	na

<b>Investment support to SRET</b>				-	na
Ground water pumping support	PSU	LS		-	na
Demonstration for S-RET application on agriculture	PSU	LS		-	na
<b>Sub-component 3.2: MoWA-ISU</b>	<b>ISU</b>			-	<b>91%</b>
<b>A. Studies and policy support</b>	ISU			-	<b>150%</b>
1. Stocktaking on gender mainstreaming in agriculture	ISU	consultant	1	2	150%
2. Support Gender Mainstreaming Action Plan	ISU	consultant	1	2	150%
Publishing gender mainstreaming action plan	ISU	book		350	na
3. Assessment of drudgery patterns of women in target areas	ISU	consultant	1	2	150%
Publishing drudgery patterns of women in target areas (Eng&KHM) and translate of studies on drudgery patterns and gender mainstreaming action plan	ISU	book		350	na
<b>B. Support to MoWA</b>	<b>ISU</b>			-	<b>31%</b>
<b>1. Equipment</b>	ISU			-	<b>10%</b>
Vehicles	ISU	unit	1	-	0%
Computers - laptops	ISU	unit	2	-	0%
Computers - desktops	ISU	unit	4	-	0%
Printers with scanner	ISU	unit	2	-	0%
Photocopier	ISU	LS	-	-	NA
Furniture & miscellaneous	ISU	LS	2	1	50%
LCD projector	ISU	unit	0	1	NA
<b>2. Training of MoWA staff</b>	<b>ISU</b>	<b>course</b>	<b>2,0</b>	<b>1</b>	<b>50%</b>
<b>3. Support to MoWA TA to provinces</b>	ISU			-	<b>NA</b>
<b>a. Development/adaptation of training materials</b>	ISU	LS		-	<b>NA</b>
WS to revise existing materials and develop new training materials	ISU	time	0	1	NA
Printing training materials	ISU			-	na
Publishing series of training manual	ISU	book	0	-	NA
Publish nutrition posters for new group	ISU	book	0	-	NA
Publish nutrition flipchart + nutrition training book	ISU	book	0	-	NA
<b>b. Project national staff training</b>	ISU	LS	<b>5</b>	-	<b>0%</b>
<b>c. Information and media materials development and dissemination</b>	ISU	LS	<b>5</b>	-	<b>0%</b>
Printing gender poster	ISU	poster	0	12.500	NA
<b>d. National level stocktaking workshops</b>	ISU	LS			<b>#DIV/0!</b>
WS to disseminate the finding on drudgery study and gender Mainstreaming action plan	ISU	ws	0	2	NA

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WS with PDoWA and DoWA to follow up on NLB, Gender Mainstreaming and Nutrition	ISU	time	0	2	NA
Quarterly Meeting with PDoWAs/ DoWAs to review the progress of Gender, Nutrition and NLB	ISU	time		-	na
TOT Training to PDoWAs/DoWAs on Gender, Nutrition and reporting format (5days)	ISU	course		1	na
<b>4. Support to gender mainstreaming at sub-national level</b>	ISU			-	<b>34%</b>
1. Training of of trainer on gender mainstreaming	ISU	course	30	6	20%
2. Training of trainer on gender assessment and analysis	ISU	course	0	1	NA
3. Gender mainstreaming materials development and dissemination	ISU	LS	5	0	0%
<b>1. Establishment of the KM Unit</b>				-	<b>na</b>
g. On the job training on cost and benefit analysis for NLB intervention and M&E	ISU			-	na
<b>2. Training, meeting and workshop</b>				-	<b>na</b>
b. General training/meeting/WS for MoWA ISU	ISU	LS		2	na
<b>Sub-component 3.3: Provincial Management</b>	<b>PA</b>			-	<b>96%</b>
<b>A. Provincial support - PA</b>	PA			-	<b>96%</b>
<b>1. Vehicles</b>	PA			-	<b>150%</b>
a. Motorcycles	PA	unit	10	15	150%
<b>2. Office equipment</b>	PA			-	<b>68%</b>
a. Computers - desktops with UPS	PA	unit	10	10	100%
b. Computers - laptops	PA	unit	20	5	25%
c. Photocopier	PA	unit	NA	5	na
d. Digital camera	PA	unit	NA	5	na
c. Printers with scanner	PA	unit	20	9	45%
d. Phone and internet installation	PA	unit	5	5	100%
e. Furniture & miscellaneous	PA	LS	12,8	9	70%
f. LCD projector	PA	set		3	na
<b>3. Training for provincial staff</b>	PA			-	<b>70%</b>
a. Initial and refresher courses	PA	LS	20,0	14	70%
b. Quarterly meeting	PA	time		5	na
c. Workshop and meeting	PA	LS	NA	44	na



## Appendix 9: RIMS data

According to IFAD's enhanced operational approach to results-based management in 2017, RIMS Baseline and RIMS Impact Assessment as well as RIMS third level impact indicators are no longer mandatory. It is noted that some RIMS indicators were integrated in to ORMS logical framework reporting since 2017. PADEE outcomes are measured through Core Indicators and project-specific indicators rather than rating based assessments. As per IFAD's enhanced operational approach to results-based management separate RIMS reporting was also stopped in 2017. Therefore the last RIMS first and second level indicators were in 2016 as shown below. Key RIMS indicators remain and measured in the logical framework. Therefore, the latest RIMS results can be found in the project logical framework (Appendix 2).

FIRST LEVEL RESULTS									
		Unit	Period ending:	31-Dec		Cumulative			
			AWP&B	Actual	% of AWPB	Appraisal	Actual	% of Appraisal	
Results									
Total Outreach	People receiving project services	Female	126.444	150.552	119%	167.564	127.333	76%	
		Male	119.556	95.448	80%	158.436	120.397	76%	
		Number	246.000	246.000	100%	326.000	247.730	76%	
	Households receiving project services	Number	49.200	49.200	100%	65.200	66.124	101%	
	Groups receiving project services	Number	984	984	100%	984	984	100%	
Component	Sub Component								
1. Improved Access to Financial Services	1.1 GCCTS	People accessing development funds created under the project	Number	49.200	49.200	100%	49.200	49.200	100%
			Female	24.600	31.686	129%	30.504	31.686	104%
			Male	24.600	17.514	71%	18.696	17.514	94%
	1.2 Capacity building in financial literacy	Saving and credit groups formed/strengthened	Number	0	0	#DIV/0!	984	984	100%
		People in saving and credit groups formed/strengthened	Number	0	0	#DIV/0!	49.200	49.546	101%

<b>2. Improved Access Technology and Market</b>	1.3 Other existing groups supported		Male	0	0	#DIV/0!	24.600	17.860	73%
			Female	0	0	#DIV/0!	24.600	31.686	129%
		Saving and credit groups with women in leadership position	Number	590	962	163%	590	962	163%
		Active borrowers (disaggregated by gender)	Number	0	29.427	#DIV/0!	34.440	29.427	85%
			Male	0	10.800	#DIV/0!	17.220	10.800	63%
			Female	0	18.627	#DIV/0!	17.220	18.627	108%
					9.981.37		11.808.0	9.981.37	
		Value of gross loan portfolio	USD	10.960.000	3	91%	00	3	85%
		People trained in financial services	Number	10.600	10.600	100%	49.200	49.200	100%
			Male	5.300	3.901	74%	24.600	18.106	74%
			Female	5.300	6.699	126%	24.600	31.094	126%
	2.1 Support to Innovation and Capacity Building	People trained in financial services	Number		0	#DIV/0!	12.500	0	0%
		Saving and credit groups formed/strengthened	Number		0	#DIV/0!	500	0	0%
		Government officials and staff trained	Number	183	183	100%	127	215	169%
			Male	110	118	107%	64	139	219%
			Female	73	65	89%	64	76	120%
		Staff of service providers trained	Number	242	271	112%	274	283	103%
			Male	121	198	164%	137	208	152%
			Female	121	73	60%	137	75	55%
		Community workers and volunteers trained	Number	1.223	1.451	119%	2.164	1.555	72%
			Male	612	991	162%	949	1.072	113%
			Female	612	460	75%	1.215	483	40%
	2.2 Applied training and capacity building	People trained in crop production and technologies	Number	0	0	#DIV/0!	47.400	49.200	104%
			Male	0	0	#DIV/0!	23.700	18.155	77%
			Female	0	0	#DIV/0!	23.700	31.045	131%
		People trained in livestock production and technologies	Number	0	0	#DIV/0!	47.400	38.600	81%



2.3 Small Rural Business	People trained in fish production and technologies	Male	0	0	#DIV/0!	23.700	14.243	60%
		Female	0	0	#DIV/0!	23.700	24.357	103%
		Number	0	0	#DIV/0!	47.400	38.600	81%
	People trained in income generating activities	Male	0	0	#DIV/0!	23.700	14.243	60%
		Female	0	0	#DIV/0!	23.700	24.357	103%
		Number	0	0	#DIV/0!	8.200	0	0%
	People trained in business and entrepreneurship skills	Male	0	0	#DIV/0!	4.100	341	8%
		Female	0	0	#DIV/0!	4.100	1.009	25%
		Number	0	0	#DIV/0!	700	0	0%
	Enterprises accessing financial services facilitated by the project	Male	0	0	#DIV/0!	350	235	67%
		Female	0	0	#DIV/0!	350	150	43%
		Number	0	0	#DIV/0!	75	0	0%
	Other productive infrastructure constructed/rehabilitated	Number	0	0	#DIV/0!	4.000	0	0%

## RIMS Second-level Indicator reporting

SECOND LEVEL RESULTS					
Component	Sub Component	Results	Results (quantitative)	no/%/h a	Ratin g
<b>Component name</b>	<b>Sub component name</b>				
<b>1. Improved Access to Financial Services</b>	1.1 GCCTS				
	1.2 Capacity building in financial literacy	Likelihood of sustainability of saving and credit groups formed/strengthened	Number of groups operational/functional	880	5
		Sustainability: improved performance of financial institutions	Portfolio at risk	0,39	4
			Operational self-sufficiency	665,9%	5
			Active borrowers/personnel	60%	5
<b>2. Improved Access Technology and Market</b>			Operating expenses ration	15%	5
	2.3 Small Rural Business	Effectiveness: improved performance of service providers	Operational self-sufficiency	162%	4
		Effectiveness: creation of employment opportunities	Number of jobs generated by small and medium enterprises		5

## Appendix 10: PADEE internal rate of return (detailed analysis)

### Assumptions and Methodology

The economic and financial analysis (EFA) at completion employs the standard Cost-Benefit Analysis (CBA) method in accordance with the IFAD's Internal Guidelines for Economic and Financial Analysis for Rural Investment Projects (IFAD: August 2015). The project investment costs, all other investment costs and all quantifiable benefits were adjusted to 2017 prices applying the GDP deflator for Cambodia to estimate the net incremental benefits, which is the balance of benefits induced by or with the project (WP), against the Without Project (WOP) situation. The incremental net benefit streams taken over a period of 15 years are derived mainly from cost savings and higher yield in crops, animal production and small businesses as a result of households' application of improved technologies induced by the project.

The EFA was based on nine production models based on the data collected by the Baseline and End-line surveys and other project surveys with caveats derived from the PCR mission and other consultations as applicable. The analysis maintained the result chain approach where the benefits of the intervention activities are included into the incremental cash flows only if the beneficiaries have a direct attribution or a linkage to project interventions, in some cases in terms of new knowledge and technologies.

### Types of beneficiary households

It is important to identify the types of beneficiary households in order to measure the financial and economic benefits brought to them by the project. The project reported a total of **88,986 households** that benefited from various activities of the project. They are classified by seven types of groups according to the service delivery as listed in the table below. The EFA models focused on these major beneficiaries of the project, including both the 49,200 IGRF members and non-IGRF members supported through all other partners/agencies (MOWA, iDE, SNV, and Procasur). In the EFA, estimates are made on the number of households per each category in order to account for the aggregate incremental benefits. It is known that many households benefit from multiple interventions from the project such as rice, vegetable and animal raising but it is not known how many exactly do so as based on the existing materials/reports.

Type of beneficiaries	Benefits provided	Number of HH counted as beneficiaries
1) Households in IGRF membership	Small loan and training in various value chains	49,200
2) Households benefiting from 15 value chain clusters (chicken, vegetable, handicraft, mushroom)	Significant grant and training in chicken, vegetable, handicraft and mushroom	1,444
3) Households supported through MoWA (non-IGRF members only)	Grant and training in handicraft, small business and chicken value chains	580
4) Repeat clients (non-IGRF members only) through iDE FBAs	Training in rice and vegetable	11,875
5) Households in 34 Rural Business Stimulus Facilities (RBSF) by SNV	Training in rice, vegetable, mushroom, fish and chicken & pig	1,534
6) Beneficiaries of FFD in 200 crop diversification demos by GDA (non-IGRF members only, 20.5% found to have adopted)	Training through FFD on corn, water melon, mung bean	8,280

Type of beneficiaries	Benefits provided	Number of HH counted as beneficiaries
7) Households benefiting from farm to farmer (F2F) by Procasur outside target areas	Study visits in commune learning centres (not considered for EFA)	16,073
<b>Total number of households counted as beneficiaries</b>		<b>88,986</b>

### Crop Models

The majority of the project interventions are in crop production, followed by animal raising and small business (essentially handicraft). For EFA, 10 models are selected to account for the benefits accrued to the 88,986 beneficiary households (see Table below). Seven of these are crop models: 1) wet season rice, 2) dry season rice, 3) mung bean, 4) sweet corn, 5) water melon, 6) cucumber, and 7) sponge gourd.

The baseline and end-line survey results are used to derive key statistics for the 10 models. As for the seven crop models, wet season and vegetables are the most common for beneficiary households. As high as 57.8% households in the target domain (TD) grow wet season rice, on 1.15 ha of land per household on average. Only 10.1% of households in TD cultivate dry season rice, on 1.64 ha per household. 33% grow vegetables on 0.10 ha or less, represented by cucumber and sponge gourd in the EFA. Less than 4% cultivate mung bean, sweet corn and water melon despite the numerous diversification farmer field days. These three cash crops represent two third of the whole cash crops grown by households interviewed in terms of both land and number of households.

	Crop or product with project intervention	# HH trained by PADEE in survey sample (2,948 hhs)	% trained HH adopting technologies in survey sample	# HH trained and adopting technologies	Impact rate in target beneficiary population based on End-line survey	Average farm or production size (ha or heads)
1	Wet season rice	1,204	70.0%	843	55.1%	1.15
2	Dry season rice	211	70.0%	148	9.7%	1.64
3	Mung bean (for both TD and CD)	66	61.0%	40	2.6%	0.62
4	Sweet corn (for both TD and CD)	81	70.0%	57	3.7%	0.75
5	Water melon (for both TD and CD)	25	70.0%	18	1.1%	0.46
6	Cucumber (for both TD and CD)*	518	60.0%	311	20.3%	0.10
7	Sponge gourd (for both TD and CD)*	518	60.0%	311	20.3%	0.03
8	Chicken	1433	60.0%	860	56.2%	29.00
9	Pig	519	70.0%	363	23.7%	10.00
10	Small business		5.0%		5.0%	

\* These two vegetable crops are representative of more than 10 vegetable crops grown by 980 households interviewed out of 2948 households. Actually only 116 and 196 households grew cucumber and sponge gourd, respectively. But they represent 980 households who engaged in vegetable growing.

### Farm models per household per year (in financial terms)

Analysis is conducted for 8 types of farm models. As can be seen in the summary table below the farm model that cultivate on wet season rice even twice the average size (model 1), the net income is only USD 929/year, the incremental net benefit only USD386 (see Table below). For the households that grow vegetable on a total of 0.38ha and raise 10 pigs (model 7), the net income is USD6,466/year and net incremental brought about by the project is USD563. Likewise, households that only raise 290 chicken and 10 pig per year (model 8) make net income of USD 4,988/year and USD 1,325/year as incremental net benefit compared to the without project situation.

### Farm models in summary (annual, financial term)

	Type of farm model	Net income		Incremental net benefit	
		KHR/year	USD/year	KHR/year	USD/year
1	Household cultivating only wet season rice on 2.30ha only	3,738,170	929	1,554,473	386
2	Household cultivating only wet season rice on 3.28ha only	8,571,877	2,131	4,555,079	1,132
3	Household cultivating wet season rice on 1.15ha and mung bean on 0.62ha of mung bean in dry season	3,212,719	799	976,281	243
4	Household cultivating wet season rice on 1.15ha, mung bean on 0.62ha in dry season and raising 29 chicken	4,684,379	1,164	1,376,184	342
5	Household cultivating dry season rice on 1.64ha and water melon on 0.46ha in wet season	5,262,110	1,308	2,620,151	651
6	Household cultivating wet season rice on 1.64ha and water melon on 0.46ha in wet season and raising 10 pigs	8,194,815	2,037	2,452,231	610
7	Household cultivating 0.20ha cucumber, 0.18ha sponge gourd and raising 10 pigs	26,012,244	6,466	2,266,592	563
8	Household raising 290 chickens and raising 10 pigs	20,066,158	4,988	5,331,412	1,325

The following table provide the breakdown of costs and revenue with project and without project situation in KHR per average farm per year by crop or production.

		With project	Without project	Incremental
<b>WET SEASON RICE</b>	Ha	1.15	0.97	1.1
Number of production cycle per year		1.0	1.0	1.0
<b>Item</b>	<b>Unit</b>			
Produce	Kg	3,551	2,500	1,051
Produce price	KHR/Kg	828	816	12
<b>REVENUE</b>	<b>KHR</b>	<b>2,940,053</b>	<b>2,040,039</b>	<b>900,014</b>
Planting material	KHR	12,140	7,681	4,459
Land preparation	KHR	252,682	228,177	24,505
Fertilizer/pesticide	KHR	468,187	409,191	58,996
Watering	KHR	53,161	37,598	15,563
Hired labor	KHR	151,943	115,276	36,667
Harvesting	KHR	44,312	52,963	(8,651)
Produce transport	KHR	69,745	81,945	(12,199)

		With project	Without project	Incremental
Other costs	KHR	18,797	15,360	3,437
<b>TOTAL COSTS</b>	KHR	<b>1,070,968</b>	<b>948,191</b>	<b>122,777</b>
<b>NETT</b>	KHR	<b>1,869,085</b>	<b>1,091,848</b>	<b>777,237</b>
		With project	Without project	Incremental
<b>DRY SEASON RICE</b>	Ha	1.64	0.99	0.6
Number of production cycle per year		1.0		1.0
<b>Item</b>	<b>Unit</b>			
Produce	Kg	8,451	4,139	4,312
Produce price	KHR/Kg	780	770	10
<b>REVENUE</b>	KHR	<b>6,592,026</b>	<b>3,187,196</b>	<b>3,404,830</b>
Planting material	KHR	8,577	1,837	6,740
Land preparation	KHR	321,191	199,467	121,724
Fertilizer/pesticide	KHR	1,194,405	458,395	736,011
Watering	KHR	379,384	182,553	196,831
Hired labor	KHR	91,696	125,523	(33,827)
Harvesting	KHR	86,289	35,639	50,649
Produce transport	KHR	39,799	2,324	37,476
Other costs	KHR	184,747	173,059	11,688
<b>TOTAL COSTS</b>	KHR	<b>2,306,087</b>	<b>1,178,797</b>	<b>1,127,291</b>
<b>NETT</b>	KHR	<b>4,285,938</b>	<b>2,008,399</b>	<b>2,277,539</b>
		With project	Without project	Incremental
<b>MUNG BEAN</b>	Ha	0.62	0.62	-
Number of production cycle per year		1.0		1.0
<b>Item</b>	<b>Unit</b>			
Produce	Kg	568	457	111
Produce price	KHR/Kg	3,700	3,700	-
<b>REVENUE</b>	KHR	<b>2,102,181</b>	<b>1,689,777</b>	<b>412,404</b>
Planting material	KHR	158,190	79,347	78,843
Land preparation	KHR	106,217	124,177	(17,960)
Insecticide/herbicide	KHR	309,199	130,549	178,650
Fertilizer	KHR	38,685	62,863	(24,178)
Watering	KHR	12,243	-	12,243
Hired labor	KHR	118,597	143,737	(25,140)
Harvesting	KHR	-	-	-
Produce transport	KHR	13,757	4,425	9,331
Other costs	KHR	1,659	89	1,570
<b>TOTAL COSTS</b>	KHR	<b>758,547</b>	<b>545,188</b>	<b>213,359</b>
<b>NETT</b>	KHR	<b>1,343,634</b>	<b>1,144,590</b>	<b>199,045</b>
		With project	Without project	Incremental
<b>SWEET CORN</b>	Ha	0.75	0.75	-
Number of production cycle per year		1.0		1.0
<b>Item</b>	<b>Unit</b>			
Produce	Kg	3,385	2,839	546

		With project	Without project	Incremental
Produce price	KHR/Kg	820	820	-
<b>REVENUE</b>	KHR	<b>2,775,931</b>	<b>2,328,158</b>	<b>447,773</b>
Planting material	KHR	321,469	191,793	129,676
Land preparation	KHR	147,205	121,693	25,512
Insecticide/herbicide	KHR	116,487	63,225	53,262
Fertilizer	KHR	259,428	367,151	(107,722)
Watering	KHR	22,072	13,811	8,261
Hired labor	KHR	102,224	96,986	5,238
Harvesting	KHR	1,230	-	1,230
Produce transport	KHR	31,346	15,960	15,386
Other costs	KHR	6,210	-	6,210
<b>TOTAL COSTS</b>	KHR	<b>1,007,672</b>	<b>870,620</b>	<b>137,053</b>
<b>NETT</b>	KHR	<b>1,768,258</b>	<b>1,457,539</b>	<b>310,720</b>
		With project	Without project	Incremental
<b>WATER MELON</b>	Ha	0.46	0.5	-
Number of production cycle per year		1.0		1.0
<b>Item</b>	<b>Unit</b>			
Produce	Kg	1,691.0	665.6	1,025
Produce price	KHR/Kg	900.0	900.0	-
<b>REVENUE</b>	KHR	<b>1,521,919.2</b>	<b>599,040.2</b>	<b>922,879</b>
Planting material	KHR	67,205.4	133,657.9	(66,452)
Land preparation	KHR	117,794.1	98,753.9	19,040
Insecticide/herbicide	KHR	183,226.4	65,961.0	117,265
Fertilizer	KHR	64,444.9	302,595.1	(238,150)
Watering	KHR	1,783.1	2,814.8	(1,032)
Hired labor	KHR	99,535.5	31,901.5	67,634
Harvesting	KHR	-	-	-
Produce transport	KHR	11,253.9	28,148.4	(16,894)
Other costs	KHR	504.7	-	505
<b>TOTAL COSTS</b>	KHR	<b>545,748.0</b>	<b>663,832.6</b>	<b>(118,085)</b>
<b>NETT</b>	KHR	<b>976,171.2</b>	<b>(64,792.4)</b>	<b>1,040,964</b>
		With project	Without project	Incremental
<b>CUCUMBER</b>	Ha	0.20	0.2	-
Number of production cycle per year		2.0		2.0
<b>Item</b>	<b>Unit</b>			
Produce	Kg	4,109	3,940	169
Produce price	KHR/Kg	1,320	1,200	120
<b>REVENUE</b>	KHR	<b>5,424,408</b>	<b>4,728,000</b>	<b>696,408</b>
Planting material	KHR	88,224	94,201	(5,977)
Land preparation	KHR	40,112	54,729	(14,617)
Fertilizer/pesticide	KHR	693,832	258,905	434,927
Hired labor	KHR	154,348	22,113	132,235
Watering	KHR	123,748	108,021	15,727
Drip materials	KHR	95,492	-	95,492
Trellis	KHR	96,129	88,452	7,677

		With project	Without project	Incremental
Net house and mulching materials	KHR	153,646	24,324	129,322
Other costs	KHR		-	-
<b>TOTAL COSTS</b>	KHR	<b>1,445,531</b>	<b>650,745</b>	<b>794,786</b>
<b>NETT</b>	KHR	<b>3,978,877</b>	<b>4,077,255</b>	<b>(98,378)</b>
		With project	Without project	Incremental
<b>SPONGE GOURD</b>	Ha	0.06	0.06	-
Number of production cycle per year		2.0		2.0
<b>Item</b>	<b>Unit</b>			
Produce	Kg	1,720	1,639	81
Produce price	KHR/Kg	2,200	2,000	200
<b>REVENUE</b>	KHR	<b>3,783,780</b>	<b>3,278,690</b>	<b>505,090</b>
Planting material	KHR	45,203	4,270	40,933
Land preparation	KHR	1,032	-	1,032
Fertilizer/pesticide	KHR	202,092	6,406	195,686
Hired labor	KHR	57,733	-	57,733
Watering	KHR	32,354	6,406	25,948
Drip materials	KHR	43,002	-	43,002
Trellis	KHR	25,840	12,811	13,029
Net house and mulching materials	KHR	33,642	-	33,642
Other costs	KHR	15,642	29,893	(14,251)
<b>TOTAL COSTS</b>	KHR	<b>456,541</b>	<b>59,786</b>	<b>396,755</b>
<b>NETT</b>	KHR	<b>3,327,239</b>	<b>3,218,904</b>	<b>108,335</b>
		With project	Without project	Incremental
<b>CHICKEN</b>	HH	1.0	1.0	-
Number of production cycle per year		3.0		3.0
<b>Item</b>	<b>Unit</b>			
Produce	Hd	87	63	24
Produce price	KHR/Hd	18,200	18,200	-
<b>REVENUE</b>	KHR	<b>1,583,400</b>	<b>1,146,600</b>	<b>436,800</b>
Chick	KHR	18,675	9,696	8,979
Feed	KHR	45,916	37,736	8,180
Vaccines/animal medicines	KHR	4,011	1,283	2,728
Pen/housing	KHR	42,591	26,054	16,537
Tools	KHR	-	-	-
Produce transport	KHR	-	-	-
Other expenses	KHR	547	74	473
<b>TOTAL COSTS</b>	KHR	<b>111,740</b>	<b>74,843</b>	<b>36,897</b>
<b>NETT</b>	KHR	<b>1,471,660</b>	<b>1,071,757</b>	<b>399,903</b>
		With project	Without project	Incremental
<b>PIG</b>	HH	1.0	1.0	-
Number of production cycle per year		2.0		2.0
<b>Item</b>	<b>Unit</b>			
Produce	Hd	20	16	4



		With project	Without project	Incremental
Produce price	KHR/Hd	344,200	344,200	-
<b>REVENUE</b>	KHR	<b>6,884,000</b>	<b>5,507,200</b>	<b>1,376,800</b>
Piglet	KHR	326,970	179,236	147,734
Feed	KHR	941,629	932,367	9,262
Vaccines/animal medicines	KHR	39,240	33,785	5,456
Pen/housing	KHR	216,576	329,175	(112,599)
Tools	KHR	-	-	-
Produce transport	KHR	-	-	-
Other expenses	KHR	10,025	15,460	(5,435)
<b>TOTAL COSTS</b>	KHR	<b>1,534,441</b>	<b>1,490,023</b>	<b>44,417</b>
<b>NETT</b>	KHR	<b>5,349,559</b>	<b>4,017,177</b>	<b>1,332,383</b>

### Non-farm activity model

The PADEE project provides support to value chains that include handicrafts. The small loan in IGRF can also be used for running or expanding small business in the household. For EFA, the analysis derives statistics from the End line survey for small non-farm business in terms of revenue and costs. For the household that does this activity, which does not apply to more than 5% of the total households, they make an incremental benefit of USD701 per year (Table below).

#### Small non-farm business (costs and benefits in financial terms)

Item	Unit	With project	Without project	Incremental
Produce	Unit	3,911	2,967	944
Produce price	KHR/Unit	2,136	1,742	393
<b>REVENUE</b>	KHR	<b>8,351,786</b>	<b>5,170,000</b>	<b>3,181,786</b>
Inputs	KHR	816,000	463,250	352,750
Implements	KHR	94,800	86,400	8,400
Other expenses	KHR	3,646	3,354	292
<b>TOTAL COSTS</b>	KHR	<b>914,446</b>	<b>553,004</b>	<b>361,442</b>
<b>NETT</b>	KHR	<b>7,437,340</b>	<b>4,616,996</b>	<b>2,820,344</b>
	USD	<b>1,849</b>	<b>1,148</b>	<b>701</b>

### Results of financial and economic analysis at project level

All the market prices that are used for the financial analysis of NPV and IRR are adjusted to reflect their economic values in the economic analysis. Tradable commodities such as paddy and value of fertiliser have been priced at economic parities using border prices when applicable. Shadow wage rates and product prices were used to value all the labour, and standard conversion factor was used to value non-tradable goods in all the models when applicable.

The results indicate positive values for all the CBA indicators. With discount rate of 12% the financial NPV is USD20.21 million; the economic NPV is USD15.79 million. And the Benefit/Cost Ratios are 1.37 and 1.30, respectively in financial and economic terms; FIRR is 26.2% and EIRR is 23.4%.

	Financial	Economic
Net Present Value - NPV (USD) with discount rate of 12%	20,213,822	15,793,082
Benefit/Cost Ratio - BCR	1.37	1.30
Internal Rate of Return	26.2%	23.4%

## Fiscal Analysis

The fiscal analysis is essentially to account for taxes incurred by farmers and consider the total amount as revenue for government, and therefore the project cost is reduced after subtracting the taxes, making the project relatively more attractive, society wise. In the case of PADEE project, farmer surveys did provide any breakdown of costs that reflect any taxes paid by the farmers. As a matter of fact, the Cambodian government has a policy to give tax exemption to agricultural inputs such as land, machinery, seeds, fertilizer and pesticides. However, there exist informal fees on trade of fertilizer and pesticides, and there are import taxes on plastic nets, plastic mulch, steel, irrigation pipes/tubes that are used for modern vegetable farms. Moreover, businesses are required to pay 10% VAT on their sales. Therefore, the tax estimate is 10% on fertilizer, pesticides, animal feed, and other farm construction materials. The costs incurred by farmers are divided into the costs without taxes, and the taxes that go to government. As a result, the net present value of the total tax estimate for the duration of the project (15 years) discounted at 12% is \$1.99 million. While farmers benefit \$53 million in incremental income, society has a net benefit of USD28 million, after government pays USD24.9 million in project cost (USD26.96 million less USD1.99 million in taxes earned).

### Analysis of fiscal impact (USD, NPV discounted at 12%)

	Society	Government	Farmers
Income	\$84,116,317		\$84,116,317
Costs			
Production costs without taxes	(\$28,917,189)		(\$28,917,189)
Taxes		\$1,998,205	(\$1,998,205)
Project costs	(\$26,963,712)	(\$26,963,712)	
Net benefits	\$28,235,416	(\$24,965,507)	\$53,200,923

## Appendix 11: Environmental assessment (detailed analysis)

Review of the project impact on the environment was conducted in accordance with IFAD's required procedure at the appraisal phase. The Environmental Screening and Scoping Note classified the project in B category. The classification remains. The project was not directly involved in either environmental protection or natural resource management. It did not fund any civil works. No adverse impact is recorded.

The project's interventions were to promote environmentally friendly, sustainable and climate resilient technologies in agriculture. Organic farming and Good Agricultural Practices (GAP) as well as use of renewable energy were introduced and encouraged. The focus of the project was mainly on proper and reduced applications of agro-chemicals; use of natural inputs; and application of integrated pest management techniques (such as animal manures, composts, organic pesticides).

The combined effect of the project's interventions should, to a large extent, mitigate the effects of pressure on land use, bad/agro-chemical-driven agricultural practices, soil fertility depletion, and degradation of land, and aquatic resources. The positive impacts can be summarized as follows:

- More responsible uses of pesticides and insecticides due to practices of GAP introduced by the project, and thus reduced agro-chemical (including pesticide, insecticide) wastes/residues in the environment;
- Improved organic properties of soil as farmers turned to application of organic fertilizers (including composts, manures from bovines, chickens and pigs);
- Prevented or reduced occurrence of livestock diseases as the beneficiaries stopped raising their livestock based on an extensive, scavenging system. (The beneficiaries practiced housing of all livestock. Small livestock such as pigs and chickens, which were let astray before, are now kept in stalls or cages at all times due training on improved livestock production technologies.);
- Reduction and/or abandonment of uses of agrochemicals are not only beneficial to the natural environment but also to health of farmers and consumers. This is true too for the prevention and reduction of the occurrence and spread of diseases of livestock when they are raised in containment; and
- Use of water-saving technologies in crops production could have good impact on groundwater table by not depressing it too much while the climate is changing.

Nevertheless, there is at least one negative impact on the environment, specifically with the introduction and uses of plastic nets, UV plastic sheets, plastic mulches, drip irrigation systems and sprinkler systems in vegetables production. These materials are plastic-based. When not disposed of properly after uses, they can remain in the environment for hundreds of years and have harmful effect on the environment. What has been done by the beneficiaries so far is to burn them when they wear and tear, and certain materials are being sold to or picked up by trash collectors for sales to recycling factories in Vietnam.

## Appendix 12: Risks and Mitigation

### IDENTIFIED RISKS

PADEE's PDR identified four important risks that might hamper the achievement of project development objective. These risks remained the key ones throughout the implementation period; no new risks were identified. These risks are mainly related to: (i) the delivery and coordination capacity of implementing institutions; (ii) the scaling up features that create a risk in terms of quality of service delivery; (iii) the innovative features of the project; and (iv) likelihood that the risk-averse poorest rural households would adopt improved technical package and effectively invest in raising their productivity.

Despite challenges, the project diligently dealt with all these risks, successfully, to a great extent, during the implementation phase. Thanks to the mitigation measures proposed in the project PDR that were fully followed by the Project Management during the project implementation, which are discussed below.

### MITIGATION MEASURES

#### Delivery and coordination capacities of implementing institutions

##### Project implementation

MAFF's PSU accumulated significant experiences in and was very familiar with IFAD's procedures and requirements through implementing past IFAD-funded projects, specifically RPRP and RULIP. The project coordination and implementation assigned to the MAFF's PSU was the right strategic choice and decision. Many of the personnel involved by the MAFF's PSU in the RPRP and RULIP were also transferred to the project. In Kampot, several of those who were engaged in CBRDP, another past IFAD-financed project led by MRD and involved by MAFF's staff, were also appointed to the project. These staffers were the great asset for the project as they brought with them experiences and knowledge from all these past IFAD-financed projects that really eased and helped accelerate the project implementation.

##### Service delivery

The project took full advantage of the use of external service providers and the PIPs in delivering relevant and needed services to the project beneficiaries. Central and decentralized government institutions only handled administration and coordination tasks at various levels. The government institutions, specifically GDA, also helped establish MSTs and offered capacity building to them and other service providers, especially, when it came to agricultural extension services.

##### M&E, procurement and financial management

PSU received full support from and made use of technical assistance and domestic consultants in M&E, procurement and financial management affairs. For co-funding resources allocated to the PIPs, M&E and financial management was fully dealt with by and through the systems of the respective PIPs. Nonetheless, consolidation was made for the project's regular reporting on semiannual and annual basis.

#### Scaling-up risk

The project was ambitious in terms of its geographic and household targets. Fortunately, its two interrelated and complementary components, by default design, enabled it to address, to a large extent, the scaling-up risk.

Originally, the project planned to reach 250 communes in five target provinces. It reduced the number of the target commune to 246 during the implementation because available communes did not meet targeting criteria. This, therefore, relaxed the scaling-up risk slightly. Additionally, the two interrelated and well-integrated components – Component 1 and Component 2 – mitigated the ambitious scaling-up risk by design. The Project Management seemed to defy the suggestion in the PDR that a phased approach be followed with the first 12 months being devoted to preparatory activities such as material development, training of trainers and careful design of intervention logistics. On the contrary, the project spent the first six months, instead, to begin all these preparatory activities and many other core activities such as IGRF establishment and their initial training almost simultaneously.

As suggested in the PDR, MSTs were included in the project implementation, which were instrumental, to some extent, to reinforcing district-level training implementation. The MSTs were more on delivering technical backup support to the district-level service providers. It seemed, nonetheless, that they were not popular or much of use. They were not as effective as expected perhaps due to the frequency and presence of their support.

The use of external service providers really gave an added advantage to the implementation capacity of government staff as presumed in the PDR. The use of external service providers such as MFA and CEDAC through FAO's arrangements, CEWs, F2F/CLCs by PROCASUR, AVSF, FBAs of iDE were complementary to the government staff's capacities, and very beneficial to and supportive of the project's scaling-up strategy and outreach.

#### **Rural business development risk**

Identification of rural business opportunities for poor rural households was quite a huge challenge. The difficulties encountered were both in finding appropriate and profitable new ventures and linkages between project beneficiaries and supply chain agents. Despite the fact that the project tried to take advantage of its partnership with SNV who has experience in this area in Cambodia and elsewhere, as recommended in the PDR, the risk was not quite mitigated. Not new rural business ventures were identified and invested by the target groups. At best, only certain improvement to existing small rural businesses (e.g., mat-making, granulated palm sugar production, traditional basket making, spirit house production) were observed, and scaling-up was negligible or non-existent.

#### **Poor farmer's risk aversion behavior risk**

The project's strategy was conceived to offer a safe learning environment that enabled the target groups to overcome their risk aversion behavior. For example, training was timed in a way that fully accommodated their availability and participation. There were some challenges at the start until such customization was made. Also, although training, for example, were planned by the project without assessing demand and needs of the beneficiaries, the training offered were flexible in that the target beneficiaries made their own choice as to what training they needed or were interested in; no persuasion. This was reflected well in the types of training that were participated in by the target beneficiaries and number of enterprises in which the target beneficiaries pursued and invested in after their training. Thanks to the capital to which they could access through their IGRFs for pursuing and investing in enterprises and technologies that they were interested in and learned and, in turn helped improve their family income and living conditions.



## **Appendix 13: Stakeholder workshop findings**

### **Introduction**

A national stakeholder workshop was organized on June 10, 2018 in the province of Prey Veng, which was participated by the PCR mission team. Prior to the national stakeholder workshop, MAFF/PSU organized provincial stakeholder workshops in individual project provinces during the fourth week of May 2018.

The national stakeholder workshop was participated by 97 people, including representatives and/or designees of PDAFFs, IGRFs, SNV, AIMS, ASPIRE, Lors Thmey, Alba, PCG, agricultural produce buyers or collectors, local agricultural input sellers, etc.

The workshop was opened by MAFF's Deputy Secretary-General and Project Director, HE Dr. Meas Pyseth, and was closed by MAFF's Advisor and Project Manager, HE Pen Vuth. The PCR mission Team Leader, Mr. Peter Situ, was given an opportunity to share with the audience the mission's objectives, and his view on the project.

The workshop was run for one full day and divided into two core parts. The first part comprised two sessions, the opening session and the plenary session. The opening session was very formal that was allotted for introductory, welcoming and opening remarks.

The plenary session was devoted to presentations on aggregated results of the whole project and on results of individual target provinces. Each presentation was followed by questions and answers for clarifications. HE The Chhunhak, Deputy Secretary-General and Project Manager of MoWA also delivered a presentation on MoWA's involvement and contribution. The first part took place in the morning.

The second part occurred in the afternoon and was broken into two sessions, a session for group discussions and a session for group results presentations. The participants were divided into three groups for group discussions according to the project components (increased financial access, improved access to technology and market, and project coordination and management) based on their background and functional engagement with/in the project.

### **Key messages and findings**

#### **Plenary session:**

MAFF was very satisfied with and proud of the results and achievements of the project and took ownership of it. Interest in getting staffers working on the project to learn from the development partner, IFAD, and to get involved directly in producing the PCR was expressed.

MAFF suggested that the PCR be brief, but useful for MAFF's management as they are busy and do not read much in English.

Official closure event for the project to be presided over by MAFF's minister was planned and would take place soon. Good results and approaches and lessons learned from the project would be adopted for and mainstreamed into MAFF's ongoing and future projects such as ASPIRE.

Overall, the project over-achieved its planned physical outputs in nearly all areas. Only a few outputs, specifically applied training in livestock production, aquaculture and rural small businesses, which were subjected to the needs and demand of farmers were underachieved. Offsetting these, the

project produced outputs that were not planned and not even proposed in the project's original design such collection points, community learning centers, value chain clusters and mother-to-mother networks, the social marketing tool for nutrition promotion.

The delivery of the project's outputs was effective. But impacts in many aspects were not up to its targets. For example, consumption expenditure and nutrition could not meet the level of impacts the project expected. However, the beneficiary population was better off in these aspects compared with their conditions at baseline stage; their consumption expenditure, in nominal terms, increased and under-nutrition declined. Many poorest and poor households that were beneficiaries of the project moved up the ladder of wealth to become non-poor and better-off households.

Results of the project were commendable on many fronts. Adoption rate of introduced technologies was high, farm productivity, for example paddy yield, increased, farm incomes rose and were diversified, and farm profits increased. Many beneficiaries practiced organic production, Good Agricultural Practices (GAP), water saving technologies such drip irrigation, plastic mulching, etc. Many of them tried successfully new farm enterprises such frog farming, cricket farming, chick hatching or new varieties of vegetables such as cabbages. Many had better access to financial services through IGRFs and to markets through collection points and contract farming modalities promoted via value chain clusters.

Despite successes the project was faced with a number of challenges and certain interventions failed at certain localities. In some years, price fluctuations discouraged pig and vegetables production, climate change affected agricultural production at many locations of the target provinces due to weather-dependent nature of farming, and replacement or turnover of MFAs affected performance of the IGRFs and confidence of their members.

Certain farming enterprises such as frog farming in some places failed because market demand for farmed frogs did not exist. Consumers preferred natural frogs which were still abundant and Vietnamese frogs imported to Cambodia were cheap.

Chick hatching using electricity was not technically feasible due to unreliable power supply. It was not profitable because of high energy tariff and consumption.

Family aquaculture based on plastic-lined ponds was not adopted by farmers because demand for farmed fishes was limited. Farm families and local consumers preferred natural fishes which were still abundant and Vietnamese imported fishes were cheap.

Diversification practices training and demonstrations were carried out but adoption was low because farmers were not yet convinced of the benefits. In addition, locations selected for the practices were not suitable without appropriate significant investment in land modeling.

Electrical based technology for chick hatching was not technically feasible in many communities because inadequate and unreliable power supply. Solar-based chick hatching also had problem because the equipment or machines did not generate adequate power.

One of vegetables collection points established by the project had to be closed down and relocated because the beneficiaries did not use it. The beneficiaries served by this particular collection point were located not very far from main wholesale markets in Phnom Penh. They could bring their produce to these markets and cash for money right away. In addition, many buyers were active in the area and they competed fiercely among themselves. These buyers are also lenders to whom producers are indebted, thus obliged to sell their harvests.



During implementation many lessons were learned, some of the key ones are:

- Attendance to and/or participation in certain training was low because the beneficiaries did not need them. Therefore, adoption rate of the related practices or technologies introduced was poor. Examples include aquaculture, mushroom production, frog farming, etc.
- Funding support to farmers to try new technologies after technical/applied training was important. The funding was partial but helped promote the new technologies and encouraged replications and scaling-up by supported farmers and their neighbors or peers.
- Value chain clusters with regular forums or with platforms for regular interactions between producers and buyers helped build and consolidate trust among them, encourage their sustainable and long-term working relationship, and promote understanding of market demand for farmers.
- Training on financial literacy was very important not just only for IGRF board members, but also for all the beneficiaries as it helped them to better manage their household finances and plan and manage their livelihoods successfully.
- Regular oversight of IGRF fund/financial management was very crucial to ensure that any mismanagement of the funds or issues related to the fund management and record keeping could be flagged and addressed promptly without delay. Service of external agents such as MFAs with the use of MbWin ensured good performance and management of the IGRFs.
- Extension services delivered by commune extension workers were very important and effective for farmers. Therefore, good amount of training for and support to the CEWs should not be overlooked.
- All collection points, but one, worked very well because they were demanded by and served farmers' needs.

#### **Brief results and findings of group discussion on IGRF**

##### Positive results:

- Participation rate of members was high in the IGRF activities, especially on banking day when livelihoods plans of members were reviewed, discussed and approved.
- Record keeping by the IGRFs was good.

##### Challenges:

- Payment by certain members was late due to migration issue and loss of their livelihoods.
- Reporting by MFA was sometimes slow and late.
- The board was very tolerable, lax or compassionate when reviewing and approving of members' livelihoods plans.

##### Recommendations:

- The board should be strict on livelihoods plans of members.
- The Government should get local authorities to provide oversight over the IGRFs and facilitate their conversion and transition to agricultural cooperatives in order to ensure their sustainability and provide them with legal protection.

#### **Brief results and findings of group discussion on technology transfer and market access**

##### Positive results:

- Chicken and mushroom value chains generated attractive profit in many villages. So did mushroom production.
- A significant number of the beneficiaries practiced organic and good agricultural practices farming, specifically in vegetables production that helped reduce the application of agrochemicals. Prices were very good for produce produced in this way and buyers were

willing to offer contracts for such a production. With the use of net or plastic houses, vegetables could now be grown year round where there is water and no flood.

- Granulated palm sugar production fetched very good prices for palm sugar producers.

Challenges:

- Chick hatching was not profitable in several communities. Electrical based technology for chick incubation was not technically feasible in many communities because of inadequate and unreliable power supply. Solar-based chick hatching also had problem because the equipment or machines did not generate adequate power.
- Mushroom growers were faced with lack of good spores and/or mycelium, substrates and suitable land.
- Granulated palm sugar producers were still faced with the lack of necessary processing equipment and tools.

Recommendations:

- The Government should encourage social enterprises or public private partnership that could support farmers by supplying them with inputs, chicks, spores/mycelium, seeds, etc. and getting their produce to marketplaces or consumers.

**Brief results and findings of group discussion on project management**

Positive results:

- The project was a success because of good partnership.
- Management structure was clear.
- MbWin was a good system for financial record keeping of the IGRFs and flagging related issues.
- Financial and technical support was provided directly to farmers. Financial aid to farmers reduced their dependence on microfinance sector and helped them to create and accumulate their own capital. Both financial and technical support enabled farmers to change their practices, which helped to transform them from being subsistence farmers to market-oriented farmers, and improve their living conditions.
- Contract farming took shape, specifically for organic vegetables. Value chains also worked for vegetables and eggs.

Challenges:

- Price fluctuations remained an issue. Market demand was still small for local produce.
- Cost of production was still high that had problem with competition.
- Post-harvest handling was still an issue.
- Although with contract farming arrangement certain farmers did not follow production plans as agreed upon in the contracts.
- Microclimate in net houses was too hot that affected vegetables production.
- There were challenges in coordination between PADEE's CEWs and ASPIRE's CEWs.
- Several partners did not coordinate and provide any reports.

Recommendations:

- ASPIRE should have guidelines for implementation, specifically for extension service delivery.

## Appendix 14: Final wrap-up meeting minutes

### I. Introduction

The wrap-up meeting, which was chaired by Dr. Meas Pyseth, Deputy Secretary-General and Project Director of PADEE and ASPIRE, was held on 19 June 2018 at the Department of International Cooperation of the Ministry of Agriculture, Forestry and Fisheries (MAFF). It was participated by MAFF's Advisor and PADEE's Manager, Deputy Director of the MAFF's Department of Planning and Statistics and ASPIRE's Manager, representative of MoWA and representatives of PADEE's Project Implementation Partners (FAO, SNV and iDE). Representatives of provincial Project Implementation Agencies and technical assistance members also participated. In total, 44 people were in attendance. The meeting took place from 14:00 p.m. to 16:30 p.m.

### II. Opening

Dr. Meas Pyseth opened the meeting by welcoming everybody and thanking and appreciating the PCR mission team for their efforts and close working relationship with the project team to undertake a successful mission and a fruitful pre-wrap-up meeting in order to produce a good working draft "wrap-up note" for the current meeting.

Mr. Meng Sakphouseh, IFAD Country Program Officer and Team Leader of the PCR mission, took the floor to extend his thanks, on behalf of the mission team, to MAFF and the project team for their warm hospitality, support and cooperation to make the PCR mission a successful one. He also emphasized the difference between the PCR mission and other IFAD missions during the project implementation in which the PCR mission team tried to package the PCR drafted by the PSU to reflect project actual results in IFAD's PCR template. He also highlighted subsequent steps of the PCR, and the required structure, format and appendixes of the PCR. He hinted that, with satisfactory performance and results of the project and its rich lessons learned IFAD Cambodia Country Program has intended to submit the PADEE's PCR for IFAD's award. Mr. Meng's intervention was followed by the presentation on the draft wrap-up note of the PCR mission's Leader, Mr. Peter Situ.

### III. Presentation of and discussions about the draft wrap-up note

Mr. Peter started his presentation on the draft wrap-up note by appreciating the warm hospitality, support and collaboration the mission received from all concerned stakeholders, including MAFF, PSU, PIPs (FAO, SNV and iDE), Provincial Department of Agriculture, Forestry and Fisheries (PDAFFs), beneficiary groups and communities, etc. Before moving on to present the pre-circulated draft wrap-up note, he stressed that the note was prepared based on meetings, discussions and consultations with all concerned stakeholders, field visits to the provinces of Kandal, Svay Rieng and Prey Veng, and a good pre-wrap-up meeting with the PSU.

Mr. Peter was brief in his presentation on the draft wrap-up note. He briefly walked the audience through major sections (relevance, effectiveness, efficiency, sustainability, lessons learned and knowledge generated, and preliminary conclusions) of the draft wrap-up note by focusing on key statistics, summarizing main points and key messages, and rating of the project performance.

### IV. Feedbacks and comments

Besides praise and appreciation and sharing of positive experiences gained from the project by several partners and PDAFFs, questions for clarification were raised and relevant feedbacks and comments on the draft wrap-up note were provided. Questions for clarification, comments and feedbacks relate generally to: (i) sustainability; (ii) adoption, replications and scaling-up of PADEE's successful interventions and recommendations; (iii) data correction and wording; and (iv) transfer of assets and human resources from PADEE to ASPIRE.

#### **Sustainability**

Comments and questions regarding sustainability centered on IGRFs and extent of support from ASPIRE that were not detailed in the draft wrap-up note.

### **Adoption, replications and scaling-up and recommendations**

There was a common understanding, recognition and acceptance that successful initiatives (e.g., value chain clusters) should be taken onboard, replicated and scaled up by ASPIRE and other projects. But MAFF recognized that ASPIRE alone might not be able to do much because there are other areas it has to deal with and it has to do only what fall under MAFF's responsibilities. For example, support to IGRFs could be in extension or agricultural cooperative capacity strengthening.

Gender and nutrition activities brought about positive impact, i.e., poverty reduction, only when MoWA and MAFF worked together in target communities. Awareness raising by MoWA alone on gender and nutrition with the communities do not interest them when there are no associated activities to help them to improve their food production or to increase their incomes (that concerns MAFF's responsibilities). MoWA does not know what its roles are in ASPIRE; but it is prepared to collaborate with MAFF on these aspects.

Lots of good lessons were learned such as CLC/F2F, MIS, MbWin, MFA, etc. But recommendations are very short. The recommendations should be expanded to include these good lessons, modalities and knowledge generated.

### **Data and wording**

Number of Mother-to-Mother Networks established is not 33; more than that. The 33 M2MNs are the outstanding ones that MoWA has identified and selected for a study (Para 33).

Number of IGRFs that have graduated should be revised down from 278 to 246 (Para 9).

When the wrap-up note noted that value chain is very new to MAFF and MoWA, it sounds unacceptable. MAFF and MoWA might have done this before and currently in other projects (Para 29), but maybe, not well structured. The statement should be softened or rewritten.

Institutionalization may be confused in Cambodian context as usually people consider institutions belong to the Government, but in the draft wrap-up note it is meant for smallholders' or poor households' organizations. Therefore, institutionalization should be understood this way.

### **Transfer of assets and human resources**

All assets and equipment should be inventoried. Transfer only good, usable assets and equipment. Those assets and equipment that are beyond their useful life should be removed from the inventories and discarded. Do not transfer valueless assets and equipment to ASPIRE.

The wrap-up note should be specific about support to be provided to S-RET by ASPIRE (e.g., coordination, administration, M&E, procurement, or reporting).

TAs, drivers and CEWs to be taken onboard by ASPIRE should be only the well-performing ones. The underperforming TAs, drivers and CEWs should be dismissed.

## **V. Responses (of the mission team, PSU and implementing partners)**

### **Sustainability**

ASPIRE's support to the IGRFs should be a stopgap solution. Then by 2021 when ASPIRE approaches its conclusion a review of the IGRFs shall be reviewed and, if needed, further support shall be identified. The IGRFs cannot be helped forever.

The IGRF performance was impressive. They performed so well. However, it is a challenging model. Past experience was not good. Issue originated in the design. In future design, exit strategy should be required.

Fortunately, in PADEE sustainability of the IGRFs was considered early on by MAFF/PSU and FAO. IFAD Country Office was supportive of that. Relevant activities were initiated and implemented (e.g., financial literacy training, group management training, transformation into and registration as ACs, group/AC federation), which point to the direction of sustainability.

The mission cannot prescribe what ASPIRE should do with or for the farmers/groups (or for S-RET). ASPIRE should let them tell it what are possible. Sustainability comprises four main aspects, including operational, financial, social and institutional (let alone environmental). ASPIRE may want the ACs to work on business plans or just register themselves in local government system which could offer a check-and-balance function. But this is up to the agreement between the groups and ASPIRE.

The form that the IGRFs would take in the future might depend on the country's legal environment. The development of the MFI sector is an example. What a project can do is to help mitigate risks and protect the beneficiaries' interests and benefits.

Critical assistance that the ACs/IGRFs need from ASPIRE for their sustainability includes (PSU & FAO):

- Agricultural extension service as their members depend on agricultural livelihoods. When they can earn from their livelihoods they can repay their loans and sustain their IGRFs;
- Training on leadership;
- Enforcement training on financial literacy;
- Training on group financial management; and
- Strengthening of ACURF (Agricultural Cooperative Union Revolving Fund).

#### **Adoption, replications and scaling-up and recommendations**

Of course, there are good practices and good business models in value chain cluster initiatives. Nevertheless, the mission cannot prescribe to ASPIRE as to which practices or models it should focus. Let farmers (and business entities) tell it what to select and support. (Be demand- and market-driven.)

Achievement on nutrition aspect should be congratulated. Nonetheless, future work may need to move beyond just nutritious and safe food, which was relevant under PADEE that was focused on enhanced production. ASPIRE may work beyond this and even M2MNs – a good driver of social marketing for improving nutrition – by promoting the use of high-value crops (or agricultural commodities).

#### **Data and wording**

The mission will confirm with PSU's M&E:

- About new number of M2MNs established and to make sure that physical output matches with financial expenditure.
- Update data on other outputs as suggested (e.g., number of IGRFs that have graduated).
- Wording and statements as suggested will be adjusted or revised (relating to MAFF and MoWA experience in value chains, institutionalization of community entities). Institutionalization in this note is meant about solidarity of the IGRFs. A suitable word will be used to avoid implication or confusion.

#### **Transfer of assets and human resources**

PADEE should work with ASPIRE on this. The mission agreed that only quality assets and equipment and well-performing TAs, drivers and CEWs should be transferred to ASPIRE subjected to results of their annual performance evaluation.

#### **General remarks**

The mission team took notes of comments and feedbacks and will address the relevant ones within the framework of PADEE and that fit to the PCR.

### **VI. Closing**

At the end of the meeting the chair tried to summarize some of the main points raised by the audience members and thanking IFAD for financial and technical support to MAFF to implement PADEE and ASPIRE. He closed the meeting by thanking all attendants for their attention and participation, and wished everyone a safe return home.

# **List of attendees at the wrap-up meeting**

<b>No.</b>	<b>Name</b>	<b>Gender</b>	<b>Position</b>	<b>Agency</b>
01	Meas Pyseth	Male	DSG	MAFF
02	Hok Kimthourn	Male	ASPIRE	MAFF
03	Sam Sovanna	Male	PPMI	PDAFF/Kampot
04	Loch Savoeun	Male	Admin Officer	PDAFF/Kampot
05	Hiev Tang	Male	PPCA	PDAFF/Kampot
06	Nget Sophea	Female	PPM	PDAFF/Takeo
07	Ouk Chantha	Male	PPCA	PDAFF/Takeo
08	Sok Bunheng	Male	Project Officer	MEF
09	Sou Leakheana	Female	Finance Officer	Svay Rieng
10	Khat Sokeng	Male	PPCA	PADEE/Prey Veng
11	Mut Sokunthea	Female	Admin Officer	PDAFF/Prey Veng
12	Sam Sarun	Male	PPM	PDAFF/Prey Veng
13	Chhorn Sokha	Male	PMEA	PADEE/Prey Veng
14	Duong Kimchhean	Male	PMEA	PDAFF/Kandal
15	Eun Sophoan	Male	PPM	PDAFF/Svay Rieng
16	Heng Sela	Male	-	PCG
17	Sam Visaom	Male	-	PCG
18	Chan Noeng	Male	PMEA	PDAFF/Takeo
19	Pha Sroy	Male	M&E	PDAFF/Svay Rieng
20	Nop Sophary	Female	M&E	PDAFF/Kampot
21	Thach Ratana	Male	PPD	PDAFF/Svay Rieng
22	Phol Somaly	Female	Admin Officer	MAFF
23	Hak Chanthavy	Female	Finance Officer	MAFF/PSU
24	Kheng Thavy	Female	Finance Officer	MAFF/PSU
25	Duongchan Sereivisal	Female	Advisor	SNV
26	Marieke van Schie	Female	Project Manager	SNV
27	The Chhunhak	Male	DDG	MoWA
28	Emily Coleman	Female	Rural Finance Consultant	IFAD
29	Peter Situ	Male	TL	IFAD
30	Meng Sakphouseth	Male	CPO	IFAD
31	Chan Sophal	Male	Consultant	IFAD
32	Ouk Sovanna	Male	Finance Officer	PDAFF/Kandal
33	Leng Sokunthea	Female	M&E	PDAFF/Kandal
34	Say Prumny	Male	MIS	PSU
35	War Samnang	Male	TA	PSU
36	Hing Sokunthy	Male	PPCA	PDAFF/Kandal
37	Ann Chansopheak	Female	Approving Officer	FAO
38	Hor Sophal	Male	Deputy Director	PDAFF/Kandal
39	Chheng Vibolrith	Male	Assistant	ASPIRE/MAFF
40	Seng Tuy	Male	Deputy PM	PADEE
41	Py Sear	Male	Admin Officer	PDAFF/Takeo
42	Mao Narith	Male	NM&E	PADEE
43	Pen Vuth	Male	Project Manager	PADEE
44	Srey Chanthay	Male	Consultant	IFAD

## Appendix 15: Case studies

### Case 1: A dream came true

Ms. Chen Neath was a widow and had two dependents to take care of. One was her 8-year-old boy and another was her elderly mother. She was a member of the IGRF of Rumdenh village in Svay Rieng province, which was established in mid-June 2012 when PADEE started. She lacked financial resource for and knowledge about raising chickens. As a single mother, keeping chickens was the best choice for her as it is a farm micro-enterprise that could be run in her backyard, while she looked after her two dependents and did not require so much land. With a loan from the Rumdenh village's IGRF and training on improved practices for chicken raising given by the PADEE, she realized her dream.



Prior to joining the PADEE, Ms. Chen was able to keep only two chickens and frequently the chickens died of diseases before she could make any sales. It was quite a big challenge for her. With the loan from the IGRF she was able to acquire more chickens and appropriately following the technical practices she learned allowed her to have good results. From her first sales, she made 100,000 riels (about USD25.0). She later diversified her livelihoods by adding cricket raising as her new farm micro-enterprise.

Keeping chickens and crickets was good for her; these farm micro-enterprises let her earn a decent income while staying very close to home to take care of her loved ones, her young boy and elderly mother. Ms. Chen had a bigger plan for her family and was increasing investment in and expanding her two farm micro-enterprises.

## Case 2: No need to migrate for job

Mr. Khut Khoeun was a hardworking farmer in Krasa Chet village of Prey Veng province where migration rate was very high. Mr. Khut was unique in his village. While almost all farmers in his village loved using agrochemicals in their farming, Mr. Khut followed chemical-free farming practices; he went for organic production. His villagers considered that agrochemicals were very important for maximizing their yield and thus income. For Mr. Khut, agrochemicals created more problems than benefits.



Mr. Khut was not only the farmer who practices chemical-free farming, but also a role model for his villagers. He joined the IGRF of his village which was established by PADEE in mid-2012 and was elected its head. Before joining the PADEE, Mr. Khut was trained by an NGO and was sent by the NGO for a training on organic farming in Thailand. He was very well-known and highly respected by his villagers for his hard work and innovative practices. He was always eager and ready to share his knowledge and skill with his villagers.

Mr. Khut proved to his villagers that chemical-free agricultural production was better and more profitable. His produce was always pre-ordered by buyers in Phnom Penh and other provinces. Via a platform created by his IGRF he was able to share his techniques and experiences with new and enthusiastic generations of farmers in the village. Mr. Leap Sava was one of them. He was in his early 20s. Instead of migrating to Thailand for a job like his sister, brother and friends and other villagers, Mr. Leap stayed behind in the village and believed that he could be, at least, as successful as Mr. Khut, while trying to absorb as much learning as possible from what the PADEE offered.

Mr. Leap was tempted. At one point, he almost gave up his farming and was going to follow his sister's and brother's footsteps. But when PADEE arrived and with guidance from the successful farmer like Mr. Khut, his hope for making his farming a small business, not just for subsistence, seemed reachable. Mr. Leap started growing a variety of vegetables to supply market not just in his provincial town but also to Phnom Penh. Thanks to the techniques he learned from the project and to the guidance of Mr. Khut. If not constrained by water shortage during the dry season, Mr. Leap would have produced his vegetables year-round.



### Case 3: A successful IGRF

Like all the IGRFs created by PADEE, the one in Trapaing Kchao village of Takeo province always had a banking day on which all 50 members gathered together to settle their loans and pay interests to their governing board. They usually took the opportunity on this day to share with each other their new/learned knowledge and experiences, review cash flows and financial position of their group and continue building and strengthening their solidarity.

The IGRF of Trapaing Kchao village was set up in mid-2012 when the PADEE started. The head and governing board of the group was chosen in a democratic manner by the 50 members more than 50% of whom were women. Together, the 50 members defined the group's rules and regulations and decided on revolving fund management (including setting interest rate, defining amount allocated for operational costs, group's capital formation, members' dividends and emergency fund).



Members of the group received training provided by the PADEE on basic financial literacy, small farm enterprise planning, improved agricultural techniques (in production of rice, crops, livestock, and fish). With loans they obtained from the IGRF they were able to try the learned knowledge and invest in profitable small farm enterprises. Although it seemed that individual members had to generate their own small farm enterprise plans to use the loans they received from the group, in fact, the governing board members also helped them, and *vice versa*. In addition, the governing board members monitored and supported individual members' implementation of the plans.

Helping each other and working together enabled them to achieve group's goal, strengthen their bond and solidarity as well as build harmony. Also, working on their planning together allowed them to coordinate their farm enterprises and avoid duplication that could cause excess supply. The members invested their efforts and loans in diverse small farm enterprises, including crops, livestock and aquaculture. Many of the IGRF's member household saw their migrating family members coming back for, joining forces in, and pursuing diligently their new farming initiatives. Each member engaged in the initiatives was able to earn up to 20,000 riels (or USD5) per month.

Member households changed their behavior and farming practices. Many members began turning their paddy fields to vegetables growing. Those who established and managed their vegetable home gardens increased their productivity significantly, and not only improved their family food security and nutrition, but also generated some good cash earning. They learned of vaccination and veterinary cares for their livestock, especially chickens; and they applied the knowledge. They kept more chickens and raised them well; many households could earn up to 700,000 riels (or USD175) per sale each month.

Most of the farmers considered that they could never grow any fish in their village. But some started trying after receiving the training from the PADEE. Many were successful in their efforts and proved that pond aquaculture worked in their village and gave them good earnings. Many of them began improving their fish ponds so that they could increase the stocking capacity, productivity and earnings.

#### Case 4: Why low adoption rate of technology

Trial and error, at small scale, is acceptable effort and can be one of the best approaches in development field before scarce resources and critical efforts are committed. But failure from the trial and error initiative has to be learned and lesson has to be turned into opportunity and practice.

In Prey Pon village of Prey Veng province, most households relied completely on rice farming for their livelihoods. PADEE supported and facilitated its target households to set up an IGRF. Through the IGRF, the PADEE delivered a modularized training on improved agricultural practices and techniques, which were intensive, extensive and time-consuming. The training modules covered rice and vegetables production, chicken raising, aquaculture, basic financial literacy, small farm enterprise budgeting, nutrition and gender equality.<sup>45</sup> After participating in the training, individual members of the IGRF became eligible to receiving small loans to start small farm enterprises that they wanted to pursue in order to improve their family living conditions.



Although the PADEE and these farmers invested significantly in the training and planning, the farmers did not change the way they did their farming. They did not intend to neglect what they learned and planned completely. However, they faced challenges. Their interest and concern was fixated on rice production even the training covered so many grounds. The training was very intensive and extensive demanding a lot of time from the farmers, which conducted during the farming season. In addition, the training was not adapted to and friendly for farmers who generally had limited education or were illiterate.

As a result, different persons from each target households, who could only find some spare times came to the training. Also, the trainees had to possess some basic literacy in order to be able to take notes and read training materials. In many cases those who came to the training were not the ones who really did farming. This means that not the right persons learned of the new and improved techniques and practices introduced by the PADEE; and thus limited or no applications of such techniques and practices. This was a bitter experience and lesson for the PADEE and the target households.

Such issues arose due to lack of a system to ensure that training was customized and provided to the right persons, training time suited to availability of the target beneficiaries. This failure reflected the nature of demand-driven approach to delivering extension service. Same issues were faced with by other groups at other locations. Nonetheless, this happened mainly in the first half of the project and remedial measures were taken as the project implementation progressed.

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<sup>45</sup> Basic financial literacy and small farm enterprise budgeting are part of “basic small farm business planning”.

### Case 5: Mushroom makes a difference

Ms. Chea Sakorn is married. She has two children and an elderly mother to look after. Her family lives in Srah Keo village, Kraing Svay commune, Preah Sdech district in the province of Prey Veng. Her husband is a construction worker who is away from the village for most of the time.



Ms. Chea and her neighbor in her mushroom hut

Ms. Chea's family owns 2.0 ha of paddy land. The family lives in a wooden house on stilts with tiled roof. They possess an old motorcycle and a well on their property. They keep four chickens.

While her husband works in the construction job, Ms. Chea works on farm growing rice and mushroom. She grows mushroom mainly for sale. She was selected and enrolled as a PADEE's beneficiary in 2013 and has been a board member of her IGRF.

In one growing cycle, Ms. Chea can make 836,229 Riels (approximately, USD 209.0) from her mushroom production. She funds her mushroom production business with her own financial resource (35%) and her loan with her IGRF (65%). Ms. Chea has a successful and profitable mushroom production business. Her success has inspired many local farmers; and she has shared her experience with them. Now, 15 local farmers who used to be migrant workers are following in her footsteps.

## Case 6: Quality produce, healthy environment

Ms. Sieng Lykieng was born on January 1st, 1970. She is married with three children. Two of her children are now being enrolled at universities in Phnom Penh. Her youngest son is still with her and in the local public high school.

Ms. Sieng's family lives in Baren Leu village in Svay Proteal commune of Sa-ang district in the province of Kandal. Majority of villagers in Baren village traditionally depend on vegetables growing as their livelihoods; and as of late they usually overused agrochemicals such as insecticides and chemical fertilizers.

Ms. Sieng was married in 1992. Six months following the marriage the couple began a small enterprise, making metal containers, in order to generate additional income to that derived from their vegetables production. Both of them are equally involved in both vegetables production and metal container fabrication.

Ms. Sieng became a beneficiary of the project for four years until it was closed. She received training and 50% of the total cost for building a UV plastic and net house for her vegetables production when she became a member of a vegetables value chain cluster. The cluster began only a year and a half before the project was finished.

Instead of building one UV plastic vegetables production house equipped with fans for her on-demand daily farm workers, she built two side by side. Many vegetables growers in her commune use the technology as it proves beneficial and profitable. Those who adopt the technology tend to go organic and have secure contract with buyers at very good prices.

For growers who do not adopt the technology, at least practice GAP in their production. Each reduces significantly the application of agrochemicals. Five years ago, one might not find any net houses for vegetables production in the area, and might instead smell the smell of the agrochemicals, especially insecticides. Now vegetables net houses add beauty to the commune and the smell of agrochemicals is much less. Local growers feel that they are healthier. Ms. Sieng's family feel the same and she talked proudly about the change in farming practices. From each of her field under the net houses she saved 400,000 Riels (USD100.0) per production cycle from agrochemicals and her family members visit health clinic less frequently.



Ms. Sieng's twin vegetables plastic houses



Ms. Sieng and her spouse in their vegetables plastic house



## Case 7: Healthy porridge and children's health

Ms. Chhoeng Sophon is 26 years old. She was married 6 years ago. She has one daughter, 6 years old, and a son, two years old.

Ms. Chhoeng's family lives in Tuol Sala village in Sa-ang Phnom commune of Sa-ang district in Kandal province. Like majority of the families in the village, her family is landless and thus relies mainly on non-farming occupations, specifically factory and construction jobs.

When she had her first child, she was working a factory job and her husband was working as a construction worker. She left her daughter with her mother in the village a few months after delivery and went back to her factory job. At the age of one year old her daughter caught serious fever resulting in her loss of hearing and speech.

Later on, she decided to stay home with her daughter and looked after her who never recovers her hearing and speech. Then PADEE began nutrition campaign in which nutritious porridge cooking was demonstrated. She attended the demonstration and began making the porridge for her daughter. She later had a son, and started feeding him regularly with the nutritious porridge since he was 6 months old. Her son is now two years old.

Ms. Chhoeng returns to her factory job to help raise her family and continues feeding her two children with the nutritious porridge. She explained:

"I have to work to get money for our family. I need to help my husband. He alone cannot raise all of us. In this village all of us purchase nearly everything, including water for home usage.

We need cash to buy everything since we are landless. We have to have money to buy needed produce and ingredients such as rice, pumpkin, cooking oil, meat, fish, amaranth, sugar, salt and ajinomoto (monosodium glutamate) to prepare healthy porridge for our children.

The porridge is good for our children's health; it makes them healthy. They are not as sick as other children who are not fed with it. My daughter is perhaps one example. She began to have it only when she was one year old, after she was affected by that serious fever.

Feeding healthy porridge to our children is a good practice and very good for our children; and when they are healthy we can save money on common illnesses."



Ms. Chhoeng Sophon in black T-shirt with her daughter and son by her side joined by two other mothers in a discussion about her experience in feeding her children with healthy porridge



A feeding session in Ms. Chhoeng village

## Case 8: From farms to high-end markets

Svay R eng Agricultural Cooperative (SAC) was established in 2011 with support of Ivy, a Japanese Volunteer Organization. The cooperative focuses on vegetables value chain, and two years ago it received financial and technical support from Japanese Embassy to build a vegetables collection center. The center is saddled on a community's property.

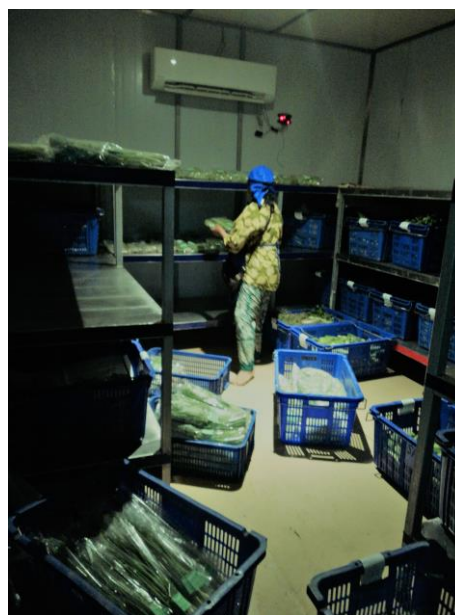
SAC has 348 farmer members, including 20 farmers who are also vegetables collectors. The members come from 59 villages of 18 communes in five districts of Svay Rieng province. At least 50% of the members are women. ***Of the 348 farmers 50 are PADEE's beneficiary farmers. PADEE's farmers started to be engaged with the SAC five years ago.***

SAC's members grow 63 varieties of vegetables, which are supplied to SAC's vegetables collection center. The center is manned by 6 persons and equipped with a cold storage room with a capacity of one tone, and two trucks; one is equipped with cooling system for long-distance transport of vegetables. The operation manager of the center is a young, dynamic woman.

Every two days the collection center ships more than 600.0 kg of vegetables to Aeon Supermarket and some to Natural Garden's outlets in Phnom Penh,<sup>46</sup> via its cold truck.<sup>47</sup> It supplies about 300.0 kg of its vegetables to casinos' restaurants in Svay Rieng's Bavet town that is located along Cambodian-Vietnamese border to the east.

The supplies to Aeon Supermarket are all organic vegetables produce certified by Cambodian Organic Agriculture Association (COAA). The supplies to NG and casinos in Bavet town are generally vegetables produced based on Good Agricultural Practices (GAP). Produce's farm-gate price for farmers is 300-500 Riels (or USD0.1-0.12) a kilogram above going farm-gate prices, depending on types and varieties of their produce.

Monthly costs and expenses of the collection center is 25 million Riels (or USD6,250.0), including 1.0 million Riels of operating costs. The center makes a net profit of 1.0 million Riels after taxes and incentives to staffers. The center is looking to expand their supplies from their member farmers through increasing productivity and coping with seasonality by expanding cultivated area and reengineering or remodeling waterlogged fields that allow for year-round cultivation<sup>48</sup> and by recruiting more vegetables-growing farmers in order to meet unsaturated and increasing demand for vegetables in the country.



SAC cold storage facility



SAC cold truck

<sup>46</sup> Aeon Supermarket is invested by Japanese. Another Aeon Supermarket was opened in early June 2018. Natural Garden is one of the high-end food products retail stores in Cambodia. It has several branches in Phnom Penh.

<sup>47</sup> SAC cold truck has a load capacity of 1.5 tons. But it does not have enough vegetables for full load each time. SAC is run below its full capacity on all fronts because farmers cannot supply sufficiently.

<sup>48</sup> SAC famers want to convert their rice fields for vegetables cultivation by building net-houses, raised beds and ditches for drainage to cope with rainy season, and ponds to harvest rainwater.

## Case 9: No more hunger

Ms. Chuon Sam is married with four children. Her family lives in Lvea Em district of Kandal province, which is separated from Phnom Penh, the capital of Cambodia, by the Mekong.

Ms. Chuon's family has inherited a small parcel of land from her mother where her family plants rice and sedge for mat making. Too small rice land, with low productivity, to produce enough rice for her family. Too poor to access any loan, even from neighbors – let alone the MFIs – to improve her family mat-making business she learned from her mother. Even her wealthy villagers were unwilling to lend her any money.

Every year prior to 2013, she went to bed hungry, with her spouse, several times per month while trying to raise her four children and keep them at local public schools with the hope that they would one day have better lives.



Ms. Chuon preparing snacks for a group meeting

In 2013 her family was recruited by a project (PADEE) to be one of its beneficiaries. Agricultural training has been one of the project interventions. Her spouse attended the training on improved techniques of rice and vegetable production provided by the project. Her spouse applies the learning to his rice crop he grows on their land in deepwater condition, which is always inundated during the wet season. Rice yield has been better; but given the very small land they have they cannot produce enough rice for the family of 6 persons.

Another key intervention of the project has been group revolving fund. The group revolving fund has been benefiting 50 households in Ms. Chuon's village. The revolving fund was disbursed in three tranches over several years. Each tranche is not large, only \$80/household. But this small amount really helped change the fate of her family around. All the three tranches amounted to \$240/household. This amount of money is lent to the group's members with an interest.

Part of the money Ms. Chuon's family borrowed from the group revolving fund has been used for improving rice production and her family mat-making business. Ms. Chuon, among many members of the group revolving fund, attended several training on improving the mat design and purse making offered by the project.

With the money her family borrowed from the group revolving fund she has been able to improve and expand her family mat-making business. Her family living conditions are so much better now. Her spouse and she never go to bed hungry again. She can now have a good savings and lend her family savings to some villagers. Her two sons and daughter, each over 20 years old, completed their studies and are now working. Her youngest daughter, who is now 18, will complete her study, and may continue to university.

Ms. Chuon is just one case. All of her mat-making group members, 42 of them, are just like her. Their family living conditions have been improved due to support from the project.



## Case 10: A young man with creativity

Mr. Srien Sreu is now 28. He lives in Trapaing Chork village of Kok Kung Lech commune in Kanhchriech district of Prey Veng province where PADEE began its interventions in 2015.

Mr. Srien was married in early 2018. He used to migrate to Phnom Penh for work. He joined the project as it commenced, and became a leader of his vegetables cluster, which was created in June last year.

After marriage, Mr. Srien received a piece of land - a small rice field - from his parents who are farmers. The land is 1,000.0 square meters where his father used to grow rice during wet season and water convolvulus during dry season. His father installed a tube well so that he could have water for growing the water convolvulus, i.e., morning glory.

Like other beneficiaries of the project, Mr. Srien was given training on various topics in farming and enterprise budgeting. He is interested in and serious with vegetables growing that has been practiced in his commune and compost making. He produces very good compost. Farmers and his cluster's members want to buy his compost; he can make only for his production at this stage.

In order to cultivate vegetables he needs to have suitable land that is not waterlogged during monsoon season. He thus decided to convert half of the paddy field he got from his parents to make it suitable for vegetables production. He has the same plan for the remaining half. He hopes that in two years-time, maximum, he will save enough money from his vegetables enterprise to convert and invest in the remaining land.

Mr. Srien used his own labor to build raised beds, ditch drains, etc. to make the field fit for growing vegetables year round. When the project helped set up his vegetables cluster, he not only was chosen as the cluster leader, but also volunteered to showcase vegetables production in net or UV house. Like other five volunteers for the new techniques of vegetables production, Mr. Srien received 60% of cost for building his vegetables net house. While members in his clusters continues growing conventional leafy types such as pokchoy, soysum, savoy, etc., Mr. Srien grows cabbage, the very first cabbage crop his villagers see growing in their community. Mr. Srien and his members in the cluster who grow their vegetables organically have contracts with Natural Agricultural Village, the wholesaler in Phnom Penh. Their organic produce fetches a price range of 3,000.0-3,500.0/kg (or USD0.75-USD0.87 per kg), while non-organic produce can command a price of only 1,000.0-1,500.0/kg (or USD0.25-0.USD37 per kg). One noticeable change in agronomic practices of non-organic grower members, though, is they follow GAP that reduces application of agro-chemicals, which is good for the environment, their health and consumer health.



Mr. Srien and his vegetables field



Mr. Srien and his father with his field in the background



### Case 11: Innovative, risk-taking farmer

Ms. Haen Kunthea is 33 years old. She is married with two young sons. She is pregnant and will deliver soon. She is responsible for most of her family farming; the family is not part of the IGRF. Her husband, Mr. Minh Kongkea, is a construction worker who was very mobile until about two years ago. He migrated to Phnom Penh and frequently to Thailand for work. Ms. Haen finished grade 6 and her husband completed grade 11.

Nearly two years ago when he came home to help his wife with farming tasks during monsoonal season - the rice cultivating season of the year - Mr. Minh heard of a planned training on non-land-based farm livelihoods to be offered by the project. He expressed interest and was invited to attend the training that covered, among others, cricket raising. He was so attracted to the cricket raising and while in the training he tried to consolidate his newly acquired learning by watching relevant videos on Facebook.

Mr. Minh shared everything he learned with his wife and planned to start the cricket raising enterprise. He discussed his passion and plan with his wife, who manages family finance. Ms. Haen records nearly everything related to family earning and expenses since day one of their marriage. Her husband gives to her all what he can earn.

Ms. Haen agreed with her husband to pursue with the plan for their new enterprise. It is also new to their whole village. Ms. Kunthea was faced with one big problem. Her family's savings were not adequate for the investment. She and her husband decided, therefore, to take out loan from an MFI, PRASAC. They borrowed USD1,000.0 at 1.5% per month interest rate. They are in their cricket business for one year now.

Ms. Haen husband continues to migrate for construction job, but less frequently and only to Phnom Penh. He spends more time at home to take care of their cricket enterprise and transport their cricket harvest to a popular market in Neak Loeung, which very far from their village.

At the present, they still live in their old house next to their cricket farm, which was built long time ago. Their cricket farm is not just only new, but is of much better quality and durable than their house. It is actually more expensive than their house.



Ms. Haen and her husband with their house in the background



Ms. Haen showing a visitor how to prepare for hatching crickets in her cricket farm

## Case 12: Nothing is perfect

Ms. Yoy Thy is 37 years old and married with three children. She completed grade 12 and is a full time farmer. Her husband is a high school teacher in their district; he helps his spouse with farming in his spare time. They live in Prey Khnes Kor village of Prey Khnes commune in Mesang district in the province of Prey Veng.

Ms. Yoy was recruited, among her villagers, as a project beneficiary in the second part of 2012. She received various training offered by the project on several topics such as crop production, livestock raising, financial literacy, entrepreneurship, etc.

Prior to joining the project Ms. Yoy grew rice and kept a pig and a few chicken (the chickens were always let stray). She planted some vegetables for home consumption. Her family lived in a small dilapidated, wooden house on stilts.

Now, after five years with the project, the family has a nice wooden house on concrete stilts with tiled roof and floor on the ground paved with cement, which is freshly built.

After receiving relevant training with some basic material support for introduced technologies and with small loan from her IGRF, Ms. Yoy began growing vegetables for sales, and improving productivity of her rice crop. She also started hatching chicks for sales to her villagers based on very basic technique. She hatched about 100 of chicks every 21 days or so with fuel lamp's heat in spongy containers given by the project. This is a new livelihood for her.

When the project promoted and facilitated the establishment of a chicken value chain cluster in the commune she participated. The project then introduced a better hatching technology that uses electricity. Ms. Yoy and four other beneficiaries in the chicken value chain cluster in her commune were given hatching machines – electrical incubators – to try.

In the first month, which was October 2017, when they started using the machines everything was good. But in subsequent months until March 2018, while hatching was not a problem, the incubators consumed too much energy that cost her and four other innovative farmers who used the machines lots of money. The cost was unbearable. All of them decided to stop using the incubators completely.

They reported the issue to the project, and the organization in charge of the initiative – AVSF – responded. It advised that the problem was due to the energy under-supply in the area. A member of the VCC who tried the incubator got the power supplier to reconfigure his house's electrical network and install a brand-new electricity meter. That did not help. The power supply was below the threshold and unstable. All the five incubators are now left unused. Everyone switched back to the first introduced technology – hatching with the heat of the kerosene lamp.



Ms. Yoy's hatching box using electricity and lamp



Ms. Yoy's and her unused electrical incubator

When the technology was introduced to this particular chicken value chain cluster, AVSF did not assess its technical feasibility. AVSF admitted this later. It was going to introduce the same technology to another district – Ba Phnom – in Prey Veng. But when it checked on the level of power supply in that particular district, it came to the conclusion that same problem would be faced. Therefore, the organization deferred the initiative.

Note, however, that the same technology was introduced to the project beneficiaries in the provinces of Kampot and Takeo, and it worked so well because the districts where the beneficiaries used the technology did not have any problem with the power supply.



Ms. Yoy's old rundown house used to contain her chickens



Ms. Yoy's brand-new house and a mission vehicle



### Case 13: Failure is a good teacher

One of the outputs the project aimed to deliver, which was not in the original design, was vegetables collection points that helped to facilitate market access for farmers. The collection points were part of iDE's responsibilities. The collection points came later in the project implementation. All, but two, did very well.

The two non-functional collection points were set up in Sa-ang district of Kandal province, one in Sa-ang Phnom commune and another in Prek Ampil commune. The former was established in October 2016 and the latter in November 2016. Sa-ang district is one of the main vegetables producing districts of Cambodia, which is located close to Phnom Penh, the capital city of Cambodia.

The first collection point served 14 vegetables producers, and the second one served 11 of them. The producers dealt with the operators and owners of the collection points through contract farming arrangements. Despite such arrangements, the collection points became idle because the vegetables producers did not use them after 7-8 months into their operation. Factors or causes leading to their death are:

- Farmers needed financing for their investments and production. They always did not have enough cash of their own. They had to borrow from buyers who neither imposed any conditions nor required any collateral; their terms were that indebted producers sell their harvests to them. This was the obligatory arrangements.
- There were many produce buyers in Sa-ang district who competed against each other very fiercely. Therefore, producers could advance money from and sell their harvests to the high buyers who offered them best/most favorable terms.
- During the undersupply season, buyers offered prices higher than the prices locked in the contracts by the collection points.
- Producers did not honor the contracts with the collection points and follow the agreed practices recommended by iDE.
- Producers opted to acquire from local input dealers cheaper agricultural materials and inputs with lower quality compared with those sold to them by iDE.
- Some producers brought their produce to wholesale markets by themselves since the major wholesale markets are not far from their villages.

When the two collection points were shut down iDE set them up in Takeo. They worked well and producers were happy with the arrangements. Not many buyers were active at these other locations, which are far from marketplaces.



An operational collection point in Takeo



Farm produce at a collection point in Takeo

### Case 14: A sustainable pathway in consideration

Troak IGRF was established in Troak village of Ksaet commune in Kampong Ro district of Svay Rieng province in 2015. It has 50 members. Unfortunately, two members passed away in early June 2018. The IGRF has 9 board members.

Until June 2018 the group had gone through three loan cycles. All members also borrowed emergency loans in rotation according to their emergency. The emergency loans were very useful and important for the members. The group banking day took place on every 21st day of the month.

The group was one of the best performing IGRFs. Repayment rate was 100%. No late payment, lateness was by one hour maximum for certain members when they had urgent businesses to deal with or due to their busy working schedules.

Members had experienced improved living conditions. They were happy to have their withdrawal shares every year. Some members began to have savings with MFIs such as AMK. The group also keeps its bank account with AMK. Members used their surplus earnings for inputs, consumer goods (e.g., motorcycles, bikes, mobile phones, etc.).

Members of the group received training on improved technologies in pig raising, vegetables production, mushroom farming, aquaculture, rice production, etc. They also obtained training on financial literacy and livelihoods planning. The training helped change their mindset and practices.



Troak village IGRF's members receiving PCR mission team

In order to borrow members had to prepare and submit to the board their livelihoods plans; then the group met to discuss and decide on members' plans. Usually, there were funding gaps between members' plans and group's financing offers. When group fund was not adequately available, members might borrow from their relatives or possibly MFIs - six MFIs were active and accessible in the area. Members understood the constraints and fund shortage of the group. They did not have any problem with that. And group solidarity was strong and members helped each other.

The group financial products (livelihoods loans, emergency loans, etc.) were extremely important and useful for all members. The group functioned like a self-help group in which members helped each other. Without emergency loans it could be very challenging for members. It was difficult for them to access such loans from other sources. Many might be in heavy debt as they might need to take out shark loans. Emergency loans were like a buffer for the members.

Since the IGRF came into existence migration for jobs was significantly less as members had some financial resources and learned some good techniques for their livelihoods. Borrowing from informal sources and MFIs was reduced. Members preferred to borrow from the group to help build group capital and increase value of the group shares.

Nevertheless, the group was still an informal group. The board and the group members expressed interest in transforming their group to an agricultural cooperative. They had a big ambition for this after a recent visit of some of their board members to a successful agricultural cooperative and shared the story with the members.

The members considered that agricultural cooperative was the good pathway for their group to become sustainable financially, operationally and institutionally. They firmly hoped that when their group became an agricultural cooperative, a formally registered entity, they can (a) further develop it by recruiting more members, and thus increasing the group financial capital, (b) build good linkage to market and (c) seek external support.

The board members also learned good lessons from well-performing IGRFs as regards their structure, management fashion, recording process, record keeping, their members' livelihoods, etc. They the learning with their members and everyone seemed to be enthusiastic about making their group the best one.