

Bhutan

Commercial Agriculture and Resilient Livelihoods Enhancement Programme

Supervision Report

Main report and appendices

Mission Dates: 18 November - 4 December 2017

Document Date: 29/01/2018

Project No. 1100001739

Report No. 4683-BT

Asia and the Pacific Division
Programme Management Department

Abbreviations and Acronyms

AI	Artificial Insemination
AMC	Agriculture Machinery Centre
AO	Accounts Officer
AOS	Annual Outcome Survey
ARDC	Agriculture Research and Development Centre
AWPB	Annual Work Plan and Budget
BTN	Bhutan Ngultrum
CAHW	Community Animal Health Worker
CARLEP Programme	Commercial Agriculture & Resilient Livelihood Enhancement
CEO	Chief Executive Officer
CM	Component Manager
CSA	Climate Smart Agriculture
CSO	Civil Society Organization
DA	Designated Account
DAMC	Department of Agriculture Marketing and Cooperatives (MoAF)
DAO	Dzongkhag Agriculture Officer
DoA	Department of Agriculture (MoAF)
DoL	Department of Livestock (MoAF)
DLO	Dzongkhag Livestock Officer
DPO	Dzongkhag Planning Officer
DT	Dzongkhag Tshogdue
FA	Financing Agreement

FCBL	Food Corporation of Bhutan Limited
FG	Farmer's Group
FS	Farm Shop
GAD	Gender and Development
GAO	Gewog Administrative Officer
GEO	Gewog Extension Officer
GNHC	Gross National Happiness Commission
GRPB	Gender Responsive Planning and Budgeting
GT	Gewog Tshogdue
ICT	Information, Communication Technology
IFAD	International Fund for Agricultural Development
KM	Knowledge Management
NCB	National Competitive Bidding
MAGIP	Market Access and Growth Intensification Project
MIS	Marketing Information System
M&E	Monitoring and Evaluation
MoAF	Ministry of Agriculture and Forests
MoEA	Ministry of Economic Affairs
MoF	Ministry of Finance
MSP	Minimum Support Price
MTR	Mid-Term Review
NEC	National Environment Commission
NGOs	Non-Governmental Organizations
NMC	National Mushroom Centre

NOP	National Organic Programme
NPD	National Programme Director
NPHC	National Post Harvest Centre
NPPC	National Plant Protection Centre
NPSC	National Programme Steering Committee
NSC	National Seed Centre
NSSC	National Soil Service Centre
O&M	Operation and Maintenance
OPM	Office of the Programme Management
PLaMS Planning and Monitoring System	
PLC	Programme Letter of Credit
PME	Participatory Monitoring & Evaluation
PPD	Policy and Planning Division (MoAF)
PPP	Public Private Partnership
PRR	Procurement Rules & Regulations
PSF	Production Support Fund
RAMC	Regional Agriculture Machinery Centre
RCA	Regional Centre for Aquaculture
RLDC	Regional Livestock Development Centre
RMA	Royal Monitory Authority
RAMCO	Regional Agriculture Marketing and Cooperative Office
RGoB	Royal Government of Bhutan
RIMS	Results and Impact Management System
RNR	Renewable Natural Resources sectors (<i>Agriculture, Forestry and Livestock</i>)

RPPF	Regional Pig & Poultry Farm
RUG	Road Users Group
SIF	Social Inclusion Fund
SLM	Sustainable Land Management
SOE	Statement of Expenditure
WA	Withdrawal Application
WUA	Water Users' Associations

A. Project Overview

Region:	Asia and the Pacific Division	Project at Risk	Not at risk
Country:	Bhutan	Status:	
Project Name:	Commercial Agriculture and Resilient Livelihoods Enhancement Programme	Environmental and Social Category:	B
Project Id:	1100001739	Climate Risk Classification:	3
Project Type:	Marketing/Storage/Processing	Executing Institution:	Ministry of Agriculture and Forests
CPM:	Lakshmi Moola	Implementing Institutions:	Food Corporation of Bhutan Ltd
Project Director:	Dorji Wangchuk		
Project Area:			

Approval Date	07/09/2015	Last audit receipt	31/12/2016
Signing Date	11/12/2015	Date of Last SIS Mission	04/12/2017
Entry into Force Date	11/12/2015	Number of SIS Missions	2
Available for Disbursement Date	01/03/2016	Number of extensions	0
First Disbursement Date	04/03/2016	Effectiveness lag	3 months
MTR Date	not available yet		
Completion Date	31/12/2022		
Financial Closure	30/06/2023		

Project total financing

IFAD Financing breakdown	IFAD	\$8,273,429
	Asia and the Pacific Division	\$1,060,596
	ASAP Trust Fund	\$5,022,615
Domestic Financing breakdown	National Government	\$5,773,849
	Food Corporation of Bhutan Ltd	\$4,802,410
	Beneficiaries	\$658,805
Co-financing breakdown,		
	To be determined	\$5,996,612
Project total financing		\$31,588,316

Current Mission

Mission Dates: 18 November - 4 December 2017

Days in the field: 8

Mission composition: Narasimhan Srinivasan - Mission Leader, Programme Management and institutions; Wafaa El Khoury, IFAD, Rome - Agronomist; Roshan Cook, IFAD, Rome – ASAP, Climate Change; Virginia Cameron, IFAD, Rome – Financial Management; Karan Sehgal, IFAD, Rome-Renewable Energy Technologies; Mehri Ismaili, IFAD, Rome – M&E, KM, Gender; Lakshmi Moola, CPM, Bhutan – Procurement

Field sites visited: Dewathang, Pemathang – Samdrup Jongkhar district Threlpu, Gomdar – Trashigang District Jamkhar, Koncholing, Bayling – Trashiyangtse District Ngatshang – Mongar district Autsho, Gulibi, Tsakaling – Lhuentse District

B. Overall Assessment

Key SIS Indicator #1	Ø Rating	Key SIS Indicator #2	Ø Rating
Likelihood of Achieving the Development Objective	4	Assessment of the Overall Implementation Performance	4
Effectiveness and Developmental Focus	4	Project Management	4
Effectiveness	4	Quality of Project Management	4
Targeting and Outreach	4	Knowledge Management	4
Gender equality & women's participation	4	Value for Money	
Agricultural Productivity	4	Coherence between AWPB and Implementation	4
Nutrition		Performance of M&E System	4
Adaptation to Climate Change	4	Requirements of Social, Environmental and Climate Assessment Procedures (SECAP)	

Sustainability and Scaling-up	4	Financial Management and Execution	5
Institutions and Policy Engagement	3	Acceptable Disbursement Rate	6
Partnership-building	4	Quality of Financial Management	4
Human and Social Capital and Empowerment	3	Quality and Timeliness of Audit	4
Quality of Beneficiary Participation	4	Counterparts Funds	5
Responsiveness of Service Providers	4	Compliance with Loan Covenants	4
Environment and Natural Resource Management	4	Procurement	4
Exit Strategy			
Potential for Scaling-up			

C. Mission Objectives and Key Conclusions

Background and Main Objective of the Mission

The Programme located in the relatively remote eastern districts of Bhutan is a key initiative in orienting rural people to markets and livelihood enterprises. Following the joint implementation support mission (ISM) conducted in March 2017, a supervision mission was fielded from 18 November to 5 December 2017 to assess overall progress as per the AWPB and follow up on the implementation of actions suggested by previous supervision missions. More specifically, the mission intended to (i) review component-wise progress; (ii) identify problems in implementation of action plans; (iii) address issues and bottlenecks in programme management; (iv) evaluate performance of partners; and (v) review the fiduciary and accountability aspects of the Programme.

The mission visited different villages, groups and households in five districts of eastern Bhutan – namely, Samdrup Jongkhar, Trashigang, Trashiyangtse, Lhuentse and Mongar (Pemagatshel district was not visited on account of logistic problems). Groups engaged in production of vegetables and milk, lead farmers, youth groups, Dzongkhag officials, Gewog officials and other functionaries were met during the field visits. The mission also visited Koufuku International dairy processing unit in Trashigang. An initial meeting with the Office of Programme Management (OPM) was held on 19 November. Further meetings were conducted with the Regional Livestock Development Centre (RLDC) on 22 November, with Agriculture Research and Development Centre (ARDC) on 27 November and with the Regional Agriculture Marketing and Cooperative (RAMCO) on 28 November to discuss and understand issues hampering timely delivery of activities on the ground. A teleconference with CEO, Food Corporation of Bhutan Ltd (FCBL) on 29 November was also held. A preliminary wrap-up meeting with OPM and other implementing partners was held on 30 November. A final wrap meeting was held on 4 December 2017, chaired by Dr Tashi Samdup, Director General, Ministry of Agriculture to discuss key findings and action points. The mission is grateful to the Royal Government of Bhutan (RGoB) and all other partners for their collaboration and support.

Key Mission Agreements and Conclusions

The Programme had commenced activities in all districts, with good participation from people. The implementing partners have been involved in several mobilisation and capacity building efforts. Youth groups seemed to show promise of entrepreneurial and commercial orientation. While production related activities had progressed rapidly, the market access aspects lagged behind. Different production initiatives undertaken were not based on a clear understanding of costs and returns at household, group and enterprise levels. FCBL, a key partner, was yet to attain readiness to undertake activities relating to marketing of produce from different groups. The dairy value chain is at risk due to the shortage of animals on account of the RGoB stipulation to buy cows within the country when quality animals are potentially in short supply.

Most actions suggested have a short term focus and have to be completed within three to six months. In order of priority the restrictions of dairy animals' purchase should be exempt for Programme households. Roles of FCBL and RAMCO should be clear so that future marketing efforts are properly planned and executed. The Programme should improve its monitoring and evaluation systems to measure results and impact, going beyond just activities. Throughout the Programme decision making on investments and activities should be underpinned by economic logic and a drive towards producing net benefits with wide dispersal over the Programme area. Apart from improving the different training curricula and methods, programme partners agreed to assess the effectiveness of training and use the findings in refining the next courses. Biannual grading of groups and development of group specific capacity building plan followed by implementation was also agreed with the programme. There was also full agreement on the need to analyse costs, incomes and economics of different investments before actually commissioning the investments such as milk chillers, polyhouses, transport vans, etc. To accelerate commercialisation, some pilots in vegetable marketing and integrated dairy units have been agreed upon. Some initiatives on bio-gas have also been agreed upon, especially integrating bio gas with improved cow sheds, larger cow farms as well flexi-bio gas units as pilots.

To support CARLEP over the next three/six month time frame, IFAD will field an implementation support mission in February 2018 and April/May 2018.

D. Overview and Project Progress

Component 1: Market led agricultural Production

Increased production resilience and diversification in agriculture: Vegetable and dairy farmer groups and individual households were supported to diversify their production and enhance their resilience. They were provided with different seeds, Napier grass slips and fruit tree seedlings by the Dzongkhags, ADRC and RLDC. They were supported for establishment of backyard poultry and piggery farms as also stone bunds and check dams to enhance sustainable land and water management.

Intensification and expansion of vegetable production: Farmers were provided with specialized training on staggered production, postharvest management and bio-pesticides besides regular extension support by the gewog extension agents and lead farmers. Support was also provided through the construction and rehabilitation of irrigation schemes (22.13 Kms benefiting 551 households and covering 609 acres), strengthening water user associations, land development (11 sites with a total area of 129 acres and benefiting 270 households) for enhanced mechanization. A total of 26 lead farmers (LFs) were trained (4 females and 22 males) led by ARDC and SJI in Samdrup Jongkhar using the lead farmer model with 3 intensive training sessions provided on crop management, postharvest, marketing and record keeping. Lead farmers are provided with starter kits that allows them to establish demonstrations on their farms. Six commercial vegetable production sites were identified and supported by ADRC (total of 58 acres) with farmer groups provided with vegetable seeds, polyhouses, irrigation pipes, water tanks, sprinklers, watering cans, and sprayers for covering more area under vegetable production. ARDC trained 17 farmers as seed producers and provided them with inputs for start-up activities in vegetable seed production.

The mission observed vegetable production in the field with well-established crops, carried out with training from CARLEP. Some mushroom production units, which seem very promising for income generation, were also supported. Polyhouses were mostly used for nursery seedling production for group members. Groups had not been made aware of optimal use of polyhouses and its commercial possibilities. There was rarely any mulching or composting practiced by farmers, and very little land and water management observed at the landscape level in these areas. Crops were seen suffering from insects and bacterial blight and farmers did not have adequate knowledge on controlling the problems. While the Programme reports on the quantities of vegetable produced and the income earned by farmers, it does not clearly indicate the incremental benefits in the production, productivity and incomes, post-intervention.

Intensification and expansion of dairy production: Dairy producer groups including the 8 newly formed groups (390 members) and youth groups were supported (160 households) for dairy intensification through import of 246 cattle from India, construction of improved dairy sheds along with silo pit (for 235 male and 138 female-headed households), provision of fodder seedlings, chaff cutters, and electric milking equipment in a few cases. Groups were trained in governance, book keeping, technical issues of livestock husbandry including nutrition, feed preparation and health. Training has been provided to graduate lead farmers (ToT) to train Community Animal Health Workers (CAHW). Biogas systems were often provided with cow-sheds, which is to be further scaled-up in future (800 biogas digesters planned). This cow shed-biogas digester combination is highly commended for enhanced integrated crop-livestock farming systems by converting animal manure into biogas for fuel and slurry for improving soil fertility. As in case of vegetable farming, incremental benefits accruing from Programme intervention have not been quantified, though necessary information is collected.

Where improved sheds and biogas units are installed, the design of cattle sheds as well as that of the biogas digesters could be enhanced and standardized so as to reduce methane emissions through better livestock manure management and increase fermentation and gas production levels. With the closure of BBP on 31st December 2017, an institutional restructuring as well as alternative sources of funding are being sought for supporting biogas activities to ensure the sustainability of these activities.

Innovation through ICTs

CARLEP has instituted an online reporting system using Google sheet which provides an interactive platform to improve the data quality through online dialogues and feedback hence increasing reporting system efficiency. Apart that, no ICT activities have been implemented. The Programme could benefit greatly from the use of hand-held tablets to be used by extension agents and district officers working directly with the CARLEP target group. The tablets would be equipped with all needed software and used for: 1) real time data collection (trainings, production, evaluation, etc) which could be directly uploaded into the central M&E system for quality assessment and for corresponding timely revisions and validation; 2) geo-mapping of villages and target areas of interventions; and 3) dissemination of information for users in the field including training material and technical information (data and photos of crop and animal pests and disease symptoms, nutrient deficiencies, soil fertility and water-related problems, etc).

Increasing outreach of extension services:

The **Lead Farmer (LF)** strategy is extremely useful to support the outreach of the extension agents as well as to create a potential mass of private extension service providers paid for their services. LFs met during the mission seemed to be working closely with the extension agents coordinating the trainings for farmers. Both had difficulties in convincing farmers to change their attitudes and cultivation practices. Differences were observed in the extent and type of support provided by LFs to their fellow farmers. The LF model does not have a system to make lead farmers to provide the training to fellow farmers either through incentives or otherwise. In order to incentivise the lead farmer to provide services to others and make the LF accountable for service delivery some adjustments on the present LF model would be needed. These include 1) the selection process of LFs has to be done based on their willingness and availability to provide extension services and the communities could also be consulted on their selection, 2) besides the technical skills, their training should include facilitation skills on how to deliver the training effectively, and 3) an undertaking from LF to deliver a training and extension services to an agreed minimum number of farmers.

Community Animal Health Workers (CAHW): These assist the extension agent and are able to undertake vaccination and support in animal healthcare. However, they lack the incentive and motivation to support their fellow farmers. CARLEP is now encouraging the CAHWs to be further trained to become a certified Community Artificial Insemination Technician which allows them to charge fees for their services and hence enhance their motivation for community support which is commendable.

Innovation through Permaculture and Biogas

The mission visited one climate smart village (CSV) and noted that permaculture has not become common knowledge. The lead farmers and extension workers will require more exposure and experience to be able to introduce permaculture practices. In case of biogas, there were several successful units run by individual farmers. Many of these had been supported under the ADB funded Bhutan Biogas Project (BBP) which will end in December 2017. But the department is confident of continuing the programme with other funds. Some pilots on integrated dairy farms with biogas units and flexi biogas digesters should be carried out under CARLEP (details in technical note).

Efficient and optimal use of irrigation water

CARLEP is to support development of climate resilient, water-use efficient and financially viable irrigation, including renovation of existing major irrigation systems of more than 70 acres. The mission noted that some old irrigation structures have been renovated and new irrigation facilities to some vegetable and youth groups provided. While sprinkler sets were more in use, drip irrigation was rarely provided; the difficulty of removing the drip pipes at the end of crop season cited as the reason. The irrigation structures - both new and renovated - have to be reviewed in light of climate resilient engineering norms, which have been stipulated in the irrigation manual. Capacity building in climate resilient irrigation structures for ARDC and Dzongkhag engineering staff is necessary.

Component 2

Value chain development and marketing support

Many of the groups seemed to be working well together, purchasing inputs jointly and using the common polyhouse for their seedlings, and saving, within the group, regularly and in some cases getting loans from the group; however they very rarely market as a group. Rather they sell individually to vendors that come to their village or in nearby markets, though usually at the same price for the same product quality. There is an absence of a clear marketing strategy and identification of specific markets for specific vegetables. The training and capacity building plans for the groups as well as their drive to work together has not been guided by market identification, crops in demand and their quality. As marketing assets will need to be profitable and sustainable, the mission observed that none of the investments were based on an economic and financial assessment of the investment.

Vegetable Value Chain: There is an absence of a clear marketing strategy and identification of specific markets with specific needs in terms of quantities and quality for specific vegetables. Joint discussions between the OPM, RAMCO, FCBL and the gewog agricultural extension officers on the market needs for vegetable groups in preparation of the AWPB for 2017/18 has been undertaken, resulting in prioritization of 9 crops with potential markets by FCBL. However, no specific quantities/crop needs with clear markets have been identified and set. As identified by RAMCO, the mission observed through discussions with farmers and extension agents, that postharvest losses are high in vegetables (assessed by RAMCO at 18%). The mission notes that the installation of post-harvest technologies (such as solar driers and evaporative cooling systems) could significantly lower postharvest losses by drying or keeping produce fresh for a longer time and enable marketing over an extended period.

Dairy value chain: The dairy value chain is relatively well organized. CARLEP has provided the dairy groups with common milk chilling facilities, 13 milk collection sheds and training. Support to link the farmer group to the Koufuku International company has been successful, however farmers are still not getting the highest prices for the milk due to high bacterial counts in milk. Farmer groups not directly linked to dairy plant of Koufuku International Limited, or other plants, were supported through provision of equipment for processing of milk. Some dairy groups are still having to bring back their milk from the market without being able to sell it fresh. They are not always able to assess the economics of whether to sell their milk fresh or process it.

Community cow sheds. The mission visited a youth group in which plan to purchase 12 cows and jointly manage the operations. This seems to be a potential strategy for the livestock production and milk distribution through communal cattle shed models equipped with a larger-scale biogas digester. This model has the potential to reduce transport time of milk from farm to collection point, improve disease control, nutrition and reproduction parameters, centralize milk collection as well as the delivery of training (for CAHWs and/or for groups i.e. on fodder plantation, silage pit, clean milk production etc.). Koufuku International was interested to support such an initiative in Trashigang.

On account of lack of clarity on how to deliver under their mandate, FCBL has made little headway in supporting CARLEP. In terms of its mandate, FCBL was to provide market options for farmers to sell their produce profitably. The farm shops are unable to offer viable prices to farmers and provide a 'last resort' support price. The three studies, (vegetable and dairy value chain studies and institutional capacity assessment of FCBL) have been completed as rapid assessments. The recommendations were general, incomplete in critical information and inadequate for the purpose. FCBL indicated that they do not intend engaging a long term consultant or international TA to accompany the process of transformation into an agricultural product marketing entity. It was indicated that FCBL has adequate internal competency to manage agricultural marketing and that they are supporting marketing through the farm shops. The 62 farm shops set up in CARLEP areas have bought a small quantity of farm produce from farmers valued at about BTN 1.88 million (2016/17). The prices offered by farm shops were more "last resort option" than competitive market prices and hence dis-incentivised farmers from approaching FCBL.

RAMCO has gathered basic information on production, quantities sold and potential buyers. It has also assessed the post-harvest losses of vegetables and conducts training accordingly. RAMCO also

continues to link farmers to institutions, such as schools. The mission also noted that several dairy groups are large enough to become cooperatives. While RAMCO is supporting marketing groups, the mission found that farmer groups are not adequately capacitated in order to ensure these graduate in to full-fledged cooperatives, that are subject to department of cooperatives' supervision. In addition, the hand-holding of farmer groups - in their interactions with traders- is currently missing. OPM together with RAMCO has also completed an assessment of all the farmer groups and cooperatives (for both vegetable and dairy value chains) in terms of their social capital, business skills and technical capacities and accordingly, graded them in three different categories; weak or at initial stage, intermediary and matured. The grading of groups should be conducted every six months in a comprehensive manner jointly by OPM, ARDC, RLDC and RAMCO. A group specific capacity development plan should be prepared based on the assessment and implemented.

Component 3

Institutional support and policy development

The mission noted that while this component has not commenced full-fledged activities, there is great potential for institutional support that could lead to policy development. Capacity building in staff at different levels could lead to improved appreciation of policy development, innovations and institutional support needs.

Agreed Action	Responsibility	Agreed Date
Facilitated Multi Stakeholder Platform		
Undertake a Facilitated Multi Stakeholder Platform and buyer-seller meeting for marketing improvements supported by an expert in the field (IFAD would provide the expert)	OPM and RAMCO with IFAD support	01/2018
Social Mobilisation		
Ensure availability of social mobilisation expertise either by hiring a suitable institution or an individual. With groups being the preferred mode of implementation, their cohesion, collaboration and discipline should be ensured	OPM	02/2018
Recruitments		
Hire an irrigation engineer, with expertise of climate resilience irrigation norms to train irrigation engineers of ARDC/Dzongkhags, in country, on the field; Hire an economist , full time as programme staff, to carry out cost-benefit analysis and feasibility studies of all CARLEP interventions, monitor economic impact and conduct policy analysis for taking up with RGOB and other national institutions	OPM	02/2018
Staffing		
Key staff, including PD, Component Managers, one representative from RAMCO and M&E specialist to undertake a field visit to the High Value Agriculture Project (HVAP) in Nepal to observe first-hand the development of the VC there (include a special visit of the OPM Component Manager - Dairy to observe the flexi biogas units piloted under the IFAD supported Adaptation for Smallholders in Hilly Areas (ASHA) project in Surkhet, Nepal)	OPM	02/2018

Market analysis		
Conduct simple market analysis of current and anticipated demand for dairy and vegetables at local, regional, national and cross-border markets	RAMCO supported by FCBL	03/2018
Milk quality improvement campaign		
In collaboration with Koufuku International, launch a milk quality improvement campaign in the areas adjacent to company plant to enhance milk quality received from relevant dairy groups	OPM Component Manager - Dairy with RLDC and Koufuku	03/2018
Pilot: testing of fresh chilli cold storage		
FCBL to test the possibilities of cold storing fresh chillies in the Samdrup Jongkhar facilities for some time to be sold at higher prices when the produce is not available. FCBL to work closely with ARDC, RAMCO, National Post Harvest Centre to test the quality of the product when stored for different durations in cold storage. Pilot is subject to completion of technical and financial viability study	FCBL in collaboration with CARLEP Component Manager - Agriculture, ARDC, postharvest institute	03/2018
Enhancing the vegetable and dairy producer groups		
Implementing partners should undertake an assessment, every six months, and grade groups based on their performance,. Prepare group specific capacity building plan based on the grading.	OPM and RAMCO	03/2018
Marketing skills		
Enable the farmer groups to acquire appropriate marketing skills with hand holding/coaching	RAMCO	03/2018
Intensification and expansion of dairy production		
Support the inclusion of biogas digesters with the improved shed construction during 2018 (anticipating the 2019 budget for biogas) and enhance the design of both systems (as per technical note provided); Test 6 flexi biogas units within CARLEP targeted areas as a pilot, through international technical assistance, with rigorous monitoring in terms of social (acceptance towards technology), technical (high gas production volumes), economic (affordability) and environmental (reduced deforestation rates) aspects	OPM Component Manager - Dairy with RLDC	03/2018
Market infrastructure		
Investments in market infrastructure should be preceded by an economic and financial analysis of viability	OPM	03/2018
Intensification and expansion of vegetable production		
Include within the Lead Farmer (LF) training curriculum interventions on the optimization of integrated of crop-livestock farming systems and facilitation skill for training of farmers, including farmer narrated instructional videos	ARDC	03/2018

Optimal use of polyhouses		
Provide a production plan and schedule to groups for making optimal use of polyhouses and get the best economic returns from the investment; include this as part of group training curriculum	ARDC	03/2018
FCBL & RAMCO		
MoAF to provide IFAD with clarity on the future roles of FCBL and RAMCO	MoAF	03/2018
Increasing outreach through Lead Farmers		
Consider enhancement of the LF model with the following: 1) community involvement in selection; 2) willingness and availability of LF to train others; and 3) a service fee based on the delivery of training to fellow farmers and the level of their adoption resulting from their extension services	OPM and ARDC	03/2018
Innovations through ICT		
Procure hand-held tablets initially for use by extension agents and district M&E officers. Configure them with the needed information and software, including GPS and technical information for field support and train the users	OPM	03/2018
Dairy cooperatives		
RAMCO to proactively support the large dairy groups to qualify and register as cooperatives to enable better regulation and supervision of members' interests	RAMCO	03/2018
Pilot: support vendors in buying higher quantities		
RAMCO to test an incentive package for supporting a few identified traders to increase the purchased quantity of specific crops from a specific area (covering a number of producer groups). CARLEP to incentivise the traders based on incremental quantities procured from groups	RAMCO in close collaboration with CARLEP Component Manager - Agriculture, gewog extension officers and ARDC	04/2018
Pilot: vegetable marketing programme with FCBL		
Design and run a pilot, with the 3-tonne truck to be hired out by FCBL, for pooled marketing of vegetables by 1-2 groups of identified crops in close collaboration with RAMCO, FCBL, ARDC,. The learning on costs, returns and risks from the pilot to be used for future scaling-up.	OPM Component Manager and FCBL	05/2018
New market outlets		
Assess together with Koufuku the feasibility and requirements of establishing new secondary milk collection and processing plants where dairy groups are available and have the potential to produce the needed quantities, and plan for training and equipment support accordingly	OPM Component Manager - Dairy with RLDC and Koufuku	06/2018

Postharvest management

Through support of SJI (and/or other selected institutions) pilot 10 solar/electric driers for specific crops that can benefit from reduced chances of pest damage and contamination, as well as speeding up drying activities (i.e. chilli, paddy rice etc.) – refer to technical note

OPM - CARLEP
Component Manager - 06/2018
Agriculture

Mushroom production

As a promising business with a possible comparative advantage for youth and remote areas, undertake: 1) complete cost-benefit analysis of the mushroom production; 2) evaluate the potential market needs for mushroom spawns; and 3) develop a strategy for the initiation of the commercialization of spawn production and inoculation as a business enterprise opportunity involving private units

OPM and RAMCO 06/2018

Pilot communal cow shed

Pilot the system of the communal cow shed with 3 dairy groups (two in close cooperation with Koufuku Limited) for future scaling up. See technical note for details on criteria for selection of site and group, marketing, training, after-sales and conditions for success

OPM Component
Manager - Dairy with 06/2018
RLDC

E. Project implementation

a. Development Effectiveness

Effectiveness and Developmental Focus

Effectiveness Rating: 4

Justification of rating

Production related activities have been prioritised, initial market links with schools and institutions in case of vegetable groups have been enabled.

Log-Frame Analysis & Main Issues of Effectiveness

Dairy groups have been able to market milk either in retail or to processors such as Koufuku. Lead farmers have become functional and enlarged extension services and capacity building of farmers. Commercialisation which is a key objective might be difficult to achieve fully without changes implementation approaches. Lack of economic analysis at household, group and Programme levels can reduce effectiveness of activities.

Agreed Action	Responsibility	Agreed Date
Introduction of rigorous economic analysis		
The investments and activities of the Programme should be appraised for generating net benefits to the households and groups as also positive effects on distribution of benefits	OPM	12/2017

Development Focus

Targeting and Outreach Rating: 4

Justification of rating

The Programme is focusing appropriately on remote areas in the relatively poorer eastern districts

Main issues

The groups formed comprise households from different economic backgrounds. While some of the households might be better on a comparative frame, overall the economic background of participating households is that of needy and deserving persons.

The beneficiaries were all from the Programme districts. Some of the chosen lead farmers were clearly better off. The groups that benefited from the previous MAGIP programme were also taken up under this Programme. While the group membership is voluntary and thus self-selecting, lead-farmer selection follows set criteria. At present M&E does not examine targeting related aspects. The outreach achieved so far

Agreed Action	Responsibility	Agreed Date
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Targeting		
Programme should target poorer section of households both in production and marketing efforts. Some of the landless could be involved in marketing related activities and extension services provision after training	OPS	12/2017
Youth Groups		
Youth groups should be prioritised on account of their market oriented outlook and willingness to work along commercial lines	OPM	12/2017

Gender equality & women's participation

Rating: 4

Justification of rating

A gender policy has been prepared. Participation of women in Programme activities is high.

Main issues

Some women also participate in governance of institutions mobilised under the Programme. However, more affirmative action is needed to bring more women to governance responsibilities (at the farmer group level as well as at the level of the OPM), introduce drudgery reduction measures and provide training to meet needs of women.

Agreed Action	Responsibility Agreed Date	
Training		
Train and persuade women to take up leadership positions in the community institutions under the Programme	OPM	12/2017

Agricultural Productivity

Rating: 4

Justification of rating

CARLEP has formed and supported vegetables and dairy groups, providing them production inputs (seeds, irrigation equipment, cows, cow sheds, chillers, shaff cutters, etc and with the needed technical and managerial training.

Main issues

Lead farmers and CAHW were trained to extend the outreach of extension and advisory services. The field missions observed that vegetable production had increased as also milk collection in the pooled marketing arrangements. New vegetables had been introduced and were popular among farm households.

While several activities were undertaken in support of the production and marketing groups, including the provision of inputs (seeds and seedlings, polyhouses, irrigation canals and equipment, live cows and enhanced sheds, shaff cutters, etc) and training, interventions till present do not seem to be part of any clear holistic vision – and the respective actions- to ensure the sustainability of these production and marketing groups. The data on production and productivity is still anecdotal and the MIS and M&E should be geared to collect suitable data and analyse the same to quantify productivity increases. The market pull factor is critical for improving production and productivity; hence RAMCO and others should prioritise market interventions

In the absence of a clear market pull, especially for the vegetable value chain, which was partly due to absence of clear mandates for marketing between FCBL and RAMCO, farmer incentive for increasing productivity is low. The mission has accordingly, recommended a series of pilots in this area that are to be implemented within a 3-6 months period after which lessons learnt will be incorporated for scaling up these pilots. The agreed actions are listed in an earlier section.

Adaptation to Climate Change

Rating: 4

Justification of rating

In the first one and a half years the Programme has undertaken a number of activities for advancing the CCA aspects of the Programme

Main issues

In the first one and a half years the Programme has undertaken a number of activities for advancing the CCA aspects of the Programme such as, the establishment of Climate Smart Villages (CSV); training of extension workers in some aspects of sustainable land management (SLM) such as, compost production, bio-slurry use, mulching, vegetative contour terracing and use of bio-pesticides; and Napier grass slips for promotion of soil erosion control and fodder management and seed for crop diversification.

Moving forward, considering the various aspects of climate change resilience building, and improvement of environmental values the programme needs to adopt a holistic approach that goes beyond piecemeal activities. The CSVs provide a good venue for promoting this holistic approach and in this regard, the current methodology used in the CSV planning process needs to be upgraded. To ensure that a systematic approach is adopted for building climate change adaptation (CCA) the following key areas need to be prioritised: i) climate-resilient and market-oriented Gewog level planning; ii) upgrade extension training curriculum with CCA/SLM module; and iii) training and demonstration of permaculture. See technical note for details.

Agreed Action	Responsibility	Agreed Date
Introductory Permaculture Course		
Facilitate core team of ARDC, livestock extension and LFs to undergo an Introductory Permaculture Course (IPC) in Nepal or India	OPM	02/2018
Methodology to evaluation the quality and delivery of post-training services		
Put in place a methodology to evaluate the quality and delivery of post-training services by LFs to farmers on basic SLM/CCA practices	OPM	04/2018

b. Sustainability and Scaling up

Institutions and Policy Engagement

Rating: 3

Previous rating: 4

Justification of rating

There is considerable potential for policy engagement arising from the Programme in market oriented interventions in rural economy.

Main issues

The progress of work has been limited and did generate learnings as yet that can influence policy and institutional engagement. Key personnel to examine implementation approaches, results and their possible influence on policy are not available with OPM. Actions to augment the expertise have been indicated earlier under programme management

Partnership-building

Rating: 4

Justification of rating

Barring FCBL, the other partners such as ARDC, RLDC, RAMCO, SJI and Koufuku International are working in close collaboration with the Programme.

Agreed Action	Responsibility	Agreed Date
Closer collaboration with Koufuku International		
Given the high marketing potential in milk offered by Koufuku international, CARLEP should strengthen the partnership with them and then launch/implement joint activities in clean milk production and milk marketing.	OPM/RLDC	01/2018

Human and Social Capital and Empowerment

Rating: 3

Previous rating: 4

Justification of rating

While training on production aspects has been conducted, mobilisation aspects have not been fully addressed.

Main issues

Trained groups in marketing or other group activities do not seem to have attained higher capacities. Expectation of continued help from the Programme ran counter to the empowerment objective.

Attitudinal and behavioural issues should be addressed as an entry point activity to ensure collective and cohesive action that can generate social capital and enhance human capacities. Group discipline, coordinated action and working towards a larger cause are aspects that need to be stressed in the group mobilisation process. A suggestion for augmenting social mobilisation expertise has been made in the programme management section which can deal with designing suitable capacity building actions.

Quality of Beneficiary Participation

Rating: 4

Justification of rating

The households for the most part have been enthusiastic. They have adopted the new ideas and processes; contributed their share of investments to avail the support from CARLEP.

Main issues

The beneficiary contribution has significantly high at an early stage of implementation which is a highly encouraging sign of participation.

Enthusiastic participation from groups should be harnessed to orient the groups towards collective, income enhancing, market oriented efforts. Training and capacity building of the groups for the purpose has been suggested in an earlier section. Participation from the poorest households should be increased through affirmative action.

Responsiveness of Service Providers

Rating: 4

Justification of rating

There are few service providers to the Programme such SJI (Samdrup Jongkhar Initiative). They have responded well and completed the tasks assigned satisfactorily. While ARDC, RLDC and RAMCO have been responsive, other service providers are yet to gear up fully.

Environment and Natural Resource Management

Rating: 4

Justification of rating

As mentioned previously, some SLM practices are being promoted among farmers. However, if the VCs are to be made sustainable over the medium to long term, then a more holistic approach to natural resource management (NRM) needs to be adopted.

Main issues

Please see sections on Climate change and value chains earlier where the actions relating to NRM have been suggested.

c. Project Management

Quality of Project Management

Rating: 4

Previous rating: 5

Justification of rating

Within 18 months of start-up most activities have been initiated, with most staffing in place. Barring institutions and policy engagement and FCBL led marketing activities, other sub-components have made reasonable progress, with satisfactory disbursement level being reached. Cohesion among implementing partners, collaborative planning, monitoring of results have to improve.

Main issues

The process of AWPB has resulted in resource allocation to the different implementing entities without adequate monitoring or oversight from OPM to secure the objectives. The implementing agencies have proposed activities and financial budgets, following listing of items of expenditure in the design

document of the Programme. OPM has not played the critical role of putting the AWPB together, after due consideration of conflicting priorities, establishing complementarities, sequencing of activities and plugging the gaps. The AWPB approval is also seen as a total endorsement of any activity that the implementing partners want to undertake regardless of the economics and likelihood of development impact. The need for appraising costs, returns, economics and distribution of benefits among participating households in respect of new or large initiatives has not been fully realised.

The steering of the programme was satisfactory. However its decision to buy dairy animals only within the country even when quality animals were in short supply has impeded progress in the dairy value chain. The OPM manages the Programme through implementing agencies – ARDC, RLDC and RAMCO. FCBL has not yet become functional as an implementing partner. OPM in overall charge of the Programme, has to influence the implementing agencies to act in a cohesive manner to achieve Programme objectives. The existing process of AWPB has resulted in resource allocation to the different implementing entities without monitoring or oversight from OPM to secure the objectives.

Agreed Action	Responsibility	Agreed Date
Role of OPM		
OPM needs to occupy a strategic oversight position. Planning processes need streamlining - allocation decisions should be taken by OPM after discussions with all implementing partners – to ensure sequencing, mutuality of support and avoidance of overlaps	OPM/NSC	12/2017
Implementation of AWPB		
For new interventions and those above a threshold of equivalent USD 2,500 (subject to change), OPM to form a committee to examine such proposals. An approval process in OPM should be introduced to examine objective, costs, feasibility and expected results of proposals	OPM	12/2017
Component-wise AWPB allocations		
Budget allocations should be aligned to agencies' implementing capacity and mandates – not guided by cost-tables	OPM/implementing partners	01/2018
Workflow Planning under AWPB		
Monthly and quarterly work flows that disaggregate the AWPB, should be planned and monitored by OPM	OPM/implementing partners	01/2018

Knowledge Management

Rating: 4

Justification of rating

The Knowledge Management strategy has been completed. Training manuals and guidelines have been developed and finalized for distribution to all district officers.

Main issues

These are intended to be used on the ground to generate knowledge sharing among farmers, communities and groups. The Programme also aims to translate some of the training manuals and to create training material and videos in local language. The latter will be distributed through the social media application “WeChat”. The programme has an official website and an official page on Facebook and these are actively used for knowledge and information sharing among stakeholders, with regular uploads of articles and photographs. KM function should attend to developing training content that can be easily absorbed in the form of drawings, posters and videos and for staff and rural

households. The stakeholder compendium, developed for a Nepal programme, has been shared with CARLEP team for adoption.

Coherence between AWPB and Implementation

Rating: 4

Justification of rating

During 2016-17 the AWPB was achieved to the extent of 65% of financial allocations. In terms of physical progress, most training related interventions had been completed 100%. Reporting on some activities has been on a different basis than what was adopted for planning. In some activities such as construction of cow sheds, the physical performance exceeded the AWPB.

AWPB Inputs and Outputs Review and Implementation Progress

While the AWPB has been finalised in time, the process needs refinement as indicated in the chapter on Programme Management. Planning and reporting implementation progress need to be in the same units. While production and infrastructure related interventions get completed faster, marketing related activities have moved much slower. Without accompanying marketing efforts, commercialisation would be slower, despite surge in production. In some activities, sequencing and alignment with other components need to be ensured.

Agreed Action	Responsibility	Agreed Date
Coherence between AWPB and implementation reporting		
Units used for planning and reporting implementation progress should be the same.	MIS/M&E	01/2018

Performance of M&E System

Rating: 4

Justification of rating

The programme monitoring is on activity level and with less emphasis on results and outcomes. Analysis of baseline data and comparison with outputs and results of Programme activities has not been carried out for some activities.

M&E System Review

The Programme has developed its own MIS system, used by the implementing agencies. The M&E officer has trained other district officers to collect and monitor data and undertakes quarterly field visits. MIS data does not have unique identifiers for each household covered by the programme, with the result that there is a likelihood of same household being counted multiple times. Monitoring has been with reference to AWPB activities and not related to results and outcomes. For example, when reporting on production or income increase, the M&E data does not specify whether this is a result of increase in acreage or number of animals, or an increase of productivity per acre or animal, nor does it refer to a 'without programme' situation.

Examination of results in the light of objectives with which investments and activities were carried out is still not in practice.

Agreed Action	Responsibility	Agreed Date
Measurement of M&E		
Data analysis should refer to incremental changes in production/productivity as a result of programme intervention	OPM	01/2018

M&E Plan		
A plan for M&E activities should be prepared with clear objectives. M&E's contribution to decision making processes of the Programme should be elaborated.	OPM	01/2018
Data capture for M&E		
Steps to improve timeliness and accuracy of data and consolidation at the end of each quarter should be taken	OPM	01/2018

d. Financial Management & Execution

Disbursement by financier

Type	Name	Current Amount	Disbursed Amount	Actual Rate
Domestic Financing breakdown	National Government	\$5,773,849		
	Food Corporation of Bhutan Ltd	\$4,802,410		
	Beneficiaries	\$658,805		
Co-financing breakdown,	To be determined	\$5,996,612		

Acceptable Disbursement Rate Rating: 6 **Previous rating: 4**

Justification of rating

The Programme is in its second year of implementation and has a disbursement rate of 25%. There have been no extensions

Main issues

As of 31 October 2017, 22% of IFAD loan resources have been disbursed (five withdrawal applications), 31% of IFAD grant (4 Was) and 25% of ASAP Grant (three WAs), including the advances to the designated accounts. Some constraints in disbursement of IFAD loan resources were experienced last financial year. To avoid cash-flow problems recurring in 2017-8, the Programme will submit a request to increase the advance to the designated account, currently USD 800,000.

Agreed Action	Responsibility Agreed Date	
Increase in advance		
Submit request to IFAD for increased advance to the loan designated account – 31 December 2017 (OPM)	OPM	12/2018

Fiduciary Aspects

Quality of Financial Management

Rating: 4

Justification of rating

CARLEP's financial management is generally acceptable and appropriate controls are in place. However financial reporting requires significant improvement.

Main issues

The OPM has responsibility for CARLEP financial management, for reporting, disbursement and audit purposes. The finance unit, composed of a finance officer and an accountant, coordinates expenditure reporting and fund-flows for the agencies implementing CARLEP activities, i.e. six districts, three regional agencies and a state-owned corporation (FCBL). The accounting for CARLEP expenditure at district and regional agency level is done by these entities' finance staff. Expenditure is approved by the agency head, the Drawing and Disbursing Officer (DDO).

The Programme budget preparation is fully integrated with national systems. Bhutan's financial year runs from 1 July to 30 June, and parliament approves the national budget in February-March. Once approved, CARLEP's AWPBs are input in the centralised budget tracking system for public expenditure, MYRB.

The mission recommended strengthening budgetary planning, as in 2016-7, there were instances of budget having been allocated to entities unsuited to carry out the concerned activity. This led to the practice of "deposit works" during the AWPB period – the cross-transfer of budgeted funds between spending units. As this dilutes accountability and makes expenditure difficult to trace, the mission recommended avoiding such practices by strengthening budgetary planning.

CARLEP fund-flows are complex. The Royal Monetary Authority (RMA) holds three designated accounts respectively for the IFAD loan, grant and ASAP grant. Fund-flows from the three DAs are decentralised to the implementing agencies (IAs). Quarterly, budgetary allocations of IFAD and RGOB funds are transferred to each IA by RMA via the Ministry of Finance, on the basis of fund release requests, which are endorsed by OPM. The IAs hold segregated sub-accounts (PLCs) for CARLEP expenditure, operated by the IA's DDO and Accounts Officer. The CARLEP fund-flow mechanism has functioned reasonably well so far, but relies heavily on the OPM finance officer's proactivity.

Accounting by all IAs is done in the Public Expenditure Management System (PEMS), following the Financial Rules and Regulations were issued in 2016 for all government agencies. Daily input of accounting entries in PEMS is mandatory for all Government entities, and there are strict requirements for accounts to be closed timely at month end. Cash accounting standards are used in Bhutan.

At all levels, systems are in place to ensure that funds are used for the intended purposes. Internal controls are in place with appropriate segregation of approval processes, and vouchers are certified by engineers or sector officers, as relevant. The financial documents of four districts out of six districts and the three regional agencies (RLDC, RAMCO and ARDC) were spot-checked and generally found acceptable, although financial discipline needs to be somewhat improved by RLDC and Trashigang district. The Finance Officer uses PEMS to view information, monitor advances and generate IAs' expenditure reports at monthly closure of accounts, which facilitates the consolidation of financial reporting and preparation of replenishment requests to IFAD. However, the mission found that the

Programme's financial reporting does not meet the requirements of the Letter to the Borrower: the Programme has not adopted the correct SOE form, leading to expenditure having been mis-classified in some cases. Furthermore, OPM does not maintain a contract register or monitoring forms, there is no system for recording fixed assets, and the Programme has not submitting quarterly financial reports to IFAD as required. A number of measures are recommended by the mission to improve financial reporting.

Agreed Action	Responsibility	Agreed Date
Integration of finance unit		
Improved integration of finance unit in AWPB preparation, progress and beneficiary reporting	OPM	12/2017
Unaudited financial statements		
Signed unaudited financial statements to be submitted to IFAD within required deadline for 2016-17	OPM	12/2017
Asset Management		
Strengthen asset management; maintain centralised asset register; ensure assets appropriately accounted for and tagged	OPM	12/2017
SOE model		
Adoption of mandatory SOE model	OPM/Finance	12/2017
Assessment of FCBL co-financing		
Provide assessment of FCBL co-financing, limited to Programme areas	OPM/Finance	12/2017
Quarterly financial reporting		
Quarterly financial reporting per IFAD requirements within 45 days of end of quarter	OPM/Finance	12/2017
E-learning certificate		
Accountant to submit IFAD FM e-learning certificate to IFAD	OPM Accountant	12/2017
Build capacity of agencies' financial staff		
Workshop to build capacity of agencies' financial staff	OPM/Finance	01/2018
Training on international accounting standards		
Finance officer to take training on international accounting standards (e-learning)	Finance Officer	06/2018

Quality and Timeliness of Audit

Rating: 4

Justification of rating

Responsibility for assigning a rating to this indicator rests solely with IFAD Finance Officers. Finance Officers are also required to provide the justification for the rating, the narrative on main issues identified as well as indicating the various actions required to form the action plan. During supervision missions IFAD Finance Officers or FM consultants are required to review and update the action plan as appropriate. Any additional information regarding Programme audits may be obtained from FMD.

Main issues

The Royal Audit Authority (RAA) is mandated to audit public funds in Bhutan. CARLEP's 2015-6 audit was submitted timely, but did not fully comply with IFAD's audit guidelines. Audit work for the 2016-7 audit was ongoing at the time of the mission, and the report is expected to be submitted by 31 December 2017. The RAA's East Bhutan Office consolidates and finalises CARLEP's audits. The mission met the Assistant Auditor General, who expressed interest in applying performance audit techniques to CARLEP in coming years

Counterparts Funds	Rating: 5	Previous rating: 4
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Justification of rating

Actual government contribution in FY 2017-8 so far has been fully aligned to budgetary requirements. The OPM has not yet established a system for reporting the tax portion of counterpart contribution

Main issues

For FY 2017-8, the budget approved from RGOB contribution is Nu.7.5.14 million and as of October 31, 2017, RGOB had released Nu 2.464 million for retraining of livestock and farm recording keeping (Nu 0.102 million) and programme management operational Costs (Nu.2.36 million). RGOB contribution includes all tax on Programme expenditure. As tax is exempted, the Programme should include the calculation of foregone tax in the overall calculation of counterpart funding

Agreed Action	Responsibility	Agreed Date
RGOB contribution		
Calculate exempted tax as RGOB contribution and report accordingly	Finance officer	12/2017

Compliance with Loan Covenants	Rating: 4
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Justification of rating

The programme was found to be generally in compliance with loan covenants, taking necessary actions to set up the OPM, open the designated accounts and follow due procedure for WAs. FCBL, designated as additional programme party has yet to become fully effective in implementation. FCBL has so far brought in only 4% of the budgeted contribution (the accounting of the contribution has to be reviewed).

Procurement

Procurement	Rating: 4
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Justification of rating

In general, procurement documentation was made available to the mission team for the review. CARLEP's initial issues with the procurement plan have been resolved with the training that was attended by the PD and Accounts Assistant.

Procurement Review

CARLEP has experienced moderate difficulty in the areas of – contracts and assets register; incomplete files for the prior review procurements; one instance of FCBL has undertaken an international training without the prior no objection of IFAD being sought. CARLEP does not have a

separate procurement unit, procurement activities are managed by the OPM and then procurement processes delegated to the respective implementing agency. All needed documentations were made available to the mission. RGoB guidelines are followed by all the implementing agencies consistently with respect to the processes. The procurement for Technical Assistance for FCBL has been suspended until their involvement in CARLEP is clear.

Agreed Action	Responsibility	Agreed Date
Procurement staff		
In the event, ARDC is able to hire a new person to undertake their procurement, it is suggested that CARLEP share the person for the procurement purposes.	OPM	02/2018
Procurement process and related delegation		
As some procurements are carried out at the Dzongkhag level, at the request of an implementing agency, it is recommended that the overarching responsibility and review of the same remains with the OPM	OPM	02/2018
Documentation related to Prior review Contracts		
Soft copies of all the procurement related documentation, in the entire package, is to be maintained (retroactively) for the prior review contracts.	OPM	03/2018
Contracts and Fixed Assets Register		
Subsequent to the last supervision mission request, a contracts register has not been maintained. This must be prepared retroactively for all procurement, prior and post, that has been undertaken by CARLEP, in the format that has been shared with the team.	OPM	03/2018
Economic and Financial Analysis and Information Sheet		
All prior review procurements will be submitted with the information sheet (template provided to OPM) and with an economic and financial analysis for the investment ,and the information sheet in the format previously provided to OPM.	OPM	03/2018

F. Relevance

Relevance	Rating: 5
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Justification of rating

The commercialisation objective and the implementation strategies designed continue to be relevant in the local context of Eastern Bhutan.

G. Agreed Actions

Agreed Action	Responsibility	Agreed Date
RGOB contribution		
Calculate exempted tax as RGOB contribution and report accordingly	Finance officer	12/2017
SOE model		
Adoption of mandatory SOE model	OPM/Finance	12/2017
Assessment of FCBL co-financing		
Provide assessment of FCBL co-financing, limited to Programme areas	OPM/Finance	12/2017
Youth Groups		
Youth groups should be prioritised on account of their market oriented outlook and willingness to work along commercial lines	OPM	12/2017
Introduction of rigorous economic analysis		
The investments and activities of the Programme should be appraised for generating net benefits to the households and groups as also positive effects on distribution of benefits	OPM	12/2017
Targeting		
Programme should target poorer section of households both in production and marketing efforts. Some of the landless could be involved in marketing related activities and extension services provision after training	OPS	12/2017
Training		
Train and persuade women to take up leadership positions in the community institutions under the Programme	OPM	12/2017
Unaudited financial statements		
Signed unaudited financial statements to be submitted to IFAD within required deadline for 2016-17	OPM	12/2017

Asset Management		
Strengthen asset management; maintain centralised asset register; ensure assets appropriately accounted for and tagged	OPM	12/2017
E-learning certificate		
Accountant to submit IFAD FM e-learning certificate to IFAD	OPM Accountant	12/2017
Integration of finance unit		
Improved integration of finance unit in AWPB preparation, progress and beneficiary reporting	OPM	12/2017
Role of OPM		
OPM needs to occupy a strategic oversight position. Planning processes need streamlining - allocation decisions should be taken by OPM after discussions with all implementing partners – to ensure sequencing, mutuality of support and avoidance of overlaps	OPM/NSC	12/2017
Quarterly financial reporting		
Quarterly financial reporting per IFAD requirements within 45 days of end of quarter	OPM/Finance	12/2017
Implementation of AWPB		
For new interventions and those above a threshold of equivalent USD 2,500 (subject to change), OPM to form a committee to examine such proposals. An approval process in OPM should be introduced to examine objective, costs, feasibility and expected results of proposals	OPM	12/2017
Component-wise AWPB allocations		
Budget allocations should be aligned to agencies' implementing capacity and mandates – not guided by cost-tables	OPM/implementing partners	01/2018
Closer collaboration with Koufuku International		
Given the high marketing potential in milk offered by Koufuku international, CARLEP should strengthen the partnership with them and then launch/implement joint activities in clean milk production and milk marketing.	OPM/RLDC	01/2018
Coherence between AWPB and implementation reporting		
Units used for planning and reporting implementation progress should be the same.	MIS/M&E	01/2018
Workflow Planning under AWPB		
Monthly and quarterly work flows that disaggregate the AWPB, should be planned and monitored by OPM	OPM/implementing partners	01/2018

Build capacity of agencies' financial staff		
Workshop to build capacity of agencies' financial staff	OPM/Finance	01/2018
Facilitated Multi Stakeholder Platform		
Undertake a Facilitated Multi Stakeholder Platform and buyer-seller meeting for marketing improvements supported by an expert in the field (IFAD would provide the expert)	OPM and RAMCO with IFAD support	01/2018
Data capture for M&E		
Steps to improve timeliness and accuracy of data and consolidation at the end of each quarter should be taken	OPM	01/2018
M&E Plan		
A plan for M&E activities should be prepared with clear objectives. M&E's contribution to decision making processes of the Programme should be elaborated.	OPM	01/2018
Measurement of M&E		
Data analysis should refer to incremental changes in production/productivity as a result of programme intervention	OPM	01/2018
Recruitments		
Hire an irrigation engineer, with expertise of climate resilience irrigation norms to train irrigation engineers of ARDC/Dzongkhags, in country, on the field;	OPM	02/2018
Hire an economist , full time as programme staff, to carry out cost-benefit analysis and feasibility studies of all CARLEP interventions, monitor economic impact and conduct policy analysis for taking up with RGOB and other national institutions		
Procurement staff		
In the event, ARDC is able to hire a new person to undertake their procurement, it is suggested that CARLEP share the person for the procurement purposes.	OPM	02/2018
Introductory Permaculture Course		
Facilitate core team of ARDC, livestock extension and LFs to undergo an Introductory Permaculture Course (IPC) in Nepal or India	OPM	02/2018

Staffing		
Key staff, including PD, Component Managers, one representative from RAMCO and M&E specialist to undertake a field visit to the High Value Agriculture Project (HVAP) in Nepal to observe first-hand the development of the VC there (include a special visit of the OPM Component Manager - Dairy to observe the flexi biogas units piloted under the IFAD supported Adaptation for Smallholders in Hilly Areas (ASHA) project in Surkhet, Nepal)	OPM	02/2018
Procurement process and related delegation		
As some procurements are carried out at the Dzongkhag level, at the request of an implementing agency, it is recommended that the overarching responsibility and review of the same remains with the OPM	OPM	02/2018
Social Mobilisation		
Ensure availability of social mobilisation expertise either by hiring a suitable institution or an individual. With groups being the preferred mode of implementation, their cohesion, collaboration and discipline should be ensured	OPM	02/2018
Documentation related to Prior review		
Contracts		
Soft copies of all the procurement related documentation, in the entire package, is to be maintained (retroactively) for the prior review contracts.	OPM	03/2018
Optimal use of polyhouses		
Provide a production plan and schedule to groups for making optimal use of polyhouses and get the best economic returns from the investment; include this as part of group training curriculum	ARDC	03/2018
Contracts and Fixed Assets Register		
Subsequent to the last supervision mission request, a contracts register has not been maintained. This must be prepared retroactively for all procurement, prior and post, that has been undertaken by CARLEP, in the format that has been shared with the team.	OPM	03/2018
Economic and Financial Analysis and Information Sheet		
All prior review procurements will be submitted with the information sheet (template provided to OPM) and with an economic and financial analysis for the investment ,and the information sheet in the format previously provided to OPM.	OPM	03/2018

Milk quality improvement campaign		
In collaboration with Koufuku International, launch a milk quality improvement campaign in the areas adjacent to company plant to enhance milk quality received from relevant dairy groups	OPM Component Manager - Dairy with RLDC and Koufuku	03/2018
Pilot: testing of fresh chilli cold storage		
FCBL to test the possibilities of cold storing fresh chillies in the Samdrup Jongkhar facilities for some time to be sold at higher prices when the produce is not available. FCBL to work closely with ARDC, RAMCO, National Post Harvest Centre to test the quality of the product when stored for different durations in cold storage. Pilot is subject to completion of technical and financial viability study	FCBL in collaboration with CARLEP Component Manager - Agriculture, ARDC, postharvest institute	03/2018
Increasing outreach through Lead Farmers		
Consider enhancement of the LF model with the following: 1) community involvement in selection; 2) willingness and availability of LF to train others; and 3) a service fee based on the delivery of training to fellow farmers and the level of their adoption resulting from their extension services	OPM and ARDC	03/2018
Innovations through ICT		
Procure hand-held tablets initially for use by extension agents and district M&E officers. Configure them with the needed information and software, including GPS and technical information for field support and train the users	OPM	03/2018
Market analysis		
Conduct simple market analysis of current and anticipated demand for dairy and vegetables at local, regional, national and cross-border markets	RAMCO supported by FCBL	03/2018
Dairy cooperatives		
RAMCO to proactively support the large dairy groups to qualify and register as cooperatives to enable better regulation and supervision of members' interests	RAMCO	03/2018
Enhancing the vegetable and dairy producer groups		
Implementing partners should undertake an assessment, every six months, and grade groups based on their performance,. Prepare group specific capacity building plan based on the grading.	OPM and RAMCO	03/2018
Marketing skills		
Enable the farmer groups to acquire appropriate marketing skills with hand holding/coaching	RAMCO	03/2018

Intensification and expansion of dairy production

Support the inclusion of biogas digesters with the improved shed construction during 2018 (anticipating the 2019 budget for biogas) and enhance the design of both systems (as per technical note provided);

OPM Component Manager
- Dairy with RLDC 03/2018

Test 6 flexi biogas units within CARLEP targeted areas as a pilot, through international technical assistance, with rigorous monitoring in terms of social (acceptance towards technology), technical (high gas production volumes), economic (affordability) and environmental (reduced deforestation rates) aspects

Market infrastructure

Investments in market infrastructure should be preceded by an economic and financial analysis of viability

OPM 03/2018

Intensification and expansion of vegetable production

Include within the Lead Farmer (LF) training curriculum interventions on the optimization of integrated of crop-livestock farming systems and facilitation skill for training of farmers, including farmer narrated instructional videos

ARDC 03/2018

FCBL & RAMCO

MoAF to provide IFAD with clarity on the future roles of FCBL and RAMCO

MoAF 03/2018

Pilot: support vendors in buying higher quantities

RAMCO to test an incentive package for supporting a few identified traders to increase the purchased quantity of specific crops from a specific area (covering a number of producer groups). CARLEP to incentivise the traders based on incremental quantities procured from groups

RAMCO in close collaboration with CARLEP Component Manager - Agriculture, gewog extension officers and ARDC 04/2018

Methodology to evaluation the quality and delivery of post-training services

Put in place a methodology to evaluate the quality and delivery of post-training services by LFs to farmers on basic SLM/CCA practices

OPM 04/2018

Pilot: vegetable marketing programme with FCBL

Design and run a pilot, with the 3-tonne truck to be hired out by FCBL, for pooled marketing of vegetables by 1-2 groups of identified crops in close collaboration with RAMCO, FCBL, ARDC,. The learning on costs, returns and risks from the pilot to be used for future scaling-up.

OPM Component Manager and FCBL 05/2018

Mushroom production

As a promising business with a possible comparative advantage for youth and remote areas, undertake: 1) complete cost-benefit analysis of the mushroom production; 2) evaluate the potential market needs for mushroom spawns; and 3) develop a strategy for the initiation of the commercialization of spawn production and inoculation as a business enterprise opportunity involving private units

OPM and RAMCO

06/2018

Training on international accounting standards

Finance officer to take training on international accounting standards (e-learning)

Finance Officer

06/2018

New market outlets

Assess together with Koufuku the feasibility and requirements of establishing new secondary milk collection and processing plants where dairy groups are available and have the potential to produce the needed quantities, and plan for training and equipment support accordingly

OPM Component Manager
- Dairy with RLDC and
Koufuku

06/2018

Postharvest management

Through support of SJI (and/or other selected institutions) pilot 10 solar/electric driers for specific crops that can benefit from reduced chances of pest damage and contamination, as well as speeding up drying activities (i.e. chilli, paddy rice etc.) – refer to technical note

OPM - CARLEP
Component Manager -
Agriculture

06/2018

Pilot communal cow shed

Pilot the system of the communal cow shed with 3 dairy groups (two in close cooperation with Koufuku Limited) for future scaling up. See technical note for details on criteria for selection of site and group, marketing, training, after-sales and conditions for success

OPM Component Manager
- Dairy with RLDC

06/2018

Increase in advance

Submit request to IFAD for increased advance to the loan designated account – 31 December 2017 (OPM)

OPM

12/2018

Results Hierarchy	Indicators							Means of verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Annual Result	Cumulative Result	Cumulative Result %	Source	Frequency	Responsibility	
Goal Sustainably increase smallholder producers' incomes and reduce poverty through commercialization of production within programme households	Non-Indigenous people										No major socio-economic slow down, or natural disasters Increasing support for collaboration between different Agencies, civil society and private sector to develop value chains - Continued MoAF support for innovative approaches Agricultural approaches and technologies primarily remain profitable - Programme investments are realized as designed
	Young										
	Females				1122	1122					
	5 000 direct beneficiary HH in vegetable and dairy value chains report at least 25% increase in HH asset and income, as compared to baseline (disaggregated by HHs-head gender)							IFAD's Results and Impact Management System (RIMS) and baseline surveys			
	% of increase in HH asset and income			25							
Objective Increased returns	15% reduction in the prevalence of child malnutrition, as compared to baseline							Programme M&E			No major socio-economic slow down, or natural disasters Increasing support for
	% reduction child malnutrition			15							
	≥ 30% increase in production of vegetables and dairy products							Baseline survey -			

Results Hierarchy	Indicators							Means of verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Annual Result	Cumulative Result	Cumulative Result %	Source	Frequency	Responsibility	
to smallholder farmers through climate resilient production of crops and livestock in nationally organized value chains and marketing systems	% increase in production			30				Sector studies - Technical agencies' reports and studies Research and academic studies Programme M&E			collaboration between different Agencies, civil society and private sector to develop value chains - Continued MoAF support for innovative approaches Agricultural approaches and technologies primarily remain profitable - Programme investments are realized as designed
	≥ 20,000 HH in vulnerable areas with increased water availability for agriculture production							Baseline survey - Sector studies - Technical agencies' reports and studies Research and academic studies Programme M&E			
	Households			20000							
Outcome Community-based	6 000 HH adopt sustainable agricultural practices							Programme M&E reports			Collaboration between Government Agencies/staff and non-state service

Results Hierarchy	Indicators							Means of verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Annual Result	Cumulative Result	Cumulative Result %	Source	Frequency	Responsibility	
Resilient Agricultural Production has sustainably increased	Households			6000				- Contracted studies - RIMS and benchmark - Scientific and conference papers			providers is successful Royal Government of Bhutan (RGoB) complementary financing and supportive annual block grants (dzongkhags) is allocated and utilised
Output Increased Production Resilience, Diversification and Innovation	≥ 23 000 (of which 50% are women) smallholder HH supported in coping with the effects of climate change with sustainable land management practices							Base line studies			RGoB earmarked funding (including other donors) of agricultural inputs and capacity development of farmer groups is allocated and utilised as per programme design - Capacity of Government Agencies/staff and non-state service providers is adequate to achieve results as per programme design
	Females			11500				Programme progress report			
	Households			23000				Line agencies' reports			
Output Vegetable Production Intensified and Expanded	300 new vegetable farmer groups (4 500 HH) established and functional; minimum 60% female members							Base line studies			RGoB earmarked funding (including other donors) of agricultural inputs and capacity development of farmer groups is allocated and utilised as per programme design - Capacity of Government Agencies/staff and non-state service providers is adequate to achieve results as per programme design
	No. of groups formed			300				Programme progress report			
Output Dairy Production Intensified and Expanded	150 Smallholder Dairy Farmer Groups (450 HH) established and functional, with minimum 50% female members							Base line studies			RGoB earmarked funding (including other donors) of agricultural inputs and capacity development of farmer groups is allocated and utilised as per programme design - Capacity of Government Agencies/staff and non-state service providers is adequate to achieve results as per programme design
	No. of groups formed			150				Programme progress report			
								Line agencies' reports			

Results Hierarchy	Indicators							Means of verification			Assumptions	
	Name	Baseline	Mid-Term	End Target	Annual Result	Cumulative Result	Cumulative Result %	Source	Frequency	Responsibility		
Outcome Increased smallholder income from Crop and Livestock Value Chains	Households receiving animals from distribution/restocking							RIMS	Annual			
	Households				21	21						
	70% of the agricultural enterprises established have a positive outlook on their profitability and sustainability							Programme M&E reports - RIMS and benchmark - Line agencies' reports - Sector studies and reports - Farmer satisfaction surveys				
	% of positive outlook on profitability			70								
Output Resilient Vegetable and Dairy Value Chains developed	65 geogs have developed climate resilient vegetable and dairy production, marketing, and infrastructure management plans							Programme progress report Sector reports and studies			FCBL has adequate financial allocations to develop its own capacity next to programme support - Geogs are willing to develop more holistic (value chain based) geog plans for dairy and vegetables to guide programme investments and strengthen local institutions for climate resilience	
	No. of geogs			65								
Output Agricultural Commercialization and Enterprise Development strengthened	115 marketing groups established or revitalized and functional within programme value chains							Programme progress report - Sector reports and studies			Adequate number of interested and able entrepreneurs come forward to establish businesses - Access to finance for small rural agricultural entrepreneurs is adequately facilitated	
	No. of marketing groups			115								

Results Hierarchy	Indicators							Means of verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Annual Result	Cumulative Result	Cumulative Result %	Source	Frequency	Responsibility	
	200 agriculture enterprises (including cooperatives) established and strengthened as part of value chain development							Programme progress report - Sector reports and studies			
	No. of enterprises			200							
	Other productive infrastructure constructed/rehabilitated										
	No. of infrastructure			830	20	20	2.4%	RIMS	Annual		
	People in groups managing productive infrastructure										
	Females				297	297		RIMS	Annual		
	Males				370	370					
	Groups managing productive infrastructure formed/strengthened										
	No. of groups formed			26	15	15	57.7%	RIMS	Annual		
	Crop/Livestock production groups formed/strengthened										
	No. of groups				8	8		RIMS	Annual		

Results Hierarchy	Indicators							Means of verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Annual Result	Cumulative Result	Cumulative Result %	Source	Frequency	Responsibility	
	People in crop/Livestock production groups formed/strengthened										
	Males				60	60		RIMS	Annual		
	Females				40	40					
	Land under improved management practices										
	Hectares of land				52	52		RIMS	Annual		
	People trained on land management practices										
	Females				124	124		RIMS	Annual		
	Males				146	146					
	Land under irrigation scheme constructed / rehabilitated										
	Hectares of land				22	22		RIMS	Annual		
	Market/processing facilities constructed and/or rehabilitated										
	No. of market facilities				11	11		RIMS	Annual		

Results Hierarchy	Indicators							Means of verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Annual Result	Cumulative Result	Cumulative Result %	Source	Frequency	Responsibility	
Output	Marketing groups formed and/or strengthened										
	No. of marketing groups				18	18		RIMS	Annual		
	People trained in crop production practices and technologies										
	Females				260	260		RIMS	Annual		
	Males				556	556					
	Vegetable and dairy value chain processing and marketing infrastructure designed and constructed in 10 dzongkhags							Programme progress report - Sector reports and studies			Complementary financing from RGoB and FCBL will be provided as earmarked
	No. of value chain processing and market infrastructure										
Outcome	Strengthened Agricultural Institutions and Policies for ≥ 70% of VC stakeholders report the use of market information in investment decision-making 60% of VC stakeholders report satisfaction with the policy and regulatory framework as providing a fair distribution of incentives, costs, benefits, and risks							Programme M&E reports - Line agencies' - Department			MoAF will pro-actively implement the 11th FYP strategy for enabling private sector engagement and participation within the process of commercialisation of agricultural

Results Hierarchy	Indicators							Means of verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Annual Result	Cumulative Result	Cumulative Result %	Source	Frequency	Responsibility	
	Males										
	Households										
	Young										
	Non-Indigenous people										
	Indigenous people										
	Females										
	Not Young										
	Total number of household members										
	3.2.3 Households reporting a significant reduction in the time spent for collecting water or fuel										
	Women-headed households							RIMS	Annual		

Results Hierarchy	Indicators							Means of verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Annual Result	Cumulative Result	Cumulative Result %	Source	Frequency	Responsibility	
Output Strengthened value chain and marketing knowledge and communication	Indigenous people										
	Market Information System MoAF/DAMC providing relevant (real-time) information to farmers							Programme M&E reports			
	No of market information system							Line agencies', DAMC, FCBL and BOiC reports			
	People trained in business/entrepreneurship							Sector studies and reports			Adequate technical and process support is provided to develop the models and approaches on the ground, to access learning and to document good practice (presently a weak part of IFAD projects)
	Females				4	4		RIMS	Annual		
	Males				4	4					
	People trained in dairy production										
	Males				1100	1100		RIMS	Annual		
	Females				653	653					
Output Climate change resilience and	Enhanced engineering norms for building climate resilient irrigation systems							Programme M&E reports			Dialogue and collaboration between Government Agencies/staff and external stakeholders is successful and generates
								Line			

Results Hierarchy	Indicators							Means of verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Annual Result	Cumulative Result	Cumulative Result %	Source	Frequency	Responsibility	
value chain development lessons mainstreamed in agricultural policies and sector strategies	No. of norms							agencies' reports Sector studies and reports Policy documents Regulatory framework document for private sector and PPP			meaningful lessons and insights for policy development
	Vegetable and dairy development policies enhanced based on multi-stakeholder consultation processes and programme lessons (resilience, value chain and marketing)							Programme M&E reports Line agencies' reports Sector studies and reports Policy documents Regulatory framework document for private sector and PPP			
	No. of policies										
	Regulatory framework for private sector development and PPP in agriculture sector developed							Programme M&E reports Line			

