Investing in rural people

Royal Government of Bhutan

Commercial Agriculture and Resilient Livelihoods Enhancement Programme

Supervision report

Main report and appendices

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Table of Contents

Abbreviations and acronyms iii
A. Introduction 5
B. Overall Assessment of Programme Implementation 5
C. Programme Implementation Progress 8
Outputs and outcomes 8
D. Programme Implementation progress 11
E. Fiduciary aspects 14
F. Sustainability 15
G. Other 16
H. Conclusion 16

Appendices

Appendix 1: Summary of project status and ratings 19
Appendix 2: Updated logical framework: Progress against objectives, outcomes and outputs 23
Appendix 3: Summary of key actions to be taken within agreed timeframes 29
Appendix 4: Physical progress measured against AWP&B, including RIMS indicators 33
Appendix 5: Financial: Actual financial performance by financier; by component and disbursements by category 43
Appendix 6: Compliance with legal covenants: Status of implementation 44
Appendix 7: Knowledge management: Learning and Innovation 49
Appendix 8: List of Documents to File on (APR xdesk), including detailed working papers. 51

Annex 1. Agriculture and Livestock

Annex 2. Climate Change

Annex 3. Summary of Project Fiduciary Risk Assessment at Supervision

Abbreviations and acronyms

AO	Accounts Officer
AOS	Annual Outcome Survey
ARDC	Agriculture Research and Development Centre
ASAP	Adaptation for Smallholder Agriculture Programme
AWPB	Annual Work Plan and Budget
BTN	Bhutanese Ngultram (currency)
CARLEP	Comprehensive market focused Agriculture & Rural Livelihood Enhancement
CPM	Country Programme Manager
CSV	Climate Smart Village
DAMC	Department of Agriculture Marketing and Cooperatives
DAO	Dzongkhag/District Agriculture Officer
DLP	Dzongkhag/District Livestock Officer
DoA	Department of Agriculture
DoL	Department of Livestock
FCBL	Food Corporation of Bhutan Ltd.
GCCA	Global Climate Change Alliance
HH	Household
HVAP	High Value Agriculture Project
IFAD	International Fund for Agriculture Development
KM	Knowledge Management
MAGIP	Market Access and Growth Intensification project
MOAF	Ministry of Agriculture & Forests
M&E	Monitoring and Evaluation
NEC	National Environment Commission (of Bhutan)
NPD	National Programme Director
NPSC	National Programme Steering Committee
OPM	Office of Programme Management
PoP	Poorest of the Poor
PSF	Production Support Fund
RAA	Royal Audit Authority
RAMCO	Regional Agriculture Marketing and Cooperative
RGoB	Royal Government of Bhutan
RIMS	Results and Impact Management System
RLDC	Regional Livestock Development Centre
SLM	Sustainable Land Management
SoE	Statement of Expenditure
ToR	Terms of Reference
VC	Value Chain
WA	Withdrawal Application
WUA	Water Users Association

Chiwogs	A Groups of Villages for Self-governance
Dzongda	Administrative Head of *Dzongkhag*
Dzongkhag	District
Dzongkhag Yargye Tshogdu (DYT)	District Development Committee
Geog or Gewog	Block
Gup	Administrative Headed of a *Geog*
Thromde Yargye Tshogde (TYT)	Municipal Development Committee

Map of Bhutan showing the present programme areas of CARLEP in the six Eastern Dzongkhags

Supervision Main Report

Royal Government of Bhutan
Commercial Agriculture & Résilient Livelihood Enhancement Programme (CARLEP)

A. Introduction[1]

1. The Commercial Agriculture and Resilient Livelihoods Enhancement Programme (CARLEP) came into force on 11 December 2015 and covers a seven year period, for a total cost of USD 31.5 million, financed as follows: an IFAD loan of USD 8.25 million; an IFAD grant of USD 1.05 million,a grant from the Adaptation for Smallholder Agriculture Programme (ASAP) of USD5 million, a contribution from beneficiaries of about USD 0.6 million, and USD 5.7 million from the Royal Government of Bhutan and USD 4.8 million from Food Corporation of Bhutan Limited (FCBL). It is coordinated and managed by the Office of Programme Management (OPM) based at Wengkhar in Mongar. So far the programme has received the full initial advances on the loan and the ASAP grant. The draft progress report for the first six months of 2016 (January – June) has been submitted.

2. An IFAD supervision mission has taken place from15October to 2November 2016, with the objective to broadly assess overall implementation progress as per AWPB following the start-up workshop in March 2016. Time in the field was limited to 6 days. Being the first supervision for the programme focus was on orienting the OPM for appropriately sequenced implementation. The mission interacted with the Ministry of Agriculture and Forestry, Ministry of Finance, OPM, officials from FCBL, RAMCO, RLDC and ARDC. The mission visited and interacted with Gewog officials and farmers in Samdrup Jongkar, Trashi Yangtse and Mongar Dzongkhags and grateful to the Royal Government of Bhutan (RGoB) and all other partners for their collaboration and support.

B. Overall Assessment of Programme Implementation

3. **Progress**: Overall, the programme is moving towards achieving start-up operations with a *moderately satisfactory rating (score=4)*. The period from December 11, 2015 up to October 2016, has been spent in fulfilling disbursement conditions, key loan covenants and the recruitment of OPM staff. The following activities have taken place since the start-up workshop: (i) consultation meetings with the Programme Dzongkhags and selection of Gewogs for programme interventions; (ii) preparation of PIM, draft implementation guidelines and training manuals (iii) selection of pilot climate smart villages; (iv)mapping of vegetable and dairy production areas and marketing flows; and (v) support to purchase and distribution of seedling to farmers, rehabilitation of irrigation schemes and improved dairy sheds and fodder development. The basic financial management and procurement systems are in place and operational. Work on establishing the key elements of the monitoring and evaluation (M&E) system has started with revision of the Log-frame and Results Framework while indicators at output and outcome level are being elaborated.

4. **Likelihood of achieving development objectives**. Rated as *moderately satisfactory* (score=4). Although field level implementations have just been initiated, the likelihood of achieving development objectives are clearly evident. The timely establishment of OPM with full staffing, AWPB and procurement plan approval with adequate budget provisions, active collaboration and coordination with Dzongkhags and implementing partners, and overall high ownership of the programme by the MoAF, RGoB as well as the communities are all positive indications towards achieving the development objectives.

5. **Mission's key observations:** Based on programme design, subsequent negotiations and the financial agreement signed between IFAD and the RGoB, the three main studies on *dairy and vegetable value chain assessments and the FCBL institutional capacity assessment* are to be carried on through international technical assistance. However, in official correspondence, from RGoB in August, 2016, IFAD was informed that the procurement process, which had already commenced, was withdrawn by the Ministry of Agriculture and Forestry in

1 Mission composition: Tom Anyonge, Lead Technical Specialist (Mission Leader); Ms Lakshmi Moola (CPM, RGoB); Vincent Darlong, IFAD ICO (Gender; M&E and KM),Wafaa ElKhoury, Lead Technical Specialist (Agronomy); Paxina Chelishe Senior Technical Specialist (Climate Change), Rajendra Bhari (Project Manager – HVAP, Nepal); and Pratul Dube, IFAD Consultant (Financial Management & Procurement Specialist). Mr. Tashi Wangdi, NPD, CARLEP and sector managers of OPM, CARLEP accompanied the mission during the field visits. The mission would like to express its gratitude to the RGoB and Dzongkhags particularly the staffs of OPM, CARLEP for the cooperation and courtesy extended during the present mission.

favour of using national rather than international independent consultants[2]. In its response[3] IFAD agreed to these studies being carried out using independent national consultants. IFAD would like to reiterate that the independence of these studies is critical to ensure that: (i) the results aligned to the terms of reference, provide an overarching guidance to the entire programme, without the risk of influence of individual technical departments within the Ministry and to build the coherence between institutions of the Ministry to deliver the intended outcomes; (ii) fragmentation of analysis and setting of technical priorities based on sub-sectors is circumvented; (iii) adherence to the provisions of the IFAD Executive Board that these studies are carried out independently; (iv) an external view and new ideas are rationalised into the re-organization of FCBL's future role as an independent actor in the agricultural produce markets; and (v) the studies, which require full time commitment, also mitigate the risk of gaps in experience and knowledge, by identifying the key areas for capacity building, that were identified during design. To this end, the TORs will be redefined and shared with IFAD for National Consultancy, with the flexibility, allowing the national firm to hire international experts to support the process, if needed.

6. It is now one month since this cancellation of the bidding process and any further delay risks slowing down the entire implementation pace of the programme. The identification and budgeting for priority interventions of CARLEP needs to be informed by the results of these three studies. Since the annual work planning and budgeting for CARLEP is scheduled in December (for 2017/2018), it is critical that these studies are completed no later than the end of 2016.In addition to the 3 studies, the mission observed that the inventory of groups done by RAMCO and OPM needs to be further deepened to assess the maturity status with regard to social capital, technical and business capabilities. This will enable the OPM/RAMCO and ARDC and RLDC to identify and cost the necessary training/mentoring modules which can be used in developing *a capacity building plan for groups* to empower them implement their development ambitions. Indeed, this assessment together with the above three are mutually reinforcing and need to be done simultaneously to feed into the planning and implementation process.

7. The*local level planning process* at the field level needs to be more integrated. The core implementation team at the Dzongkhag levels should make sure that the essential main technical themes are well covered during the participatory planning process with communities. The planning should be *jointly done by the main implementation partners* (selected key Dzongkhag Government professionals, ARDC, RLDC, DAMC/RAMCO and FCBL). In addition to justcarrying out needs assessment jointly, prioritizing key interventions, agreeing on who will do what and how, preparation of well sequenced implementation plans which feed into the programme annual work-plan and budgeting process, should also be done jointly with implementation partners.

8. Implementation guidelines should be significantly revised. The *implementation guidelines on groups* should integrate the three key aspects of group dynamics including leadership and governance, financial and business management, and production and resilience aspects. Further to this, the guidelines on *implementation of livestock and agriculture development* activities should be improved by incorporating the recommendations presented under component 1 and 2 below which includes a more systematic integration of climate change risk analysis. These implementation guidelines should be applied in a mutually reinforcing manner. Group development particularly enhancing group *cohesiveness* should be a prerequisite to strengthening their *technical skills* in crop/livestock production and *business skills.*

9. The main climate change adaptation and environmental management issues are the approach for building resilience of the target beneficiaries both in the value chains and for individual smallholders and their communities. The incorporation of the climate risk management needs to be systematic and activities sequenced in the appropriate manner. The *relevant expertise* from relevant agencies (e.g. National Environment Commission Secretariat (NEC) particularly with regards to *climate information and monitoring* need to be engaged in the relevant project activities especially the planning and implementation stages to ensure the strategic and operational orientation.

10. **Mission's key recommendations:** The focus in the next 6 months will be in three areas: (i) *fast-tracking* the procurement and carrying out of the rapid assessments of the value chains, FCBL and the groups with the aim to have the assignments complete by mid – December, 2016 to feed into the planning process of 2017/18; (ii) OPM needs to *follow-up the community participatory planning* process in selected climate smart villages to ascertain that they are adequately integrated i.e. to ensure that the implementation teams cover the *core thematic disciplines;* and (iii) integration is not only in participatory identification of farmers' needs but also to see to it that there is *equal*

2Letter ref: MoAF/FCBL/2016/397 of 2th August , 2016

3 Letter ref: IFAD of 22nd September, 2016

participation in prioritising of key interventions and that there in integration in preparation of implementation plans where *interventions are well sequenced* to achieve the required operational and outcome synergies.

11. OPM needs to ensure that the procurement and execution of the independent rapid assessments of vegetable and dairy value chains (VC)is fast-tracked and implemented in two phases. For the first phase, the Terms of Reference (ToRs) will be narrowed down to focus on key areas needed to identify the main barriers where the programme can intervene and to make quick gains in facilitating farmers integrate profitably into key value chains, enable activities to start on time and facilitate preparation of the AWPB for 2017/18. The ToRs should ensure incorporation of climate change vulnerability analysis at all levels of the value chain studies.For the second phase, detailed studies can follow in 2017 following a review by the next supervision mission. OPM should encourage that the assessment team builds on the preliminary work already done by RAMCO and OPM on vegetables, dairy and groups' assessment.

12. As per IFAD regulations, any savings accrued from narrowing down the TORs of the assessments will be solely committed to carrying out detailed studies of specific market oriented aspects of individual commodities in the second phase of the VC and FCBL studies. Any re-allocation of these funds will be determined only during the mid-term review.

13. The assessment of FCBL will also be staggered to comprise two phases. The first phase should be carried out simultaneously with the rapid VC assessments and should focus on carrying out *an independent limited capacity audit of FCBL* to determine the existing technical/staff numbers and physical capacity to perform the roles assigned specifically to deliver CARLEP requirements. It will assess *existing technical skills and gaps* therein and identify realistic training and basic physical infrastructure support which CARLEP can provide to enable FCBL to start providing services as contained in the PDR and the MoU signed between FCBL and OPM. The second phase would be a much more thorough study that would fulfill the detailed ToR already developed including providing a detailed business plan that will see FCBL becoming a viable business entity in the long-term.

14. RAMCO should further deepen the assessment of grassroots groups building on the inventory and other secondary data they have already (with additional field work if needed) to *establish the maturity status* of the groups in the selected Gewogs. It is also proposed that this work will be done simultaneously with the two above. The findings and recommendations on the way-forward from these studies will be presented in a workshop of key stakeholders (which will also discuss the outcomes of the initial VC and FCBL studies) to be convened by OPM towards end of December 2016 to clearly reach an understanding of the roles of each implementing partner. The priorities from this workshop will inform the elaboration of the *capacity building plan* for groups to be supported by CARLEP and should also be aligned with the guidelines describing the roles and responsibilities of each stakeholder.

15. OPM technical staffs need to participate in all the Climate Smart village (CSV) level planning exercises to ensure that joint planning is achieved and sequenced implementation plans are prepared. OPM team will prepare *follow-up schedules* to supervise and provide support during implementation of CSV-level activities to ensure that synergy is being achieved. As and when needed the technical inputs can be sought by requesting technical expertise from the *National Environment Commission (*NEC) in Thimphu to participate in the planning process for the climate smart villages. This can also be done through partnerships who have comparative advantage such as Universities, the *NEC Secretariat* (climate change expertise) or by hiring short-term national consultants.

16. After the strategy and action plan for group development is developed, RAMCO, ARDC and RLDC should mobilize *additional capacity* with support from CARLEP to support group development in three areas: (i) building of social capital; (ii) technical skills in agricultural and livestock production; and (iii) business skills.

Agreed action	Responsibility	Agreed date
1. Revise the TORs accordingly and complete the 3 independent rapid assessments: • 1st stage of vegetable value chain • 1st stage of dairy value chain • 1st stage of the FCBL assessment	FCBL & OPM	31 Dec 2016
2. RAMCO should undertake further assessment of existing groups based on inventory and other secondary data to establish the maturity status of the groups	DAMC, RAMCO & OPM	31 Dec 2016
3. Convene a stakeholders workshop to validate the studies, agree on priority areas of focus and specific roles of key implementation	MoAF & OPM	31 Dec 2017

Agreed action	Responsibility	Agreed date
partners and prepare an action plan		
4. OPM technical staff to participate in and supervise the local level planning and action plan preparation exercises for climate smart villages	OPM, ARDC, RLDC &RAMCO	31 Jan 2016
5. RAMCO, RLDC and ARDC to mobilise additional capacity to enhance social capital and technical and business skills of groups	OPM, RAMCO, RLDC & ARDC	31 Mar 2017 & continuous

C. Programme Implementation Progress

Outputs and outcomes

17. **Component 1 - Market-led sustainable Agricultural Production:** Overall performance of the component is *moderately satisfactory (score=4).* This component aims at increasing the resilience of agricultural production of the targeted rural households through three outputs namely: 1) increased production resilience and diversification; 2) intensification and expansion of vegetable production by households and 3) expansion of dairy production by rural households.

18. During the past 6 months stress tolerant *vegetable seeds and various fruit tree seedlings* were distributed to farmers and farmer groups. The mission visited 2 newly established commercial horticulture farms that were supported by ARDC through planting materials and technical advice. The mission also visited a farm where onion production is being introduced to replace fallow after paddy production. The objective for supporting the farmers visited was not clear, especially that they did not belong to any vegetable production groups, they had limited farming experience to be able of being lead farmers. However, they have a good potential to use their farms as demonstration sites for other farmers or through their larger production quantities, they can support other producer groups with limited land in marketing jointly and expand market opportunities. *This mission recommends that all interventions should be clearly linked to the CARLEP outcome objectives, and the implementation of production intensification investments should be guided by a business plan that describes the planning process involved and the market targeted.*

19. Since the CARLEP is going to continue its support in the *rehabilitation and construction of irrigation schemes,* the selection and prioritisation of the irrigation schemes should be based on climate resilient designs in addition to the feasibility studies. Therefore criteria will have to be established through an assessment of existing systems and climate resilience building options. The irrigation engineering manual (May, 2016) includes steps to be followed in climate change impact and vulnerability assessment and adaptation planning. The mission recommends that the steps be followed to prioritise the list of schemes to be rehabilitated and constructed under CARLEP. The mission visited one of the irrigation canals proposed to be rehabilitated under CARLEP in Trashi Yangste. It was obvious from the discussion with the WUA that it was still very weak in capacity to manage the timely maintenance of the canals early on to avoid great damage requiring larger rehabilitation works and funding from the government.

20. The mission visited a dairy production group in Orong Gewog, Samdrup Jongkhar District that was established in 2009 and has grown in its membership from 48 to 78 members by 2016. The increased production capacity and profit of the group was impressive and so was its governance, as reflected by record keeping, transparency and organizational capacity. Technical, financial and logistical support had been provided over the years by various organizations and programmes, and the group was able to make good use of this support for its development with a clear vision for their further growth. The mission also visited a successful semi-commercial dairy producers run by a single mother and her 3 children in Jangdung village, Mongar District. The motivation, enthusiasm, endurance and capacity to learn of the female farmer was impressive. While none of the family members is part of a producer group, the mission felt that their experience, commitment to dairy farming and willingness to help would make them potential lead farmers in the surrounding communities and could support the marketing of other dairy groups.

21. *Climate Smart Villages* are an innovation within the CARLEP and from the site visited (Ngarpongtang, Thangrong gewog, Mongar Dzongkhag) it is evident that the results from this pilot are eagerly awaited. The team composed of ARDC, OPM and Gewog officers have made commendable efforts in developing a methodology for participatory climate vulnerability analysis that partly forms the basis of the action plans. The historical perspective including types of climatic events, frequency and impacts particularly on livelihoods (exposure and sensitivity) as well as the coping mechanisms (adaptive capacity) have been well captured using various tools and keen community participation. The initial tested methodology can benefit from incorporating climate scenarios and projections to better inform the action plans. The inclusion of the scenarios will contribute to the awareness raising for climate change among the different actors and also introduce a more long term perspective in the planning process with consideration of potential trade-offs that may be required while also informing the prioritisation of activities. Permaculture emphasises the natural resource base, which relates to a catchment/ landscape approach that communities can also be encouraged to take in the development of the action plans. Continuous refining of the methodology is envisaged with a core team of expertise to engage with the communities. A more holistic methodology for assessing vulnerability, with a historic, current and future perspective, will contribute to the villages becoming climate smart.

22. The climate vulnerability assessments should lead to the *mainstreaming of climate change risk analysis into the planning processes* at the village, Gewog, district and national levels. Within CARLEP the entry point is the Climate Smart village development process, which as outlined above can be strengthened by ensuring a more long term perspective that will result in adaptation planning. The longer term plans can be unpacked into short and medium term local adaptation plans through the good facilitation of the core group of experts that can draw on additional expertise as required. Community level facilitators or social mobilisers can also play a key role in this process including the monitoring of the action plan implementation. The integrated planning process illustrated in the Climate Smart Village development process is essential and the envisaged mainstreaming will benefit from a bottom up approach to inform the district and national level planning. In addition activities, particularly for the medium to long term plans, need to be sequenced carefully to avoid mal-adaptation over subsequent five year planning cycles.

23. **Group development:** The mission has observed that support to group development needs to be significantly improved by mobilizing *additional technical/human capacity* on social capital, technical knowledge on production aspects (crops/livestock) and in business skills enhancement. Out of the two groups visited, one (*the dairy group at Orong Gewog, Samdrup Jongkahar Dzongkhag*) illustrated strong internal cohesiveness and is taking advantage of collective action on labour and access to services in improving their milk production. However they need improvement in business skills to develop simple farm business plans to move towards making their milk production more market-driven. Mentoring in agribusiness should be a focus for OPM and ARDC in order to integrate the *farming as a business* culture among groups. On the other hand, the Water Users Association of the *Lungdiri irrigation scheme,* Tongzhang Gewog was less cohesive. The mission agreed with the Project Director that generally many groups have received support in the past without attaining sufficient commitment and organizational maturity levels required to implement and manage the investments they receive from projects. Indeed, no training has so far been provided to contribute to the development of most groups, thus calling for more nurturing to put them on a trajectory towards achieving organizational maturity not only to positively engage with development actors (from government or private sector) but to achieve their other development aspirations as well.

24. Many groups will therefore need support through facilitation, training and mentoring to build mostly social capital, but also technical, business and entrepreneurial capacities to maximize the support they are likely to get from CARLEP. The implementation guidelines on Strengthening Farmers Groups and Cooperatives need to be revised accordingly to integrate the three key aspects of group development (social capital, technical skills – Crops/livestock and business skills). Similarly, the guidelines on the implementation of the agricultural and livestock activities would also have to be revised to take into consideration the changes needed in the extension delivery process and its content to provide for the above mentioned support to the groups.

25. The government extension service acting as mobilizers admitted that they are not able to help the groups in this area because their main comparative advantage is in production related topics. RAMCO can assist to some extent but they are understaffed and overwhelmed by other duties and may not have the time to systematically engage at the field level to mentor groups to acquire and use the business skills needed. It is recommended OPM working closely with FCBL, should expand the farmers' facilitator base by working with selected group mobilizers (extension officers) including with lead farmers and/or able group members to train them on entrepreneurship skills so that they can be a constant reference point among group members building the *farming as a business* culture.

26. C**omponent implementation guidelines**: The PMO and its implementing partners have initiated the preparation of the guidelines for the programme component implementation which included: 1) Guideline for Strengthening Farmers Groups and Cooperatives; 2) Guide for the Production Support Fund (PSF); 3) Livestock Implementation Guide; 40 Social Inclusion Guidelines; and 5) Agriculture Component Guidelines.

27. The draft guidelines were shared with the mission team for review. The mission is however recommending a major shift in how CARLEP will facilitate, train and mentor the farmer groups to allow them to reach the needed maturity levels to become sustainable (see section on group support). Accordingly, guidelines would need to be revised to ensure that they clearly correspond to the outcome objectives, are mutually reinforcing, embrace an integrated approach to interventions in support to resilience, reflect the revised process of extension through facilitation, training and mentoring, clarify the role and responsibilities of each actor for each intervention, and mainstream climate change adaptation as well as gender issues. The content of the respective training manuals would accordingly also need revision. A more systematic incorporation of climate change risk analysis will emphasise the resilience building objective particularly in the guidelines for agriculture and livestock.

28. The new recommended approach to group support would require a larger human and technical capacity that may not be always available with the CARLEP implementing partners. These partners may draw upon external human resources to be trained as facilitators in support of group cohesion and governance or as lead farmers for dairy and vegetable production. These could be young unemployed or school drop-outs or farmers members of the groups, or other community members, as seen appropriate. Since these will be responsible for the continuous follow-up with the groups and their members, they should be local residents of the community who will be provided with the needed trainings. These will be trained and coached by trainers, staff of RAMCO, RLDC, ARDC, gewog and Dzondkhags. Where technical resources for the manual preparation and conducting the training of trainers (staff of CARLEP implementing partners) is not available, such as for business/entrepreneurial skill development and mainstreaming of climate change, support could be sought from national specialized institutions or experts (further details will be provided in the supervision mission report).

Agreed action	Responsibility	Agreed date
6. Revise all the implementation manuals according to the changes in the process of group support and include aspects of social capital, business skills, climate change resilience and gender issues in the training manuals (support to be provided with available manuals in other countries /programmes)	OPM, RAMCO, ARDC & RLDC	31 Mar 2017
7. Prioritise the irrigation schemes to be rehabilitated/constructed based on the assessment of climate vulnerability and impact including climate resilience building measures	OPM, ARDC & Dzongkhags	31 Mar 2017
8. Include climate scenarios in the methodology of the climate vulnerability assessment and a longer term planning horizon	OPM, ARDC, NECS & DHMS	31 Mar 2017
9. Articulate steps to develop adaptation plans with a bottom-up perspective from the village to the gewog and district level planning	OPM, Gewogs & Dzongkhags	30 Apr 2017

29. **Component 2** - **Value chain development and marketing:** Overall performance of the component is *moderately unsatisfactory (score=3).* This component aims at instituting organized value chains and marketing systems through networks of farmer groups and is realized through 1) increased smallholder income from crop and livestock value chains 2) commercial farming expanded and new farm enterprise developed and 3) community driven market infrastructure developed. This component is mainly lead by FCBL, DAMC/RAMCO and the Dzondkhags. Activities within this component are yet to start awaiting the completion of the value chain study and the study in support of the development of FCBL's strategy and business plan and an assessment of its capacity to implement the strategy. The three studies are linked and are needed for the targeted initiation of programme activities.

30. The vegetable and dairy value chain studies should guide CARLEP in identifying areas of interventions based on market requirements including recommendations for infrastructure and equipment to enhance their efficiency, while taking into consideration that enhancing *climate resilience in value chains* is a key objective of CARLEP. The main strategy to ensure this objective is reached is through the incorporation of climate change vulnerability analysis in the value chain studies. This incorporation can identify entry points for climate change adaptation and mitigation measures that will ensure a climate sensitive development of the value chains. The IFAD note on How to do climate change risk assessments in value chain projects is also a good resource to inform the selection of activities that can be incorporated into the CARLEP. Applying the methodology in the note can

supplement the adaptation entry points that have already been identified by OPM and ARDC. These include the development of climate resilient infrastructure and the revision of related manuals and codes as well as the selection of varieties and species based on climate tolerance. Other options such as conservation agriculture in suitable areas, particularly those with water stress as well as improving water storage capacity and use efficiency can also be explored. Fundamentally, the adaptation options should build on indigenous knowledge as has been illustrated in the vulnerability analysis for the climate smart villages where one of the coping strategies is the adjustment of planting times for maize.

Agreed action	Responsibility	Agreed date
10. Identify key options and entry points for climate change adaptation in the selected value chains	OPM &Dzongkhags	30 Nov 2016
11. Organize a technical support mission to work with MoAF on the finalization of the value chain studies and participate in the multi-stakeholder workshop	IFAD, MoAF & OPM	28 Feb 2017

D. Programme Implementation progress

31. **Project Management and Coordination:** Performance of OPM is rated as *satisfactory (score= 5*). A fully-functioning Office of the Programme Management (OPM) has been established at Wengkhar in Mongar and relevant staffs have been recruited. One accounts assistant will be recruited to help alleviate financial management workload in OPM. Key CARLEP focal point persons in key implementation partner organizations have been identified and assigned including: liaison office in MoAF Secretariat, ARDC Wengkhar, FCBL in Phuntsholing, RLDC Kanglung and RAMCO in Mongar. Good office space has been provided to OPM staff by RGoB in ARDC premises in Mongar. The OPM was officially inaugurated at the launch of the programme in March, 2016, however it only became fully equipped and operational in June, 2016, while the National Programme Steering Committee (NPSC) and coordination structures are in place. Since the start-up workshop held in March, 2016 OPM staff have focused on planning activities and introducing the programme to key stakeholders in all the Programme Dzongkhags.

32. **Coordination:** FCBL- a RGoB owned corporation, will play a major role in linking farmers to markets, as a CARLEP implementing partner. Departments in MoAF (namely DoA, DoL, DAMC at the central level; ARDC, RLDC, RAMCO at the regional level; DAO, DLO at the Dzongkhag level; and Extension officers at the Gewog level) are key implementing units at the field level. The PIM needs to be clear on the exact roles they will perform in implementation. There are also a number of other projects such as Global Climate Change Alliance (GCCA), Government of India (GoI) supported projects, Highland Research and Development, Gewog and Dzongkhag development grants (RGoB), etc. which are implementing their programs in the same Dzongkhags as CARLEP. While CARLEP is trying to avoid any duplication likely to be among these projects and programs, it is critical that the coordination mechanism is strengthened by regular exchanges to enhance complementarity in planning and implementation. The inclusion of the District Commissioners in the coordination efforts is also recommended.

33. **Capacity building for staff:** Besides enhancing the capacities of the groups, all PMO staff as well as concerned staff from gewog/Dzongkhag and implementing partners should, at least once, follow the training on facilitation and business skills provided to the facilitators or farmers. This will enhance their mentoring capacities to the groups as well as enhance the data collection for the M&E system and knowledge management reflecting lessons learnt. The mission commends OPM for recruiting young professional in efforts to building national capacity in delivery of development programmes. However, it is also recommended that the recently recruited young professional staff at the OPM are urgently exposed to field operations to gain experience. Opportunities should also be sought for them to gain project management and implementation training through short courses and mentoring by experienced staff.

Agreed action	Responsibility	Agreed date
12. Organise a field schedule for newly recruited OPM young	OPM	Continuous

Agreed action	Responsibility	Agreed date
professional to participate in field activities and selected short courses in programme management and farming as a business		
13. The CPM to have a discussion with the Secretary of Agriculture to reach agreement to allow selected training of OPM staff on secondment and contract staff om M7E, Gender, and group development (e.g using learning routes, fellowships)	IFAD & MoAF	31 Mar 2017

34. **Coherence between AWPB and Implementation**: The rating is *Moderately Satisfactory (score=4)*. During the period from December 2015 to June 2016 the Project had budgeted BTN 8.556 million as against which BTN 4.260 million was utilized (50%). The utilization of allocated funds for was mainly for Component4. No expenditures were incurred towards Components 1, 2 and 3. For the year 2016-17, the AWPB is for BTN 235.12 million in respect of which only BTN 3.87 million (1.65%) has been utilized till the end of September, 2016. Not much of the amount could have been spent since the amount was released to the Dzongkhags only in September, 2016. In the preparation of the AWPB for 2017/2018the focus should be on having realistic targets based on the right sequencing, and collapsing of activities into a bundle when associated with a single procurement process. The key target for the current AWPB is to ensure effective implementation gains traction on the ground to take care of the 2017 cropping season. The AWPB for 2017/18 will be completed by the OPM and submitted to IFAD for no objection by 15 April, 2017.

Agreed action	Responsibility	Agreed date
1. The 2017/18 AWPB to match needs from local level participatory needs assessments and the VC assessments	OPM & FCBL	15 Apr 2017

35. **Monitoring and Evaluation**: Rated *moderately satisfactory* (score=4). Learning from MAGIP's limitations, CARLEP has initiated to have a more systematic and robust M&E system in place. The project has developed standard M&E reporting formats to be used by all the implementing agencies. The programme has also developed e-reporting system using online Google Sheet. The main advantages of using online Google sheet as outlined by the project are: can be easily accessed from internet-connected computer, allows only the authorized user to enter or remove data, shared access and editing in real time of online files, able to view the progress of other agencies (but cannot edit the data), and can update the progress on time through both online and offline methods.

36. The programme has been able to complete the baseline survey within the stipulated time. The final baseline data will be used to re-visit the logframe targets. The programme will develop its first Annual RIMS report for 2016 during January 2017 against the 1st level results indicators. To support its M&E system further, the programme may consider (a) introducing farmers' field diary (may customize from other IFAD project such as HVAP, Nepal) to track results and changes at farmers household level particularly for vegetable and dairy value chain farmers; (b) using the household national identity number to track individual household or farmer's participation in programme activities to avoid double counting in the M&E system; and (c) geo-referencing of locations of all farmers groups participating in the project, but also locations of production and marketing infrastructures.

Agreed action	Responsibility	Agreed date
2. Using external resource persons as needed, conduct one round of M&E training for all entities associated with the project (OPM, Dzongkhag, FCBL & technical agencies) to familiarize on overall project M&E system including data collection formats and reporting, e-reporting, RIMS and AOS, etc.	M&E Officer & NPD	31 Mar 2017
3. Report the annual RIMS for 1st level results for 2016.	M&E Officer	15 Jan 2017
4. Consider introducing (a) farmers' field dairy to capture results at household level particularly for vegetable and dairy value chain farmers; (b) tracking of all participating households using their national identity number to avoid double counting; and (c) geo-referencing of locations of all farmers groups and infrastructures.	NPD, M&E Officer & FCBL	01 Dec 2016 onwards
5. Develop a systematic data collection, analysis, validation and storage mechanism based on M&E learning from MAGIP for its project completion report and other reporting requirement; also make M&E a cross-cutting responsibility among all entities of the programme.	M&E Officer, NDP & partners	Continuous

37. **Gender**

focus: The gender performance of CARLEP is rated *moderately satisfactory* (score=4) largely based on enabling initiatives planned and under implementation. The project has a full time dedicated Gender Officer combined with KM. Building on MAGIP's gender mainstreaming strategy, CARLEP has action plan to develop gender strategy during 2016-17. The project has already initiated sex-disaggregated data in its M&E system and it is updating its logframe to include gender indicators and sex-disaggregated information. In its first six months of operational achievements, the overall number/percentage of women benefiting from the project has been encouraging, being at least 50% under component 1.

38. For the next steps, the project would do well to intensify gender-focused activities and roll out specific activities for female-headed households and considering targeting as per baseline survey. However targeting poor women may only have limited benefits unless deep rooted gender inequalities are identified and appropriately addressed. Increases in access to income and benefits to poor households might come at the cost of heavier workloads for women and diminishing health. The programme needs to be sensitive to such situations by organising gender sensitisation awareness training programme for staffs and Dzongkhag officials as per AWPB 2016-17. The programme may also examine if *Gender Advisory Committee* is needed as per project design to support in its gender mainstreaming activities.

39. **Poverty**

Agreed action	Responsibility	Agreed date
6. Develop gender and social inclusion strategy and a sensitization cum training module – which should include life skills trainings for adolescent/young girls (including non-financial services skills such as health, sanitation and nutrition)	Gender Officer & NPD	31 Mar 2017
7. Conduct gender training as per AWPB for key staff of OPM, Dzongkhags, Gewogs and partner agencies; gender officer should have exposure visits to other IFAD projects in India/Nepal for learning on-the-job on gender.	Gender Officer & NPD	31 Mar 2017
8. Where possible promote women-specific farmers groups who can take advantage of opportunities offered under components 1 & 2	OPM, RAMCO & FCBL	30 Apr 2017

focus and effectiveness of targeting approach: Rated as *moderately satisfactory* (score-4), CARLEP is focused on rural poverty by being located in the six eastern Dzongkhags, which remain the under-developed region of the country with almost half of all the poor of Bhutan residing in these dzongkhags. Poor households taking up vegetable production and dairy farming will also benefit through inclusion in farmers groups for *intensification and expansion of vegetable and dairy production.*Besides poverty, CARLEP's climate resilience strategy for smallholders will also address climate vulnerability of livelihoods from the perspective of livelihoods assets and their interrelated nature. CARLEP has developed a *comprehensive strategy to increase resilience capacity of smallholders including poor households,* through multi-level, integrated interventions, e.g. i) intra-household (gender and youth), ii) household-level (vulnerability targeting), iii) farm-level (nutrition, diversification, climate smart practices and income generation), iv) community level (social capital through farmer groups, lead farmer model), and v) local institutions (increased outreach of extension services, access to value chains/markets, improved sustainability of rural infrastructure).

40. CARLEP is following an inclusive approach (for Component 1) to include all households living in a particular community in the programme. However, the most vulnerable poor and smallholders including the ethnic communities (such as Brokpas, Lepchas and Doya) will be prioritised when allocating programme activities and benefits. Special efforts need to be made to identify and facilitate inclusion of the poorest or most vulnerable households[4, 5](through the Social Inclusion Fund) including in governance of community institutions such as farmers' groups, farmers' cooperatives, etc.

Agreed action	Responsibility	Agreed date
14. Maintain a data-base for household poverty categories (including women-headed, HHs with disability, Kidu recipient HHs, POP as per Dzongkhag classification[6], ethnic communities such as Brokpa, Lepcha & Doya -particularly in component 1).	OPM & Manager (Agriculture & Livestock) & Gender Officer	31 Mar 2017

41. **Innovation:** Overall Rated *moderately satisfactory* (score=4). The project is at an early stage of implementation to report any innovation. The project design has outputs around innovation, mainly in strengthening

4 AMEPP's PCR in 2012 that used food security, source of livelihood and asset ownership as the criteria to classify households as "Better Off", "Poor" and "Poorest". See AMEPP PCR, IFAD, 2012.
5 The term "Poorest" used in the AMEPP PCR will be replaced by "Most Vulnerable" in CARLEP to accommodate climate change impacts and vulnerabilities.
6 HHs with elderly couples or elderly widow/widower with no other sources of income and support.

production resilience of smallholders through improvement of (i) agricultural management practices at farm-, land- and soil level, (ii) water-smart technologies to meet resilience standards; (iii) e-agriculture; and (v) piloting of permaculture. The project has initiated planning for implementation of these innovations by allocating necessary budget and action plan for implementation. In its first year of implementation, the project has provided seeds and other planting materials to 4,856 HHs that will contribute to realizing the mentioned innovations as per project design.

42. **Learning and Knowledge Management:** The project has a regular KM officer. The programme is preparing a KM Strategy and Action Plan and has produced a Progress Report for the first six months of 2015-2016.Community participation in the adaptation planning process provides opportunities to capitalise on indigenous knowledge and engender the community ownership of the plans. The innovation of the climate smart villages is an opportunity for knowledge generation. The OPM and implementing partners can proactively capture the process of building Climate Smart Villages in a systematic way even before any results are achieved. One of the knowledge areas is measuring of resilience and building a framework to enable this. Household level resilience can be a key starting point and this can then be expanded to the community or village level based on the action plans.

Agreed action	Responsibility	Agreed date
9. Develop CARLEP KM Strategy and Action Plan. Enable project partners (including ARDC Wengkhar, RLDC Kanglung, FCBL, DAMC & Dzongkhag RNR officers) to contribute KM products for newsletters of IFAD, RGoB/MoAF and IFADAsia website on regular basis.	KM Officer, NPD, OPM & ARDC, RLDC	31 Mar 2017 & continuous
10. Undertake KM training programme for staffs at OPM, Dzongkhags & partner institutions; prepare action plan to produce KM products along with dissemination strategy based on KM strategy. If required, use external resource persons.	KM Officer & NPD, OPM	31 Mar 2017

43. **Climate and environment focus**. This section is rated as *moderately satisfactory* (score=4). The project has very strong climate and environment focus. The project has ASAP grant to address climate and environment. The enabling provisions are being integrated to address climate and environment in the project, though field level results are yet to emerge, being at the early stage of implementation.

E. Fiduciary aspects

44. Financial **management:** The rating for financial management is *Moderately Satisfactory (score=4)*. The accounting of the project is done in a centralized server system and hence has a uniform chart of accounts. Consequently the reports generated through the system are also standardized. Proper authorizations have been obtained before making any payments and supporting documents are well kept. The system is online and the records fed into the system at the Dzongkhag (district) level can be viewed and extracted at the OPM. The Project follows Cash system of accounting.

45. The accounts officer at the OPM has not worked under any IFAD project earlier and hence not familiar with the IFAD systems of reporting and preparation of Withdrawal Applications. He should keep a track of expenditure of each of the implementing partners every month both by components and categories and compare it with the AWPB. He also needs to keep track of the funds available with each of the project parties and ensure regular fund flow. Though the Mission has provided support and guidance it will help him if he participates in the Financial Management workshop to be held in December, 2016. The accounts staff at the Dzongkhags have not worked in the earlier project and need to be trained in preparation of monthly expenditure statements by components, categories, financier, comparison between the AWPB and the actual expenditure. The project should maintain financial expenditure by sub-components which will help in comparing the physical and financial progress. Even if the accounting system does not allow accounting by sub-components, the accountants should maintain such record and submit it to the OPM for consolidation.

46. **Disbursement:** The rating for disbursement is *Satisfactory (score=5).* So far only the initial advance has been disbursed which is 9.63% in respect of loan, 18.72% in respect of Grant and 15.85% in respect of ASAP Grant. The project has submitted a withdrawal application for the period upto June 2016 but the same has been rejected by IFAD due to some of the expenditure being ineligible.

47. **SOE Review:** The Mission reviewed the WA 2 in respect of the loan and ASAP Grant and WA 3 in respect of IFAD Grant submitted by the project for expenditure incurred till June 2016 and found expenditure amounting to

BTN 13.94 million ineligible for IFAD loan financing, which was to be booked under MAGIP but due to lack of IFAD funds, it was agreed to be booked under CARLEP. However, the expenditures were incurred prior to loan effectiveness or not being in accordance with the approved AWPB of CARLEP. The mission therefore recommends that the ineligible expenses be met from RGOB as part of its share to MAGIP which has not been fully utilized (only 73%). The WA in respect of IFAD Grant and ASAP Grant were found to be in order. The project is required to resubmit the claim with the inclusion of only the eligible expenditures. The WA submitted by the project is in the old format and not the Smart SOE methodology which has been implemented by IFAD. The Accounts Officer needs to get trained for preparation and submission of Smart SOE.

48. **Counterpart funds:** The rating for Counterpart funds is *Moderately Satisfactory (score=4).* The AWPB of the Programme is built into RGoB budget and funds are released from time to time as may be required by the Project. During the period ended June 2016 the share of RGoB contribution was BTN 0.94 million against the AWPB of BTN 4.06 million. Of this the amount actually spent was BTN0.79 million. The unspent funds at the end of the year are surrendered by the project to the RGOB. FCBL has not contributed so far. The beneficiary contribution is USD 10,450 (1.59% of the allocation).

49. **Compliance with loan covenants:** The rating for Compliance is *Moderately Satisfactory (score=4).* The Programme has generally complied with the loan covenants except (i) Clause 6 of Schedule I – half yearly meeting of NPSC has not been held (ii) 7.08 of the General Conditions - the insurance of goods and buildings used in the project has not been done except vehicles.

50. **Procurement:** The rating for Procurement is *Moderately Satisfactory (score=4).* Sample verification of procurements made by the project were made and found that RGOB Procurement Guidelines in respect of the procurement processes have been followed and documentation of such procurement is available and well maintained. The project has also maintained proper Stock Register wherein all the goods and equipment procured by the project are recorded. The assets of the project need to be tagged with an identification number. The project has not undertaken any procurement in respect of Component 2. Design of Organizational strategy, business plan and capacity development plan as also value chain design for vegetable and dairy was to be undertaken during the period in accordance with the AWPB and the procurement plan for strengthening of FCBL.

51. **Audit:** This cannot be rated as the audit report is not yet available. The audit of the project is being carried out by the Royal Audit Authority (RGOB auditor).The audit for the year 2015-16 has been completed but the report is yet to be issued. It needs to be submitted to IFAD by the end of December 2016. The format and contents of the audit report are required to be in accordance with the IFAD Guidelines on Project Audit with an opinion on the eligibility of the SOEs. The project is required to keep an audit log with the auditors' observations and their settlement.

52. **Financial management assessment and risk summary**: Overall, the project is classified as LOW risk from the fiduciary point of view.

Agreed action	Responsibility	Agreed date
25. Conduct a training programme for all accounts staff engaged in the project in preparation monthly expenditure statements and the AO in preparation of Smart SOE	OPM- AO	15 Jan 2017
26. Correct the excess claims in the WA made for the period Jan-Jun 2016 and resubmit the same to IFAD	OPM-AO	15 Nov 2016
27. Compile a list of all assets received from MAGIP and those procured under the project and tag them with identification numbers	OPM-AO	31 Dec 2016
28. Submit the audit report within the stipulated time. Audit Report to include opinion on SOEs	OPM & RAA	31 Dec 2016

F. Sustainability

53. Institutions building. Rated as *moderately satisfactory* (score=4).The project has already started engaging with the existing Farmers Groups by providing the members with vegetable seeds and fruit saplings through the Dzongkhags. Village level planning and implementation through farmer groups, investment in group development and setting up O&M groups for assets is expected to stimulate ownership by target communities for long-term

sustainability of activities. RAMCO is developing capacity building and strengthening strategy for the existing farmers groups and new groups that will be formed both for vegetable and dairy value chains.

54. Empowerment. Rated as *moderately satisfactory* (score=4). The strategy being developed by RAMCO to build the capacities of the farmers groups for vegetable and dairy value chain will contribute to the overall economic, social and knowledge empowerment of the farmers groups. The groups will also be trained in financial and group management. The water users groups or associations too would be strengthened along with irrigation infrastructures development.

55. **Quality of beneficiary participation**. Rated as *moderately satisfactory* (score=4). Early on the farmers groups are already participating actively in the planning and implementation processes particularly for the vegetable seeds received from the project. In the participatory local level planning approach being piloted through the 6 climate smart villages provides an opportunity to improve the quality of farmer participation. This approach will gradually be expanded and mainstreamed into the normal Gewog planning process used by the RGoB.

56. **Responsiveness of service providers**. This section is rated *as moderately satisfactory* (score=4). The support to strengthen the organisation capacity of FCBL and other key implementation partners such as RAMCO and ARDC and LHOMON SOCIETY will not only achieve programme results but will continue to fulfil their mandates to serve empowered local communities who will demand their services beyond the programme period. Outsourcing to private service providers and mobilising and training Lead Farmers and group development facilitators will further ensure responsiveness to demand-driven service needs. Overall, RAMCO and ARDC have already started engaging with the farmers to provide needed services based on the project approaches.

57. **Exit strategy**. Rated as *moderately satisfactory* (score=4). The programme has just commenced and CARLEP shifts the market access to the next paragidm for IFAD funded projects in Bhutan. The proposed involvement of the private sector and FCBL in particular in value chain activities will ensure that organised farmers develop long lasting business relationships. These systematic efforts to promote scaling up are the elements that do indeed constitute the exit strategy.

58. **Potential for scaling up and replication.** Rated as *moderately satisfactory* (score=4). The programme presents great potential for scaling-up and replication. Knowledge will be generated through the climate smart village approach, to inform policy shifts with regard to how to engage with vulnerable communities. Governement commitment to integrate this approach once proven in the official local level planning and national budgetary process and institutional expansion support of grassroots organizations from CARLEP will see the good practices go to scale.

G. Other

59. **Physical and financial assets**. It is too early to assess these parameters although the project has already started providing some physical assets such as dairy cattle sheds. The high level of ownership by the farmers as evidenced during the field interactions showed that such physical assets will be effectively used, managed and sustained. Rated as *moderately satisfactory* (score=4).

60. **Food security.** The project investment and processes through vegetable and dairy value chains including ASAP for climate resilient farming systems, diversified agriculture and climate smart irrigation will all contribute to strengthening the food and nutrition security of the rural communities. Rated as *moderately satisfactory* (score=4).

61. **Quality of natural assets improvement and climate resilient**: The limited use of agro-chemicals and use of organic manure in most of the sites visited are good environmental practices at the farm level; composting can also be encouraged. Seeking of environment clearance for land development and also the identification of hotspots (vulnerable areas) with advice being provided for communities to rehabilitate these are all good practices that should be maintained. Farming on slopes given the topography and location of the villages and farms is unavoidable. Therefore measures to minimise erosion and the loss of fertile top soil form an integral part of the sustainable land management practices in CARLEP. The approach envisaged by the OPM to promote various SLM techniques based on the local context is well aligned with the permaculture concepts. This approach can beneficially be expanded to the landscape approach and more emphasis can be placed on integrated natural resources management. Rated as *moderately satisfactory* (score=4).

H. Conclusion

62. A summary of the main actions agreed is provided at the end of each section above. It is agreed that the next IFAD Implementation Support Mission will take place in Jan/Feb 2017 and IFAD Supervision will take place in October/November, 2017. This Aide Memoire was discussed and agreed upon in a wrap up meeting on 31 October 2016, chaired by Rinzin Dorji, the Hon'ble Secretary, Ministry of Agriculture and Forests. IFAD and the Royal Government of Bhutan endorse the findings of the mission particularly the key recommendations of:

1. Fast tracking the procurement and completion of the three essential independent rapid assessments including: 1st stage institutional assessment of FCBL, vegetable and dairy value chains (VC).

2. Strengthen the assessment of existing groups based on inventory and other secondary data to establish the maturity status of the groups.

3. Convene a stakeholders workshop to validate the rapid assessments and agree on priority areas of focus in VC, group development, ascertain specific roles of key implementation partners, sequence the programme activities and prepare an action plan;

4. OPM technical staff to participate in and supervise the local level planning and action plan preparation exercises and RAMCO, ARDC and RLDC to mobilise additional capacity to enhance social capital and technical and business skills of groups; and

5. Revise implementation guidelines to make them practical and incorporate in a climate change adaptation approach for building resilience of the target communities.

Appendix 1: Summary of project status and ratings

Basic Facts

Country	**Bhutan**	Project ID		Loan/DSF/ Grant/ ASAP FI No.	IFAD Loan No. 2000000627; IFAD Grant No. 2000000838; ASAP Grant No. 2000000872
Project	**Commercial Agriculture & Resilient Livelihoods Enhancement Programme**			Top-up Loan/DSF/ Grant/ ASAP FI No.	

Date of Update	01-Nov-2016		
Supervising Inst.	IFAD		
No. of Supervisions	1	No. of Implementation Support/Follow-up missions	
Last Supervision		Last Implementation Support/Follow-up mission	

					USD million	Disb. rate %
Approval	11-Dec-2015			Total financing	25,568	7.13
Agreement	11-Dec-2015	Effectiveness lag		IFAD Total	14,369	12.53
Entry into force	11-Dec-2015	PAR value	--------	IFAD loan	8,273	9.67
First disbursement	17-May-2016 (Loan) 16-May-2016 (Grant) 17-May-2016 (ASAP)			DSF grant		
MTR	15-Oct-2019	Last amendment		IFAD grant	1,073	18.65
Original completion	31-Dec-2022	Last audit		ASAP grant	5,023	15.93
Current completion	31-Dec-2022			Domestic Total	11,200	0.20
Current closing	30-Jun-2023			Beneficiaries	659	1.59
No. of extensions	-			National Govern	5,739	0.21
				Other Domestic	4,802	0

		Dom. Fin. Inst.	0	0
		External Cofinancing Total	0	0

Project Performance Ratings

B.1 Fiduciary Aspects	Last	Current	B.2 Project implementation progress	Last	Current
1. Quality of financial management		4	1. Quality of project management		5
2. Acceptable disbursement rate		5	2. Performance of M&E		4
3. Counterpart funds		4	3. Coherence between AWPB & implementation		4
4. Compliance with financing covenants		4	4. Gender focus		4
5. Compliance with procurement		4	5. Poverty focus		4
6. Quality and timeliness of audits		NA	6. Effectiveness of targeting approach		4
			7. Innovation and learning		4
			8. Climate and environment focus		4
B.3 Outputs and outcomes	**Last**	**Current**	**B.4 Sustainability**	**Last**	**Current**
1. Market-led sustainable agricultural production		4	1. Institution building (organizations, etc.)		4
2. Value chain development and marketing		3	2. Empowerment		4
3. Project management & coordination		5	3. Quality of beneficiary participation		4
			4. Responsiveness of service providers		4
			5. Exit strategy (readiness and quality)		4
			6. Potential for scaling up and replication		4

B.5 Justification of ratings

The overall supervision rating is moderately satisfactory. This was the first supervision of the project. The OPM is fully staffed, but some of the key staffs of OPM would require adequate mentoring and capacity building/exposure visits. Planning processes with full participation and ownership of the Gewogs and Dzongkhags under the facilitation of the OPM could be strengthened. The three key studies of that would trigger the implementation the programme, viz. vegetable value chains, dairy value chains and capacity assessment of FCBL for effective participation/management of commercial value chains are yet to be initiated. However, processes needed to forge the implementation forward are adequately in place including the necessary budget and M&E system.

Overall Assessment and Risk Profile

		Last	Current
C.1	Physical/financial assets		4
C.2	Food security		4
C.3	Quality of natural asset improvement and climate resilience		4
C.4	Overall implementation progress (Sections B1 and B2)		4

Rationale for implementation progress rating

Overall implementation progress is rated moderately satisfactory. The project has prepared its first AWPB 2015-16 and used nearly 75% of the AWPB. The project has also prepared its first annual progress report for 2015-16 covering the period (Dec 2015 to June 2016). The implementation of the AWPB 2016-17 is also on course. The project partners particularly the ARDC and RLDC to support in technical implementation of the programme have also initiated action plans. Although the key studies are yet to be undertaken as mentioned above, the OPM and Dzongkhags have already initiated identifying the most suitable gewogs that will be focused for vegetable and dairy value chain.

C.5	Likelihood of achieving the development objectives (section B3 and B4)		4

Rationale for development objectives rating

There are encouraging indications that the project is on-course to achieve its development objectives. These are adequately reflected in the initiatives taken by the project management and processes put in place including the establishment of OPM with liaison office in MoAF Secretariat, structures of National Programme Steering Committee and coordination system, on-going planning and coordination processes with Dzongkhags and key implementation partners (ARDC, RLDC, RAMCO & FCBL) along with timely preparation of AWPB 2016-17 and release of RGoB fund for programme implementation.

C.6 **Risks** *Short description of major risks for each section and their impact on achievement of development objectives and sustainability*

Fiduciary aspects	The project follows a well-organised/structured RGoB's on-line fiduciary system for its reporting requirements. The

	challenge would be in allocating resources to dzongkhags on value-chain based interventions, whereas the dzongkhags would demand for equitable allocation of resources, as CARLEP would be one of the only sources of financing.
Project implementation progress	Dzongkhag administration and staffs as well as technical implementing partners need to have common understanding of the project processes and key objectives, particularly in commercialization of vegetable and dairy production & marketing through value chain development and diversification of farming for climate resilient rural communities. Without such common understanding, the project implementation progress may meet its desired momentum.
Outputs and outcomes	Nearly 2/3rd of the project HHs (over 21,000) are to be provided with diversified climate-resilient agriculture / farm-based interventions to enhance their resilience and adaptation to climate change. Many project communities, although generally connected by farm roads, remain logistically remote. Effectively reaching out to all communities, as also forming new groups or enhancing the capacity of the existing groups for vegetable and dairy value chains, together with adequately capturing the results through its M&E system will be a challenge. Social mobilization among these HHs and farmers groups, and also delivering project benefits would be initially slow impacting the overall project outputs and outcomes. Both the project team and implementing partners providing services and support might encounter a steep learning curve.
Sustainability	Early on, the project needs to prepare its exit cum sustainability strategy particularly the sustainability strategy for farmers groups (production and marketing groups) to sustain and scale-up commercialisation of vegetable and dairy value chains to the advantage of the farmers or groups. FCBL's role in development of marketing infrastructures and network would be crucial driving the process.

Proposed Follow-up

Issue / Problem	Recommended Action	Timing	Status
	Revise the TORs accordingly and complete the 3 independent rapid assessments: • 1st stage of vegetable value chain • 1st stage of dairy value chain • 1st stage of the FCBL assessment	31 Dec 2016	
	RAMCO should undertake further assessment of existing groups based on inventory and other secondary data to establish the maturity status of the groups	31 Dec 2016	
	Convene a stakeholders workshop to validate the studies, agree on priority areas of focus and specific roles of key implementation partners and prepare an action plan	31 Dec 2017	
	OPM technical staff to participate in and supervise the local level planning and action plan preparation exercises for climate smart villages	31 Jan 2016	
	RAMCO, RLDC and ARDC to mobilise additional capacity to enhance social capital and technical and business skills of groups	31 Mar 2017 & continuous	

Additional observations

Appendix 2: Updated logical framework: Progress against objectives, outcomes and outputs

Narrative	***Revised indicators***	***TO DO:***	***Baseline indicators***	***Remarks***
Goal:				
Sustainably increase smallholder producers' incomes and reduce poverty through commercialization of production within programme households	5 000 direct beneficiary HH in vegetable and dairy value chains report at least 25% increase in HH assets and income, as compared to baseline (disaggregated by HHs-head gender)	Undertake RIMS baseline survey with target HH to establish current asset and income situation in the intended target group. Balance survey between vegetable and dairy value chains. Consider expanding the survey with a control group in the same target area.	**HH asset:** sprinklers (4.9%), Sprayer (0.5%), rice huller (6.5%), Maize mill (7.4%), Cornflake machine (0.5%), paddy transplanter (0.5%), harvester (0.4), power chain (21.4%). **Income:** Annual income from Agri-livestock activities: 0.5% of HHs has income above Nu.200000, 2.5 % have btw Nu. 100000 -200000, 8.3% have Nu. 50000-100000, 14.9% have btw Nu. 30000-50000, 22.3% -Nu. 15000-30000, 28.6% have Nu. 5000-15000, 12.6% - less than Nu. 5000	
	15% reduction in the prevalence of child malnutrition, as compared to baseline	Establish current status of child malnutrition in target HHs through RIMS baseline survey	89% of the children up to 5 yrs. are moderately and severely underweight, 3% are moderate and severely wasting and only 1% is with severe wasting.	
	>=23 180 smallholder HH supported in coping with the impacts of climate change***(ASAP)***	Define which HHs will be counted in terms of support to cope with CC impacts (e.g. HHs farming more crops than before; HHs with access to water; HHs engaged in farmer groups; etc.)	No. of HHs farming more crops than before with adapted climate resilient/coping practices (such as Crop rotation, intercropping, counter farming, manure/leaf litter and compost application, use of pest resistant and drought tolerant seeds), No. of HH with improved access to water, no of HH engaged in farmers' groups.	

Development Objective:	>= 30% increase in production of vegetables (MT) by the end of the Programme	Develop a list of vegetables which will be included in the production count and obtain baseline data from existing monitoring systems	**list of Vegetable under Value chain:** Chili, cabbage, cauliflower, beans, radish, carrot, broccoli, bulb onion, green leaves. For the **six eastern dzongkhags,** production as per 2015 agri-stats are as follows: Chili (8580MT), Cabbage (1721MT), Cauliflower (755MT), Bean (1155MT), Radish (2201MT), carrot (205MT), Broccoli (284MT), Blub onion (400MT), Green leaves (859MT). For the **addition three Dzongkhags** per 2015 agri-stats, the production are as follows: Chili (693MT), Cabbage (844MT), Cauliflower (270MT), Bean (1043MT), Radish (1034MT), carrot (390MT), Broccoli (100MT), Blub onion (122MT), Green leaves (646MT). For all commercial production area (gewogs) the baseline needs to be collected.	
Increased returns to smallholder farmers through climate resilient production of crops and livestock in nationally organized value chains and marketing systems	>= 30% increase in production of dairy (MT)by the end of the Programme	Obtain baseline data from existing monitoring systems	As per livestock statistics 2015, for the entire region (only six eastern dzongkhags), production as follows 15424.6MT of Milk, 80.1MT of butter, 133MT of local cheese,	
	>= 20,000 HH have improved access to water for agriculture production	Develop a list of technologies which count for improved water access (irrigation, sprinkler systems, rainwater harvesting etc.) and include water-related questions in annual surveys	considering only six eastern dzongkhags, baseline for access to irrigation by technology types are as follows: 29.1% HHs have surface irrigation, 12.3% - drip irrigation, 0.7%- sprinkler, 0.3% - water storage tank/rain water harvesting.	

Component 1: Market-led sustainable agricultural production				
Outcome 1: Community-based Resilient Agricultural Production has sustainably increased	>=23 000 HH adopt technologies or practices which support coping with the impacts of climate change***(ASAP)***	Develop a list of agricultural practices which are eligible to get counted (permaculture, stress-tolerant seeds, biogas, terracing, hedgerows, composting, water management, access to irrigation, etc.)	At baseline: permaculture (0% of HH), crop rotation (42.1%), intercropping (54.9%), counter farming (26.4%), use of stress tolerant seeds (7%), use of pest resistant seeds (24.5%), composting (0.6%), biogas (3.8%) and improved water harvesting technology (0.5%).	
Output 1.1: Increased Production Resilience, Diversification and Innovation	>= 6 000 HH adopt sustainable land management practices	Develop a list of land management practices which are eligible to get counted	At baseline: dry land terracing (15.6%), hedgerow (14.6%),	
Output 1.2: Vegetable Production Intensified and Expanded	>= 4 500 HH organized into vegetable farming groups (minimum 60% female members)	Establish how many vegetable farmer groups are currently active in the targeted Dzongkhags (to use as a baseline value)	based on the DAMC report (Assessment report on registered farmers' groups and cooperatives 2016) 49 vegetable based groups	
	Vegetable farmer groups produce a total of at least 3600 MT / year by the end of the Programme	Establish a baseline value for annual vegetable production in the target dzongkhags		
Output 1.3: Dairy Production Intensified and Expanded	>= 2600 HHs organized into dairy farming groups (with minimum 50% female members)	Establish how many dairy farmer groups are currently active in the target Dzongkhags (to use as a baseline value)	based on the DAMC report (Assessment report on registered farmer's groups and cooperatives 2016) 45 based dairy groups	
	Dairy groups produce a total of at least x MT / year by the end of the Programme	Establish a baseline value for annual dairy production in the target dzongkhags		

Component 2: Value chain development and marketing				
Outcome 2: Increased smallholder income from Crop and Livestock Value Chains	At least 140commercial enterprises established are profitable by the end of the programme	Establish what constitutes a commercial enterprise under this Programme	Baseline - No commercial enterprise in the region for both Dairy and vegetable For dairy enterprise, a commercial unit encompasses an individual farmer who owns up to or more than 4 number of improved cattle with good housing facility and adequate pasture land and access to market. For vegetable enterprise, an individual farmer (even if he/she is in a group) cultivating vegetable in an area of above 25 decimals, having adequate access to irrigation facilities, having adequate skill, equipment's and material for packaging and marketing, and having substance market males a commercial unit.	
Output 2.1: Resilient Vegetable and Dairy Value Chains developed	FCBL fully staffed and operational	Establish what 'operationality' of FCBL entails (staffing, training, business plan, trucking, storage capabilities)	VC study cover this indicator later	
	Strategies and business plans for vegetable and dairy value chains developed			
Output 2.2: Agricultural Commercialization and Enterprise Development strengthened	115 marketing groups (total) are operational in vegetable and dairy value chains by the end of the Programme	Establish a baseline value for the number of marketing groups in vegetable and dairy value chains		
	200 agriculture enterprises (including cooperatives) established and with business plans	Establish a baseline value for the number of enterprises and cooperatives in vegetable and dairy value chains	As per baseline study, the number of enterprise and cooperative in vegetable and dairy value chains is zero	
Output 2.3: Community-driven	Collection, aggregation and storage facilities and farm	Define what constitutes processing and marketing infrastructure in vegetable	As per the baseline study, Collection, aggregation and storage facilities and farm shops established according to	

Strategic Market Infrastructure developed	shops established according to Value Chain Strategies and business plans	value chain so that it can be counted	Value Chain Strategies and business plans is zero	
Component 3: Institutional Support and Policy Development				
Outcome 3: Strengthened Agricultural Institutions and Policies for Improved and Resilient Agricultural and Marketing Practices	70% of vegetable and dairy groups and enterprises report the use of market information	Client survey with	As per the baseline study, vegetable and dairy groups and enterprises report the use of market information is zero	
	Regulatory framework for private sector development and Public Private Partnership in vegetable and dairy value chains developed			
Output 3.1: Strengthened value chain and marketing knowledge and communication	Market Information System enhanced to provide relevant (real-time) information for vegetable and dairy value chains			
Output 3.2: Climate change resilience and value chain development lessons	Engineering norms for irrigation systems revised to increase climate resilience		Revisit the existing the engineering norms for irrigation system prepared by DoA, MoAF.	
mainstreamed in agricultural policies and sector strategies	Based on evidence from the Programme, policy recommendations formulated and disseminated to the MoAF			

Appendix 3: Summary of key actions to be taken within agreed timeframes

Action Area	Action Agreed	Responsibility	Date	Progress
Project Implementation	1. Revise the TORs accordingly and complete the 3 independent rapid assessments: • 1st stage of vegetable value chain • 1st stage of dairy value chain • 1st stage of the FCBL assessment	FCBL & OPM	31 Dec 2016	
	2. RAMCO should undertake further assessment of existing groups based on inventory and other secondary data to establish the maturity status of the groups	DAMC, RAMCO & OPM	31 Dec 2016	
	3. Convene a stakeholders workshop to validate the studies, agree on priority areas of focus and specific roles of key implementation partners and prepare an action plan	MoAF & OPM	31 Dec 2017	
	4. OPM technical staff to participate in and supervise the local level planning and action plan preparation exercises for climate smart villages	OPM, ARDC, RLDC &RAMCO	31 Jan 2016	
	5. RAMCO, RLDC and ARDC to mobilise additional capacity to enhance social capital and technical and business skills of groups	OPM, RAMCO, RLDC & ARDC	31 Mar 2017 & continuous	
Outputs	6. Revise all the implementation manuals according to the changes in the process of group support and include aspects of social capital, business skills, climate change resilience and gender issues in the training manuals (support to be provided with available manuals in other countries /programmes)	OPM, RAMCO, ARDC & RLDC	31 Mar 2017	
	7. Prioritise the irrigation schemes to be rehabilitated/constructed based on the assessment of climate vulnerability and impact including climate resilience building measures	OPM, ARDC & Dzongkhags	31 Mar 2017	
	8. Include climate scenarios in the methodology of the climate vulnerability assessment and a longer term planning horizon	OPM, ARDC, NECS & DHMS	31 Mar 2017	
	9. Articulate steps to develop adaptation plans with a bottom-up perspective from the village to the gewog and district level planning	OPM, Gewogs & Dzongkhags	30 Apr 2017	
	10. Identify key options and entry points for climate change adaptation in the selected value chains	OPM	30 Nov 2016	

		&Dzongkhags		
	11. Organize a technical support mission to work with MoAF on the finalization of the value chain studies and participate in the multi-stakeholder workshop	IFAD, MoAF & OPM	28 Feb 2017	
	12. Organise a field schedule for newly recruited OPM young professional to participate in field activities and selected short courses in programme management and farming as a business	OPM	Continuous	
	13. The CPM to have a discussion with the Secretary of Agriculture to reach agreement to allow selected training of OPM staff on secondment and contract staff om M7E, Gender, and group development (e.g using learning routes, fellowships)	IFAD & MoAF	31 Mar 2017	
	14. The 2017/18 AWPB to match needs from local level participatory needs assessments and the VC assessments	OPM& FCBL	15 Apr 2017	
M&E	15. Using external resource persons as needed, conduct one round of M&E training for all entities associated with the project (OPM, Dzongkhag, FCBL & technical agencies) to familiarize on overall project M&E system including data collection formats and reporting, e-reporting, RIMS and AOS, etc.	M&E Officer & NPD	31 Mar 2017	
	16. Report the annual RIMS for 1st level results for 2016.	M&E Officer	15 Jan 2017	
	17. Consider introducing (a) farmers' field dairy to capture results at household level particularly for vegetable and dairy value chain farmers; (b) tracking of all participating households using their national identity number to avoid double counting; and (c) geo-referencing of locations of all farmers groups and infrastructures.	NPD, M&E Officer & FCBL	01 Dec 2016 onwards	
	18. Develop a systematic data collection, analysis, validation and storage mechanism based on M&E learning from MAGIP for its project completion report and other reporting requirement; also make M&E a cross-cutting responsibility among all entities of the programme.	M&E Officer, NDP & partners	Continuous	
Gender focus	19. Develop gender and social inclusion strategy and a sensitization cum training module – which should include life skills trainings for adolescent/young girls (including non-financial services skills such as health, sanitation and nutrition)	Gender Officer & NPD	31 Mar 2017	
	20. Conduct gender training as per AWPB for key staff of OPM, Dzongkhags, Gewogs and partner agencies;	Gender Officer & NPD	31 Mar 2017	

	gender officer should have exposure visits to other IFAD projects in India/Nepal for learning on-the-job on gender.			
	21. Where possible promote women-specific farmers groups who can take advantage of opportunities offered under components 1 & 2	OPM, RAMCO & FCBL	30 Apr 2017	
Poverty focus / targeting	22. Maintain a data-base for household poverty categories (including women-headed, HHs with disability, Kidu recipient HHs, POP as per Dzongkhag classification[7], ethnic communities such as Brokpa, Lepcha & Doya -particularly in component 1).	OPM & Manager (Agriculture & Livestock) & Gender Officer	31 Mar 2017	
Knowledge Management	23. Develop CARLEP KM Strategy and Action Plan. Enable project partners (including RDC Wengkhar, RLDC Kanglung, FCBL, DAMC & Dzongkhag RNR officers) to contribute KM products for newsletters of IFAD, RGoB/MoAF and IFADAsia website on regular basis.	KM Officer, NPD, OPM & RDC, RLDC	31 Mar 2017 & continuous	
	24. Undertake KM training programme for staffs at OPM, Dzongkhags & partner institutions; prepare action plan to produce KM products along with dissemination strategy based on KM strategy. If required, use external resource persons.	KM Officer & NPD, OPM	31 Mar 2017	
Fiduciary aspects	25. Conduct a training programme for all accounts staff engaged in the project in preparation monthly expenditure statements and the AO in preparation of Smart SOE	OPM- AO	15 Jan 2017	
	26. Correct the excess claims in the WA made for the period Jan-Jun 2016 and resubmit the same to IFAD	OPM-AO	15 Nov 2016	
	27. Compile a list of all assets received from MAGIP and those procured under the project and tag them with identification numbers	OPM-AO	31 Dec 2016	
	28. Submit the audit report within the stipulated time. Audit Report to include opinion on SOEs	OPM & RAA	31 Dec 2016	

7 HHs with elderly couples or elderly widow/widower with no other sources of income and support.

Appendix 4: Physical progress measured against AWP&B, including RIMS indicators

Sl. No.	Components/Sub-components/Activities	Indicators		11-Dec-2015 to 30-Jun-2016			Cumulative	Appraisal Target	%
				AWPB	Actual	%	Actual		
1	**Component 1: Market-led Sustainable Agriculture Production**								
1.1.A	**Climate Smart Agriculture Production and Management**								
1	Upgrading of existing farmer groups	No. of farmers Groups upgraded	No.	0	0	#DIV/0!	0	0	#DIV/0!
2	Training of extension agents	No. of EAs trained	No.	0	0	#DIV/0!	0	0	#DIV/0!
3	Production inputs for farm resilience and diversification(Agriculture)	Area under farm resilience and diversification	Acre	1	1	100	1	1	100.000
1.1.B	**Innovation through Permaculture & Biogas**								
1	Farm level rainwater harvesting infrastructure	No. of infrastructure established	No.	0	0	#DIV/0!	0	0	#DIV/0!
2	Seed and seedlings	Area covered	Acre	14	14	100	14	6	233.333
12	Biogas digester	No. of biogas digester promoted	No.	0	0	#DIV/0!	0	0	#DIV/0!
13	TA biogas	No. of TA recruited	No.	0	0	#DIV/0!	0	0	#DIV/0!
1.1.C	**Innovation through ICTs**								
1	Hand-held tablets, software and soil test kits	No. of ICT tools introduced	No.	0	0	#DIV/0!	0	0	#DIV/0!
4	Pilot e-reporting system	No. of e-reporting system	No.	0	0	#DIV/0!	0	0	#DIV/0!
5	Information management dessimination	No. of publication	No.	0	0	#DIV/0!	0	0	#DIV/0!
1.1.D	**Increase Outreach of Extension Services**								
1	Training of trainers (ToT)	No. of ToT conducted	No.	0	0	#DIV/0!	0	0	#DIV/0!
2	Training of lead farmers	No. of lead farmers trained	No.	0	0.000	#DIV/0!	0	0	#DIV/0!
3	Farmer-to-farmer trainings	No. of F-F training conducted/No of farmers trained	No.	0	0.000	#DIV/0!	0	0	#DIV/0!

4	Demonstration inputs & equipment for lead farmers			0	0	#DIV/0!	0	0	#DIV/0!
1.1.D.2	Production inputs	Area under production inputs	Acre	0.75	0.75	100	0.75	3	25.000
1	Poly-tunnels	No. of poly-tunnels set up	No.	12	15	125	15	26	57.692
3	**Resilient & Water Use Efficient Irrigation Development**	Length or No of irrigation system developed	Km/No	0	0	#DIV/0!	0	0	#DIV/0!
1.1.E	Training on Climate Resilient Irrigation			0	0	#DIV/0!	0	0	#DIV/0!
1.1.E.1	District engineers and extension agents (design and construction)	No. of DEs and EAs trained on climate resilient irrigation	No.	0	0	#DIV/0!	0	0	#DIV/0!
1	Irrigation Infrastructure			0	0	#DIV/0!	0	0	#DIV/0!
1.1.E.2	Feasibility studies	No. of Feasibilities studies conducted	No.	0	0	#DIV/0!	0	0	#DIV/0!
1	Renovation of irrigation infrastructure	irrigation Infrastructure renovated (Area coverage)	Acre	257	200.000	77.82101167	200.000	850	23.529
2	Pilot irrigation schemes	No. of Pilots irrigation schemes developed	No.	0	0	#DIV/0!	0	0	#DIV/0!
4	Promotion of water use efficient technologies	No. of improved irrigation system	No	2	2	100	2	2	100.000
7	Formation and strengthening of water user association	No. of water user association formed	No	0	0	#DIV/0!	0	0	#DIV/0!
1.2	**Output 1.2: Intensification & Expansion of Vegetable Production**			0	0	#DIV/0!	0	0	#DIV/0!
1.2.A	Development of training and extension material	No. of training & extension materials developed	No.	0	0	#DIV/0!	0	0	#DIV/0!
1.2.B	Capacity Development of Vegetable Production Groups	No. of vegetable producers groups trained	No.	0	0	#DIV/0!	0	0	#DIV/0!
1.2.B.2	Training on Production Techniques & Post-harvest Management			0	0	#DIV/0!	0	0	#DIV/0!
1	Training on vegetable production techniques	No. of farmers training conducted	No.	25	8	32	8	33	24.242
1.2.C	**Vegetable Seed Research & Production**								

2	Training and certification of vegetable seed growers	No. of vegetable seed growers trained on seed certification	No.	0	0	#DIV/0!	0	0	#DIV/0!
3	Equipment and input support vegetable seed growers	No. of Equipment supplied to veg. seed growers	No.	9	11	122.2222222	11	22	50.000
1.2.D	Equipment and input support vegetable seed growers **Provision of Vegetable Production Inputs**	Quantity of inputs supplied	No	0	0	#DIV/0!	0	0	#DIV/0!
1	Provision of stress tolerant vegetable seeds	Quantity of vegetable seeds supplied	kg	3.35	2.36	70.44776119	2.36	5	47.200
2	Provision of stress tolerant vegetable seeds (PBAS2)	Quantity of vegetable seeds supplied	kg	0	0	#DIV/0!	0	0	#DIV/0!
3	Water efficient irrigation	Area under water efficient irrigation system	Acre	0	0	#DIV/0!	0	0	#DIV/0!
5	Small post-harvest equipment	No. of small post-harvest equipment promoted	No.	11	11.000	100	11	271	4.059
1.3	**Output 1.3: Intensification & Expansion of Dairy Production**								
1.3.A	Development of training & extension materials	No. training & extension materials developed on dairy production	No.	0	0	#DIV/0!	0	0	#DIV/0!
1.3.B	Capacity Development of Dairy Production Groups			0	0	#DIV/0!	0	0	#DIV/0!
1.3.B.1	Awareness & Mobilization	No. of Dairy groups sensitized and mobilized	No.	0	0.000	#DIV/0!	0	0	#DIV/0!
1.3.B.2	Training on Good Dairy Management Practices			0	0	#DIV/0!	0	0	#DIV/0!
1	Training on livestock husbandry	No. of dairy groups or individuals trained on livestock husbandry	No.	0	0	#DIV/0!	0	0	#DIV/0!
1.3.C	**Improved Services Outreach through CAHWs & Lead Farmers**			0	0	#DIV/0!	0	0	#DIV/0!
1.3.C.1	**CAHW Model**								
1	CAHW model development and packaging	No. of CAHW model developed	No.	0	0	#DIV/0!	0	0	#DIV/0!
2	Training of trainers (ToT)	No. of ToT conducted on CAHW & lead farmers	No.	0	0	#DIV/0!	0	0	#DIV/0!

3	Training of CAHWs	No. of CAHWs trained	No.	0	0	#DIV/0!	0	0	#DIV/0!
1.3.D	**Support to Fodder & Feed Production**								
1	Perenial fodder in fallow and marginal land	Area of fallow & marginal land under perenial fodder	Acre	142	112	78.87323944	112	613	18.271
2	Winter fodder crop demonstration and seed supply	Area under Winter fodder	Acre	0	0	#DIV/0!	0	0	#DIV/0!
3	Training of feed producers	No. of feed producers trained	No.	0	0	#DIV/0!	0	0	#DIV/0!
4	Chopping machine (for dairy groups)	No. of chopping machines supplied	No.	0	0.000	#DIV/0!	0	9	0.000
1.3.E	**Provision of Dairy Production Inputs**			0	0	#DIV/0!	0	0	#DIV/0!
1	Milk cans	No. of Milk cans supplied	No.	0	0	#DIV/0!	0	0	#DIV/0!
2	Cross-breed cattle	No. of cross-breed cattle supported	head	0	0	#DIV/0!	0.000	0	#DIV/0!
4	Shed construction	No. of sheds constructed	unit	35	20	57.14285714	20	830	2.410
6	Equipment dairy production groups	No. of equipment supplied to dairy producer groups	No.	1	0.000	0	0	10	0.000
2	**Component 2: Value Chain Development & Marketing Support**								
2.1.A	**Strengthening of FCBL for Value Chain Development**			0	0	#DIV/0!	0	0	#DIV/0!
1	Design of organizational strategy, business plan and capacity development plan	Organizational development strategy, business plan and capacity development plan in place	Strategy & Plan	1	0	0	0	1	0.000
2	Capacity development activities	No. of staff trained on value chain development	No.	0	0	#DIV/0!	0	0	#DIV/0!
2.1.B	**Vegetable value-chain design and business plan**	Vegetable value-chain design & business plan in place	Plan	2	0	0	0	3	0.000
2.1.C	**Dairy value-chain design and business plan**	Dairy value-chain design & business plan in place	Plan	2	0	0	0	3	0.000
2.1.D	**Value Chain Development, Strengthening and Expansion**								

1	Multi-stakeholders facilitation process	No. of stakeholders engaged or consulted	No.	0	0	#DIV/0!	0	0	#DIV/0!
2.1.E	**Technical Assistance (C2)**			0	0	#DIV/0!	0	0	#DIV/0!
1	National/External TA	No. of National/External TA recruited	NO.	24	0	0	0	72	0.000
2.2	**Output 2.2: Agricultural Commercialization & Enterprise Development strengthened**								
2.2.A	**Support to Agriculture Enterprise Development**	No of Agriculture Enterprises supported	**No.**	0	0	#DIV/0!	0	0	#DIV/0!
2.2.B	**Support to Marketing Groups**								
1	Awareness on marketing groups	No. of Marketing groups sensitized	No.	0	0	#DIV/0!	0	0	#DIV/0!
2	Strengthening of existing marketing and cooperative capacity development packages	No. of marketing & cooperative capacity development packages strengthened	No.	0	0	#DIV/0!	0	0	#DIV/0!
2.2.C	**Training on Marketing Groups**								
1	Formation of vegetable marketing groups	No. of vegetable marketing groups formed	No.	0	0	#DIV/0!	0	0	#DIV/0!
3	Formation of dairy marketing groups	No. of dairy marketing groups formed	No.	0	0	#DIV/0!	0	0	#DIV/0!
5	Training in marketing & value-chain	No. of groups or individual farmers trained on marketing & value-chain	No.	0	0	#DIV/0!	0	0	#DIV/0!
2.2.D	**Support to Entrepreneurs**								
1	Development of training packages for agriculture entrepreneurs	No. of training packages developed for agriculture entrepreneurs	No.	0	0	#DIV/0!	0	0	#DIV/0!
2	Entrepreneur identification and engagement process	No. of entrepreneurs identified and engaged	No.	0	0	#DIV/0!	0	0	#DIV/0!

2.2.E	**Other Trainings to Groups, Cooperatives & Entrepreneurs**	No. of groups, coops & entrepreneurs trained	No.	0	0	#DIV/0!	0	0	#DIV/0!
2.2.F	**Multi-stakeholder Platforms & Network development**			0	0	#DIV/0!	0	0	#DIV/0!
2.2.F.1	Multi-stakeholder platforms and network development	No. of platforms & networking established	No.	2	2	100	2	0	#DIV/0!
2.3	**Output 2.3: Development of Community-driven Market Infrastructure**			0	0	#DIV/0!	0	0	#DIV/0!
2.3.A	**Planning & Design**			0	0	#DIV/0!	0	0	#DIV/0!
1	Business plan-based planning of market infrastructure	No. of market infrastructure developed based on business plan	No.	0	0	#DIV/0!	0	0	#DIV/0!
3	Development of business plans for 3 windows shops	No. of Developments windows shops convened	No.	0	0	#DIV/0!	0	2	0.000
2.3.B	**Vegetable Value-chain, Post-harvest & Market Infrastructure & Equipment**								
1	Value-chain equipment	No. of value-chain equipment promoted	No.	0	0	#DIV/0!	0	0	#DIV/0!
2	Value-chain infrastructure	No. of value-chain infrastructure put in place	No.	0	0	#DIV/0!	0	0	#DIV/0!
3	Transportation (Vehicle)	No. of vehicles purchased	No.	0	0	#DIV/0!	0	0	#DIV/0!
2.3.C	**Dairy Value-chain Post-harvest & Market Infrastructure & Equipment**								
1	Construction of milk collection sheds	No. of milk collection shed constructed	No.	0	0	#DIV/0!	0	0	#DIV/0!
2	Equipment of milk collection sheds	No. of equipment set up in milk collection sheds	No.	0	0	#DIV/0!	0	0	#DIV/0!
3	Construction of milk collection centers with chilling facilities	No. of milk collection centers with chiling facilities	No.	0	0	#DIV/0!	0	0	#DIV/0!
3	**Component 3: Institutional Support & Policy Development**								
3.1.A	**Strengthening of the DAMC Market Information System**								
1	Strengthening of the DAMC market information system	DAMC MIS strengthened	MIS	0	0	#DIV/0!	0	0	#DIV/0!

2	Equipment related to Market Information System upgrade	No. of equipment supplied for MIS upgradation	No.	0	0	#DIV/0!	0	0	#DIV/0!
3.1.B	**Curriculum development of RNR Training and Education institutes**	No. of curriculum developed	No.	0	0	#DIV/0!	0	0	#DIV/0!
3.2	**Output 3.2: Mainstreaming Climate Change Resilience & Value Chain Development Lessons into agricultural policies and sector strategies**								
3.2.A	**Participatory policy development and monitoring approach**	No. of participatory policy development process or approach initiated	No.	0	0	#DIV/0!	0	0	#DIV/0!
3.2.B	**Mainstreaming climate resilience and value chain development lessons in agricultural policies**	No. of Policy Notes developed based on Climate resilience & and value chain development lessons	No.	0	0	#DIV/0!	0	0	#DIV/0!
3.2.C	**Development of a regulatory framework for PPP**	A regulatory framework for PPP developed	Framework	0	0	#DIV/0!	0	0	#DIV/0!
3.2.D	**Technical Assistance (C3)**			0	0	#DIV/0!	0	0	#DIV/0!
1	National/International TA	No. of Nationals/International TA recruited	Nu.	0	0	#DIV/0!	0	0	#DIV/0!
4	**Component 4: Project Management, Coordination and M&E**								
4.1.A	**Material & Equipment**								
1	Vehicles	No. of vehicles purchased	No.	2	0	0	0	2	0.000
2	Laptops	No. of laptops purchased	No.	12	10	83.33333333	10	12	83.333
3	Printer	No. of printers purchased	No.	5	10	200	10	5	200.000
4	Scanner	No. of scanners purchased	No.	2	2	100	2	2	100.000
5	Photocopier heavy duty	No. of heavy duty photocopier purchased	No.	2	1	50	1	2	50.000
6	Office equipment	Stes of office equipment purchased	Set	5	3	60	3	5	60.000
4.1.B	**Capacity Building**			0	0	#DIV/0!	0	0	#DIV/0!
1	Training on gender	No. of staff trained on gender	No.	0	0	#DIV/0!	0	0	#DIV/0!
2	Training on knowledge management	No. of staff trained on KM	No.	0	0	#DIV/0!	0	0	#DIV/0!

3	Training on monitoring and evaluation	No. of staff trained on M&E	No.	0	0	#DIV/0!	0	0	#DIV/0!
4	Training on financial management	No. of staff trained on FM	No.	0	0	#DIV/0!	0	0	#DIV/0!
4.1.C	**Coordination**			0	0	#DIV/0!	0	0	#DIV/0!
1	Coordination meetings with dzongkhags	No. of Dzongkhags coordination meeting held	No.	1	0	0	0	7	0.000
4.1.D	**Food Corporation of Bhutan**			0	0	#DIV/0!	0	0	#DIV/0!
4.1.E	**Monitoring & Evaluation**			0	0	#DIV/0!	0	0	#DIV/0!
1	Baseline and impact studies	No. of baseline & impact studies conducted	No.	0	0	#DIV/0!	0	0	#DIV/0!
3	Programme Supervision Mission	No. Of Mission	No.	0	0	#DIV/0!	0	0	#DIV/0!
4	Annual outcome surveys	No. of AOS conducted	No.	1	0	0	0	1	0.000
6	Mid-term review	Mid-term review conducted	Mission	0	0	#DIV/0!	0	0	#DIV/0!
7	Project completion report	PCR prepared	Report	0	0	#DIV/0!	0	0	#DIV/0!
4.1.F	**Knowledge Management**			0	0	#DIV/0!	0	0	#DIV/0!
1	Printing and publications	No. of quality KM products published	No.	0	0	#DIV/0!	0	0	#DIV/0!
2	Setting up IMS (CARLEP Webpage)	Web page established	No.	0	0	#DIV/0!	0	0	#DIV/0!
3	Multistakeholder platform and networking	No. Of platforms & networks established	No.	0	0	#DIV/0!	0	0	#DIV/0!
4	Workshops and meetings	No. of workshops & meetings conducted	No.	1	1	100	1	4	25.000
4.2	**Recurrent Cost**			0	0.000	#DIV/0!	0.000		#DIV/0!
4.2.A	**OPM Mongar**								
1	National Program Director	No. of months Paid	Months	6	0.000	0	0.000	84.000	0.000
2	Finance Manager	No. of months Paid	Months	6	0.000	0	0.000	84.000	0.000
3	Accountant	No. of months Paid	Months	#REF!	0.000	#REF!	0.000	84.000	0.000
4	M&E and Gender Manager	No. of months Paid	Months	6	0.000	0	0.000	84.000	0.000
5	Project Support Officer	No. of months Paid	Months	4	4.000	100	4.000	84.000	4.762
6	KM Officer	No. of months Paid	Months	4	4.000	100	4.000	84.000	4.762

7	Component Manager (Agriculture Production)	No. of months Paid	Months	6	0.000	0	0.000	84.000	0.000
8	Component Manager (Livestock Production)	No. of months Paid	Months	6	0.000	0	0.000	84.000	0.000
9	Component Manager (Value-chain and Marketing)	No. of months Paid	Months	6	0.000	0	0.000	84.000	0.000
10	Dy. Manager-RAMCO	No. of months Paid	Months	6	0.000	0	0.000	84.000	0.000
11	Office Assistant	No. of months Paid	Months	6	0.000	0	0.000	84.000	0.000
12	Driver (x2)	No. of months Paid	Months	6	0.000	0	0.000	84.000	0.000
13	Farm shop Operators (x205)	No. of months Paid	Months	6	0.000	0	0.000	84	0.000
4.2.B	**Liaison Office, Thimphu**			0	0.000	#DIV/0!	0.000		#DIV/0!
1	IFAD Focal Officer, PPD	No. of months Paid	Months	6	0	0	0	84	0.000
2	IFAD Focal Officer, AFD	No. of months Paid	Months	6	0	0	0	84	0.000
4.2.C	**Operating Cost, Project Management Unit**			0	0.000	#DIV/0!	0.000		#DIV/0!
1	Vehicle operation and Maintenance	No of Vehicles	LPS	2	0	0	0	14	0.000
2	Maintenance of Building	Lumpsum	LPS	2	0	0	0	14	0.000
	Maintenance of Equipment	Lumpsum	LPS	2	0	0	0	14	0.000
3	Utilities - telephone, internet, electricity, water, fax, sewarage, post, etc.	Lumpsum	LPS	0.51	0	0	0	3.56	0.000

Appendix 5: Financial: Actual financial performance by financier; by component and disbursements by category

Table 5A: Financial performance by financier (upto 30-06-2016)

Financier	Approval (USD '000)	Disbursements (USD '000)	Per cent disbursed
IFAD Loan	8,273	800	9.67%
IFAD Grant	1,073	200	18.65%
ASAP Grant	5,023	800	15.93%
Government	5,739	12	0.21%
FCBL	4,802	-	-
Beneficiaries	659	10	1.59%
Total	**25,568**	**1,822**	**7.13%**

Note: IFAD Loan 2 of USD 6 million as envisaged in the PDR not included above

Table 5B: Financial performance by financier by component (30-06-16) – Amount in USD'000

No	Component	IFAD Loan & Grant			ASAP Grant			Government			FCBL			Beneficiaries			Total		
		Approval	Actual	%	Approval	Actual	%	Approval	Actual	%	Approval	Actual	%	Approval	Actual	%	Approval	Actual	
1	Market led Sustainable Agriculture Production	5,209	403	4.73%	3,025	20	0.42%	4,196	-	-	-	-	-	659	10	1.59%	13,088	434	3
2	Value Chain Development and Marketing Support	3,324	-	-	1,729	-	-	599	-	-	4,281	-	-	-	-	-	9,933	-	0
3	Institutional Support & Policy Development	178	-	-	269	-	-	14	-	-	-	-	-	-	-	-	461	-	0
4	Project Management, Co-ordination and M&E	636	64	10.04%	-	-	-	930	12	1.28%	522	-	-	-	-	-	2,087	76	3
	Total	**9,346**	**467**	**5.00%**	**5,023**	**20**	**0.39%**	**5,738**	**12**	**0.21%**	**4,802**	**-**	**-**	**659**	**10**	**1.59%**	**25,568**	**509**	1

Table 5C (i): IFAD Loan Disbursements (SDR as at 30-09-2016) - 2000000627

Code	Categories	Original Allocation	Disbursements	WA pending	Balance	% disbursed
200003	Works	1,890,000	-	133,429	1,890,000	0.00%
200012	Grants and Subsidies	180,000	-	-	180,000	0.00%
200013	Goods, Services and Inputs	2,000,000	-	157,020	2,000,000	0.00%
200019	Training	1,230,000	-	-	1,230,000	0.00%
270001	Authorized Allocation	-	567,364	-	(567,364)	100.00%
290001	Unallocated	590,000	-	-	590,000	0.00%
	Total	**5,890,000**	**567,364**	**290,448**	**5,322,636**	**9.63%**

Table 5C (ii): IFAD Grant Disbursements (SDR as at 30-09-2016) 2000000838

Code	Categories	Original Allocation	Disbursements	WA pending	Balance	% disbursed
200012	Grants and Subsidies	40,000	-		40,000	-
200013	Goods, Services and Inputs	210,000	-	43,956	210,000	-
200016	Operating Costs	70,000	-	1,806	70,000	-
200019	Training	370,000	-	39	370,000	-
270001	Authorized Allocation	-	142,276	-	(142,276)	100%
290001	Unallocated	70,000	-	-	70,000	-
	Total	**760,000**	**142,276**	**45,802**	**577,724**	**19%**

Table 5C (iii): ASAP Grant Disbursements (SDR as at 30-09-2016) 2000000872

Code	Categories	Original Allocation	Disbursements	WA pending	Balance	% disbursed
200003	Works	120,000	-		120,000	-
200013	Goods, Services and Inputs	400,000	-	14,270	400,000	-
200019	Training	2,700,000	-	188	2,700,000	-
270001	Authorized Allocation	-	567,364	-	(567,364)	100%
290001	Unallocated	360,000	-	-	360,000	-
	Total	**3,580,000**	**567,364**	**14,458**	**3,012,636**	**16%**

Appendix 6: Compliance with legal covenants: Status of implementation

Section	Covenant	Target/Action Due Date	Compliance Status
E Clause 2	*Conditions precedent to withdrawal*	Before first withdrawal	
(a)	The OPM shall have been duly established and staffed		Complied

(b)	IFAD's no-objection to the PIM shall have been obtained		Complied
(c)	The Designated Accounts have been opened and authorized signatories have been communicated to IFAD		Complied
(d)	The subsidiary agreement between MoAF and FCBL shall have entered into force		Complied
Sch I-Section II Clause 6	The NPSC shall meet at least half yearly (and/or quarterly as needed)		Not complied
Clause 7	The MoAF shall establish Regional Programme Implementation Committee for the Programme		Complied
General Conditions for Agricultural Development Financing			
4.01	*Account and Withdrawals* The Fund shall open a Loan Account and a Grant Account in the name of the Borrower	On Loan effectiveness (11-12-2015)	Complied
4.02	No withdrawal shall be made from the Loan and/or Grant accounts unless the first AWPB has been approved by the Fund		Complied
4.08	*Use of Proceeds* The Borrower and each Programme Party shall Use the proceeds of the Loan and the Grant exclusively to finance Eligible Expenditures in accordance with this Agreement and the General Conditions.	Throughout the project period	Ongoing compliance
7.01 (b) (ii)	*Annual Work Plans and Budgets* The OPM shall prepare a draft annual work plan and budget (AWPB) for each Programme Year. The OPM shall submit the draft AWPB s to the NPSC for its review and for its approval. When so approved, the Lead Programme Agency shall submit each draft AWPB to the Fund , for their respective comments, no later than 60 days before the beginning of the relevant Programme Year.	Before 30th April every year	Complied
7.05	*Procurement* Procurement of goods , works and services financed by the Loan and the Grant shall be carried out in accordance with RGOB's procurement regulations to the extent they are consistent with IFAD's Procurement Guidelines	Throughout the project period	Ongoing compliance
7.06	*Use of Goods and Services* All goods, services and buildings financed by the Project shall be used exclusively for the purpose of the Project	Throughout the project period	Ongoing compliance
7.08	*Insurance* The Borrower shall insure all goods and buildings used in the Project against such risks as shall be consistent with sound commercial practice	Throughout the project period	Only vehicle is insured. Equipments are not insured as per RGOB guidelines.
7.11	*Key Project Personnel* MoAF shall appoint the Project Director and all other key Project personnel in the manner specified in the agreement or otherwise approved by IFAD having the qualifications and experience specified in the agreement or approved by IFAD. The RGOB shall exercise best efforts to ensure continuity in key Project personnel throughout the Project Implementation period. RGOB shall insure key Project personnel against health and accident risks to the extent consistent with sound commercial practice or its customary practice in respect of its national civil service	Before first withdrawal	Complied

7.12	*Project Parties* Each Project Party shall carry out the Project in accordance with Section 7.01and not sell, lease or otherwise dispose off the Project's assets except in the normal course of business or as agreed by IFAD	Throughout project period	Ongoing Compliance
7.13	*Allocation of Project Resources* The Project Parties shall ensure that the resources and benefits of the Project, to the fullest extent practicable, are allocated among the Target Population using gender disaggregated methods	Throughout project period	Ongoing Compliance
7.14	*Environmental Factors* The Borrower/Recipient and the Project Parties shall take all reasonable measures to ensure that the Project is carried out with due diligence in regard to environmental factors and in conformity with national environmental laws and any international treaties to which the Project Member State may be party. In particular, the Project Parties shall maintain appropriate pest management practices under the Project and, to that end, shall comply with the principles of the International Code of Conduct on the Distribution and Use of Pesticides of the Food and Agriculture Organization of the United Nations (FAO), as amended, and ensure that pesticides procured under the Project do not include any pesticide formulation which would be classified as Extremely Hazardous (Class la) or Highly Hazardous (Class lb) according to *The WHO Recommended Classification of Pesticides by Hazard,* as amended.	Throughout project period	Ongoing Compliance
7.16	*Project Completion* The Borrower/Recipient shall ensure that the Project Parties complete the implementation of the Project by the Project Completion Date. The Fund and the Borrower/Recipient shall agree on the disposition of the assets of the Project upon its completion	Not yet due	
8.01	*Implementation Records* The Borrower/Recipient shall ensure that the Project Parties maintain records and documents adequate to reflect their operations in implementing the Project (including, but not limited to, copies or originals of all correspondence, minutes of meetings and all documents relating to procurement) until the Project Completion Date, and shall retain such records and documents for at least ten (10) years thereafter.	Throughout project period	Ongoing Compliance
8.02 x	*Monitoring* The OPM shall establish and maintain an appropriate information management system in accordance with IFAD's operational guidelines and Results Measurement Framework and adequately store the information during project implementation period and for at least ten years thereafter	Throughout project period	Ongoing compliance The Project has a Planning and Monitoring System (PLAMS)
8.03	*Progress Reports* The OPM shall submit to IFAD periodic progress report in such form and substance as IFAD may require		Ongoing Compliance
8.03	*Mid-Term Review* The Borrower, through the Lead Programme Agency and IFAD, shall jointly carry out a Review of Programme implementation no later than the midpoint of the project implementation period (the Mid-Term Review")	Before June 2019	Not yet due

8.04	*Completion Report* No later than the Financing Closing Date, The Borrower/ Recipient shall furnish to IFAD a report on the overall implementation of the Project in such form and substance as specified in the Financing Agreement or as IFAD shall reasonably request	By December, 2022	Not yet due
9.01	*Financial Records* The Project Parties shall maintain separate accounts and records in accordance with consistently maintained appropriate accounting practices adequate to reflect the operations, resources and expenditures related to the Project until the Financing Closing Date, and shall retain such accounts and records for at least ten (10) years thereafter.	Throughout the project implementation period	Ongoing compliance
9.02	*Financial Statements* The Borrower/Recipient shall deliver to the Fund detailed financial statements of the operations, resources and expenditures related to the Project for each Fiscal Year prepared in accordance with standards and procedures acceptable to the Fund and deliver such financial statements to the Fund within four (4) months of the end of each Fiscal Year	By 31st October every year	Not yet due. FS will be submitted by 31st October
9.03	*Audit Reports* The Borrower/Recipient shall: (a) each Fiscal Year, have the accounts relating to the Project audited in accordance with auditing standards acceptable to the Fund and the *IFAD Guidelines on Project Audits* by independent auditors acceptable to the Fund; (b) within six (6) months of the end of each Fiscal Year, furnish to the Fund a certified copy of the audit report. The Borrower/Recipient shall submit to the Fund the reply to the management letter of the auditors within one month of receipt thereof;	By 31st December every year	Not yet due
9.04	*Other Financial Reports and Information* The Borrower/Recipient and the Project Parties shall promptly furnish to the Fund such other reports and information as the Fund shall reasonably request on any financial matter relating to the Financing or the Project or any Project Party	Throughout project period	Ongoing compliance
10.03	*Visits, Inspections and Enquiries* The Borrower/Recipient and the Project Parties shall enable agents and representatives of the Fund from time to time to: (a) visit and inspect the Project, including any and all sites, works, equipment and other goods used for Project-related purposes; (b) examine the originals and take copies of any data, accounts, records and documents relevant to the Financing, the Project, or any Project Party; and (c) visit, communicate with and make enquiries of all Project personnel and any staff member of any Project Party.	Throughout project period	Ongoing compliance
10.04	*Audits Initiated by IFAD* The Borrower/Recipient and the Project Parties shall permit auditors designated by the Fund to audit the records and accounts relating to the Project. The Borrower/Recipient and the Project Parties shall cooperate fully with any such audit and accord the auditors the full rights and privileges of agents or representatives of the Fund under Section 10.03.	Throughout project period	
10.05	*Evaluations of the Project*		

	The Borrower/Recipient and each Project Party shall facilitate all evaluations and reviews of the Project that the Fund may carry out during the Project Implementation Period and for ten (10) years thereafter.	Throughout project period and 10 years thereafter

Appendix 7: Knowledge management: Learning and Innovation

Learning

1. Being in the east, the OPM is able to take advantage of its location to interact with the Dzongkhags as often as required. This is yielding results by improved planning and reporting processes, besides more pro-active coordination with Dzongkhag administration. The high level of ownership by the Dzongkhag (as evidence from the participation of Dzongdag or Governor of Mongar during the field visit) are encouraging sign of the prospect of the project achieving intended results more effectively. This proximity is also facilitating a much closer interaction between the OPM/ Project and implementing partners such as ARDC, RLDC and RAMCO.

2. The project is demonstrating towards building Climate Smart Villages (CSV) .as part of enhancing the resilient of the communities to climate change. While conceptually, the CSV looks promising, however, its field demonstration may require to be much more inclusive both for planning and implementation. The innovation in climate smart villages is the opportunity for knowledge management as the OPM and implementing partners such as ARDC Wengkhar could proactively capture the process of building Climate Smart Villages in a systematic way even before any results are achieved. One of the knowledge areas could be in measuring resilience and building a framework to enable this. Household level resilience can be a key starting point and this can then be expanded to the community or village level based on the action plans.

Innovation: Describe any interesting innovation noted during supervision

The project is at an early stage of implementation to report any innovation. The project design has outputs around innovation, mainly in strengthening production resilience of smallholders through improvement of (i) agricultural management practices at farm-, land- and soil level, (ii) water-smart technologies to meet resilience standards; (iii) e-agriculture; and (v) piloting of permaculture. The project has initiated planning for implementation of these innovations by allocating necessary budget and action plan for implementation. In its first year of implementation, the project has provided seeds and other planting materials to 4,856 HHs that will contribute to realizing the mentioned innovations as per project design.

Appendix 8: List of Documents to File on (APR xdesk), including detailed working papers.

Annex 1.

Technical report – Agriculture and Dairy production

1. This component aims at increasing the resilience of agricultural production of the targeted rural households through three outputs namely: 1) increased production resilience and diversification; 2) intensification and expansion of vegetable production by households and 3) expansion of dairy production by rural households.

2. During the past 6 months, and since CARLEP inception workshop in March 2016, the project undertook several activities within this component. These included the distribution of vegetable seeds and fruit tree seedlings, the rehabilitation and construction of irrigation schemes and canals and support to the dairy producer groups through shed construction and support to fodder development. Besides, the project has initiated the participatory community vulnerability assessments in the selected climate smart villages and the mission was able to observe the final day of this assessment and interact with the communities.

3. The Office of the Project Management (OPM) has also initiated the development of project implementation guidelines to support in the common understanding of the implementation of the activities by the various partners.

4. As observed from the project progress reporting, the field visits by the mission, as well as through discussions with the project team and the implementing partners, and as highlighted in the agreed Aide Memoire, the annex details and further explains some of the agreed recommendation related to component 1:

5. Planning:

- *Planning should be based on the objective of the subcomponent and target group*: While the project reported the distribution of seeds and seedlings to farmers, it was not clear whether the distribution of the seeds and seedlings serves the outcome on increasing resilience and diversity or that of commercialization of crops. All target groups would be requiring seeds and seedlings. However, the interventions for the target groups in the gewogs selected under the diversification and resilience subcomponent should be integrated, covering crops, livestock, and forestry and hence would require joint planning of all the concerned partners in addition to climate change experts. Cost-benefit analysis for specific interventions (such as the introduction of new crops/varieties) should consider the farming system as a whole and the livelihood of the farm, rather than just the analysis of one crop / livestock for the market. On the other hand, gewogs identified for crop /diary intensification that are linked to the value chain and markets, would be those with better accessibility to the roads and markets. For these gewogs, interventions should be based on the results of the value chain analysis and the planning and implementation of these interventions should be jointly done by the respective project and gewog/Dzongkhag technical teams together with DAMC/RAMCO and FCBL. Technical support from the climate change experts would also be needed in this case.

- *Community-based integrated needs identification and planning*: Planning should be based on community needs assessments that is done in an integrated manner. The core

implementation team at the Dzongkhag level should make sure that the essential main technical themes (crops, livestock, environment, etc) are well covered during the participatory planning process with communities. This core team should undertake the assessments with the communities during joint visits, rather than being done by sector specialists separately. Specialists from climate change institutions as well as RAMCO or FCBL staff may also be called upon to these needs assessment and planning meetings. This is to avoid the sectoral planning rather than integrated planning. After the needs assessment exercise, identification of priority interventions would be undertaken with the communities based on CARLEP's objectives, urgency of interventions, their interdependency, and the availability of funds and capacities, while taking into consideration complementarity with other interventions of the RGoB in the same gewogs and villages.

- *Planning should include the proper sequencing of activities*: Planning the sequence of the activities to be undertaken is critical for the success of these interventions. This sequencing would include:

  - Identification of existing groups or the decision to establish new groups, based on the assessment of the local situation and component objectives of CARLEP. The groups will then be supported in their social capital which is a pre-requisite for the development of any further technical or business training and interventions.

  - Selection of type of interventions together with concerned communities and implementing partners (multi-disciplinary team). Interventions could include type and variety of crops, type of soil conservation and land management technology, water harvesting or irrigation practices, postharvest structures and equipment, farm shops, forage production types, sheds, etc

  - Ensuring that the required studies and production/marketing pre-requisites are in-place or will be done before the interventions are put in place. These pre-requisites include feasibility or environmental studies for infrastructure, business plans for groups or individual farmers, markets identified, water or forage first secured (for seeds and seedlings distributions and for livestock purchase, respectively), capacity building plans prepared and trainings organized accordingly, etc

  - Ensuring that the human capacity to deliver the implementation activities are available, either from within the MOAF departments or the Dzongkhags/Gewogs or hired capacity when needed. These include engineers, trainers, Lead farmers, social capital in groups built. etc who should be trained according to what they need to deliver.

  - It is worth emphasizing that climate change aspects should be integrated in all planning and implementation activities

6. Group formation and support

- Groups are used as an entry point for most of the project interventions. In most cases, the project will work with existing groups but in some cases, there may be a need to form new groups. The coherence and social capital of the groups is a pre-requisite for the success of their activities and for their sustainability and it is a pre-requisite for providing the groups with technical and business skill development.
- The group formation and support should follow the developed implementation guidelines on groups (see technical annex on groups). This will integrate the three key aspects of group dynamics including leadership and governance, financial and business

management, as well as production and resilience aspects. All guidelines should include a more systematic integration of climate change risk analysis.

- The formation and support to groups would require special skills. Accordingly, all staff involved in the formation of groups should be provided with training in facilitation skills. These include extension agents, crops, livestock and RAMCO officers, lead farmers, ARDC staff, or hired staff required to support groups.
- However, group strengthening would need continuous mentoring to ensure their coherence. With the limited human capacity available within the various implementing partners, it is recommended that the one or more of the following strategies could be followed to achieve this objective:
  - Hire (through RAMCO or other arrangements) young unemployed graduates who will be trained to act as group facilitators in their respective gewogs following up and supporting the group governance, leadership and conflict resolution. These could also be trained in technical issues (crops and livestock) and could be facilitating social as well as technical aspects with the groups.
  - Provide the needed facilitation training and skills and some sort financial support to 1-2 members of the each group to act as facilitators supporting the coherence and governance of their groups. These could also provide technical training to their groups.
  - Use extension agents or lead farmers as facilitators of the groups, where possible. The lead farmers getting technical training should also get the training in facilitation skills.
  - By using the above options, CARLEP would be developing a mass of national personnel equipped with social facilitation (and technical) skills that could be tapped into in future activities and these could themselves deliver services on a payment basis in the future as has happened in other programmes and countries.
  - After the initial training, facilitators will be provided with refresher trainings on a regular basis as needed (usually on an annual basis) where they upgrade their knowledge or refresh the information received and where they can share experiences from the field and lessons learnt. These experiences will support the upgrading of the training manuals to enhanced their effectiveness. The service provider or extension agents / sector staff will be regularly mentoring the facilitators and support them when needed.
- Based on the assessments of the group status (strength, weaknesses and needs) that would be done by RAMCO (refer to the supervision mission recommendation), targeted capacity building plans will be developed. Groups will accordingly be further provided with business and technical skills by professional service providers (including ARDC and LDRC) as per the needs identified.

Lead Farmer approach:

7. The lead farmer approach is surely a very appropriate way of expanding the outreach of extension services to farmers in the remote areas, especially with the limited number of extension agents available and the dispersion of the farmers and their communities. The mission notes however, that there are still some scope to enhance

the LF approach to improve its efficiency and effectiveness. The following measures are accordingly recommended that:

- LF would be *fully selected by the communities*, such that they are selected as the ones most trusted and closer to the farmers. Accordingly, fellow farmers in these communities would feel more accountable and responsible for managing support received or lack of it from the LF

- LF be *preferably members of the groups*. While they should preferably be literate, this should not be a necessary condition, if they have other important capacities such as being good experienced farmers, fast learners, trusted by the fellow farmers and willingness to teach others. The LF, would receive facilitation skills training and technical training by ARDC/RLDC, then he/she would support and train the group members technical issues.

- *All LF would be responsible and accountable to train their follower farmers or the members of their groups* as a condition of getting the training, seeds/seedlings and other inputs. They would accordingly, record and document the trainings they have done (what type of training, when, how many trained and how many adopted the technology). This information would be fed into the M&E system of CARLEP. An evaluation of the LF (as well as other facilitators) would be done by the community or fellow farmers at the end of each season. Accordingly, the LF would be provided with additional technical or facilitation skills, or he/she could be completely replaced by new LF if the group evaluation indicates that they are not delivering as anticipated.

- *All LF should be provided with facilitation skill training* to ensure they are able to deliver on the training of other fellow farmers.

- *Not all LF should necessarily have demonstration farms*, hence not all LF should have large farms. This is especially true for smallholder vegetable and dairy farmers who are part of the value chain and where production practices could be demonstrated in the farmers' field or barn, even if they are of limited size. For common structures such as greenhouses, the group would then be responsible to decide where it should be constructed and how to manage it.

8. **Component implementation guidelines**: The PMO has initiated the development of the guidelines for the programme component implementation and its main activities which included: 1) Guideline for Strengthening Farmers Groups and Cooperatives; 2) Guide for the Production Support Fund (PSF); 3) Livestock Implementation Guide; and 4) Agriculture Component Guidelines. The drafts were shared with the mission team for review and comments were provided directly on the guideline contents and manuals.

9. However, the mission is recommending a major reorganization of the guidelines to include the following general principles of CARLEP implementation and outline of the guidelines as follows:

10. Objectives of the project and each of its components that is related to the guideline

11. Objectives of the guidelines specifically

12. Basic principles/ project approach. This section is described in details here, but does not necessarily need to be included as such in the guidelines. Since it reflects the guiding principles, it should rather be mainstreamed in all activities especially those in sections 4 and 5 described below:

- Groups are used as an entry point for project interventions, and the support to the groups formation and coherence (social capital) is a pre-requisite to all technical support to the groups. Besides, all groups (subsistence or commercial) should be receiving business capacity support to some degree

- The guidelines should correspond to the activities in the different outcomes in each component as these tailor to different groups and have different outcomes. For clarity they should provide the objective of each section (usually referring to an outcome or even output) prior to the description of the process. This is needed not only to clarify the justification of interventions and how they are done, but also to help in the smooth technical and financial reporting of CARLEP indicating interventions in separate components and outcomes.

- The sequence of events in each process described in the guideline is very critical and should be clearly indicated and described. This would guide the proper planning and implementation process to ensure a smooth and efficient flow of work for the implementing agencies and the beneficiaries.

- The guidelines should emphasize that whenever appropriate, the process should be participatory involving the beneficiary communities early on in the process (through awareness raising, identification of the issues, planning and implementation of activities). This is essential for the ownership of the process by the implementers and end-users and hence it will enhance its success and sustainability.

- The guidelines should take into consideration the new promoted approach for the support of the group in terms of facilitation and coaching / mentoring to enhance their social capital, and how the trained facilitators could support the extension process by providing technical training to their fellow-farmers whether they are lead farmers or hired facilitators.

- The guidelines should ensure that the process starting from planning should mainstream climate change including:
    a. Assessment of climate change risk analysis
    b. Assessment of adaptation and coping strategies to climate change
    c. Inclusion of climate proof infrastructure
    d. Preference given to technologies that enhance the livelihood of farmers and with it the resilience of farming systems
    e. NRM interventions with a landscape/watershed approach
    f. Inclusion of climate change risk reduction in all stages of the value chains
    g. Interventions reflecting a long term strategy with a vision to climate change predictions

- The guidelines should clearly indicate who is the main responsible agency/officer at each stage of the process of implementation and who are the other partners involved and their responsibilities. This would require identifying for each intervention partners, besides the participation of the communities, with whom joint decisions or consultations will be undertaken (see the section on planning).

13. Description of intervention processes following the component/outcome:

- Planning: participatory identification of needs with communities

- Prioritization and sequencing of interventions with the communities and implementing partners and Dzondgakhs; selection of interventions and prioritization based on CARLEP objectives, urgency, interdependency of interventions, availability of funds and capacities

- Identification of existing groups or decision to develop new groups based on the needs identified. The groups will then be supported in their social capital which is a pre-requisite for the development of any technical or business training and further interventions.

- Selection of type of interventions together with the communities and concerned implementing partners: type and variety of crops, type of soil conservation and land management technology, irrigation practices, postharvest structures and equipment, farm shops, sheds, forage production, dairy processing units, etc)

- Ensuring that the required studies and pre-requisites for any intervention are available or done before initiating interventions: feasibility studies, environmental studies, business plans, development of training modules, markets identified, water secured (for planting), etc.

- Ensuring that for each intervention, the indicators needed for the M&E system and responsible person to collect the data and feed it into the system have been identified

- Ensuring capacities to deliver implementation are available and hired when needed: engineers, trainers, Lead farmers, social capital in groups built, training of training undertaken. etc.

- Implementation on interventions: Clarity of the roles and responsibilities of implementers and the community. These include labor or financial contribution, O&M, household and gender disaggregated data collection for the M&E system on beneficiaries, adoption rates, etc.

14. Summary of essential partners in each component (DOL, DOA, ARDC, RAMCO, FCBL, JSI, other service providers such as RDTC, etc.)

15. Annexes: reference material and manuals

Technical Manuals:

16. It is recommended that training manuals will be revised to ensure that they are coherent with the revised planning and implementation process described in the Aide Memoire and supervision mission report. This will take into consideration that support to farmers through groups covers all three areas of governance, agriculture and livestock technical issues, and business and marketing issues. Manuals should also ensure that the aspects of resilience to climate change are included as cross-cutting issues in all technical manuals and training modules. The technical manuals could be prepared by the implementing technical partners (RAMCO, RLDC, ADRC) or by specialized agencies (for climate change and business aspects or special topics in governance, if needed). Manuals and How-to-do-Notes available through similar projects of IFAD or other development agency in the region (India, Nepal) or elsewhere or in IFAD's technical divisions have been availed and should be consulted during module development.

Technical manuals should be revised to:

a. Take into consideration target group and objective of training
b. Be adapted to include facilitators/lead farmers who are trained in facilitation skills, technical and business aspects

c. Climate change resilience modules
d. Gender considerations, where applicable

Annex 2

Climate and Environment Technical Annex

1. This annex focuses mainly on how to meet specific objectives under CARLEP particularly building the climate resilience of the targeted beneficiaries. Climate change adaptation is mainstreamed in the CARLEP and most of the ASAP funded activities in the AWBP 2016/17 were scheduled for Q3 and Q4. However, under Component 1 the selection of sustainable land management (SLM) practices to be promoted as part of CARLEP, land preparation and crop diversification, upgrading of irrigation norms and permaculture training are activities that need more concerted efforts as these were scheduled for Q2. The CARLEP baseline includes the identification of SLM techniques that can be promoted.

2. The beneficiaries within the CARLEP have been divided into targeted areas and value chain development areas. The first will focus more on building resilience of the livelihoods while the latter will focus more on building resilience in the dairy and vegetable value chains.

Component 1 - **Market-led agricultural production**
3. The activities under this component are in the targeted areas, which incorporate the climate smart agriculture production and management, innovation through permaculture and biogas and resilient and water use efficient irrigation.

Climate smart villages

4. The planning process in the Climate Smart Villages needs to have a medium to long term perspective and climate trends and projections need to be incorporated in the participatory vulnerability analysis. The process of developing climate smart villages led by the team comprising OPM, ARDC and DAOs and DLOs can be refined by adding two further elements.

- Firstly the inputs from the climate scenarios and projections downscaled at the regional level if available and secondly a longer term perspective for the plans that is then broken down into annual action plans. This can be done by inviting the climate specialists from the National Environment Commission and the Department for Hydro-Met Services (DHMS) as core team members to refine the participatory methodology being used in the communities for vulnerability assessments.
- Once the methodology is refined, a core team can then conduct the participatory planning using the tools provided and invite resource persons and specialists as and when the need arises.
- The sequencing of the activities in the action plans requires particular attention to ensure mal-adaptation is avoided. Therefore the longer term perspective informed by the climate projections and building on existing coping mechanisms is crucial. This can be effectively be facilitated by the planning team that will also address the prioritisation of activities.

5. The buy in from the gewog and Dzongkhag leaders is essential for the mainstreaming of the adaptation planning process. The action plans being developed for the climate smart villages form the basis of adaptation planning. The participatory planning process has been piloted in earlier projects (such as the sustainable land management project) and reportedly found to be quite costly. However, the approach is appreciated and ensuring its sustainability after project closure remains a challenge.

6. A critical contributing factor is the buy-in from the elected leaders and representatives at various levels. The bottom up planning has already been instituted in Bhutan therefore leaders should already be aware of it but perhaps reiteration is in order.

- As an initial step in CARLEP to re-emphasise and revamp the process, the invitation of neighbouring gewog leaders and representatives during the planning process in the Climate Smart Villages is strongly recommended. If the leaders champion the community participation in planning then the climate change mainstreaming and adaptation planning objective through priority setting and consolidation of gewog plans into Dzongkhag level plans will be achieved.
- Through the invitation of different resource persons and expertise as well as local leaders, CARLEP can facilitate the continued awareness raising for climate change vulnerability and

impacts as well as inter departmental collaboration between agriculture, livestock and Environment and DHMS teams.

Permaculture and biogas

7. The permaculture activities in targeted villages have not been initiated yet. As demonstrated in the climate smart village pilots, sites will have to be selected based on an established criteria that includes vulnerability of the beneficiaries to climate change. The criteria will have to be set in a collaborative manner involving Dzongkhags/ Gewogs, OPM ARDC and RLDC.

- A subsequent step will be to establish and document existing practices with communities, which can effectively be done through participatory methodologies in the farmer fields. The documenting of practices can be done through a suitable service provider or the young graduates that will be recruited (see technical annex for agriculture and dairy production and technical annex on groups). The participatory approach will enable several packages to be formulated based on local knowledge, conditions and assets. The packages can then be optimised with support from ARDC to address key areas of food and nutrition security, integrated pest management, improved soil fertility and income generation.
- The benefits outlined above will provide an incentive for the commitment of farmers to undertake and continue with key practices. The participatory approach is also expected to incentivise the community to maintain the practices through common learning in the smallholder fields and context. Facilitation of the common learning will be a key element of success. This can be done by the social mobilisers and facilitators that will be recruited by CARLEP (see technical annex for agriculture and dairy production and technical annex on groups).
- Establishing optimal mix in the packages to be provided will require periodic follow-up and also provides a learning opportunity for research. ARDC can engage Masters or PhD level students to undertake detailed periodic review of key parameters to build knowledge around the various practices and also identify the additional benefits associated with the different practices.

8. The biogas activities are also yet to begin and sites will have to be identified. The lessons from MAJIP will be beneficial in the promotion of the biogas activities particularly the targeting and approach to be adopted by CARLEP.

9. As with the Climate Smart Villages, through the permaculture and biogas activities, CARLEP provides an opportunity to for further learning and research that can be documented and knowledge products produced. The evidence base that will be gathered can also inform policies.

Irrigation schemes climate proofing

10. An assessment of the climate risks and adaptation measures for schemes is required prior to any investments from CARLEP in construction or rehabilitation. Several irrigation schemes are to be rehabilitated or constructed under CARLEP. A priority list of schemes for the six eastern Dzongkhags has already been identified, however this list is not informed by climate risk assessments and therefore does not include specific climate proofing measures. The priority list, which is yet to be approved) has approximately 10 schemes (a mixture of rehabilitation and construction) and not all of them can be financed under CARLEP.

- As an initial step to select the schemes to be placed under CARLEP, a screening process can be undertaken to assess the vulnerability of the identified schemes to climate risk. Once the assessment has been done, measures for climate proofing can be identified and included in the costs for the schemes.
- The screening of identified schemes can be done following the steps laid out in the irrigation manual guidance (May 2016). The assessment can be undertaken by an expert on the team that produced the manual or external expertise can be recruited on a short term basis to work with designated regional level engineers. A reprioritised list can thereafter be submitted with a clear justification for the use of CARLEP funds.
- The climate proofing of irrigation can then be mainstreamed through the training of the regional and Dzongkhag teams in using the assessment methodology outlined in the manual

with examples. The training would ideally be done during the monsoon months when there is less demand on irrigation teams.

11. As outlined in the irrigation manual, the options for enhancing resilience of irrigation schemes include both structural and bioengineering aspects. The specific measures can be more robust design (focusing on specifications), enhanced drainage, change of materials for construction or locations for siting of infrastructure in relation to sensitivity making use of indigenous knowledge among others. The bioengineering measures can help protect against landslides. Increased maintenance is also an option to be considered with communities and members of Water User Associations (WUAs) where these exist.

12. Community participation in the design and installation as well as maintenance of the infrastructure enhances ownerships and contributes to its sustainability as experience from some parts of Bhutan has shown with respect to irrigation schemes. The activities linked to group development of include WUAs, which should be functional before works on irrigation schemes commence (see technical annex on groups).

13. CARLEP will contribute to the building of capacity of the engineering teams at regional and Dzongkhag level for climate risk management in irrigation and also the application of the tools provided in the manual to ensure adaptation planning in the sector.

Guidelines for the implementation of components

14. Climate change management needs to be systematically be incorporated in the guidelines. The guidelines being prepared for the agriculture and livestock sectors will be applied under both the targeted regions and the value chain development areas. Thus they provide a tool for awareness raising and also an instrument to ensure resilience is being built. The justification of the activities should incorporate climate resilience building while the steps should reflect the incorporation of climate risk management (see technical annex for agriculture and dairy production). This can be done by reflecting the climate change adaptation opportunities at each step provided in the guidelines and identifying opportunities for communities to build their resilience. This should be a consistent message in the application of the guidelines.

Component 2 – Value Chain development and marketing

Enhancing climate resilience in value chains

15. The incorporation of climate vulnerability analysis and relevant adaptation measures in value chains to ensure they are resilient requires a particular set of expertise. The expertise includes crop modelling and suitability mapping based on downscaled climate models. In addition to the productivity mapping, further analysis of the climate risk at each node of the value chain from production to markets is required. The ToRs developed for the value chain studies incorporates the climate vulnerability analysis and a key aspect will be sourcing the expertise to undertake these tasks. The expertise may be available nationally or can be sourced from the region.

- The more rapid value chain studies can also incorporate a preliminary climate risk analysis using the checklist of how value chain interventions might produce climate-resilient outcomes that is provided in IFAD's Note on How to do Climate Risk Assessment in Value chain projects (pgs 5-7). The results of the screening can be used to inform the more in-depth value chain studies and also build the capacity of the project implementing partners in screening for climate risks as well as options for adaptation.
- The GIS mapping of value chains focusing on production areas and market access routes can also form the basis of interventions in climate change adaptation. The maps being developed by OPM can be overlaid with climate risk and hazard maps that then inform the siting of infrastructure such as storage, processing facilities and marketing structures. If the hazard maps exist from the Department of Disaster Management these can be accessed by OPM. This would also provide an opportunity for geo-referencing of the project interventions.
- The CARLEP baseline survey also provides information on climate vulnerability assessment involving farmers and technicians from a production perspective that can be built on.

Alternatively the vulnerability studies undertaken in 2011 (Assessment of environment, climate change and poverty vulnerabilities for Local Governments) can also provide a good starting point.

16. Water efficient systems are part of the improved access to agricultural productivity that responds to potential droughts and dry spells and also increasing water stress in different locations. The type of water efficiency systems whether drip irrigation that will be piloted should be appropriate for the locations and take into account the capital and maintenance costs as well as the supply chain of the technologies. Capacity building for the users in maintenance will contribute to the sustainability of the technologies.

17. CARLEP will contribute to the capacity building in climate risk management for the various groups through the training to be provided and the strengthening of particular groups. A suitable service provider with the essential skill mix should be identified either nationally or from within the region.

Resilience monitoring

18. The tracking of resilience building needs to be factored into the CARLEP monitoring and evaluation system from the initial phases. All ASAP supported projects are expected to report on the number of households that have been supported in dealing with climate change. Therefore under CARLEP a composite set of indicators will contribute to this overall figure, which based on the revised logframe during the Start-up workshop, 23 180 smallholder HH will be supported to cope with the impacts of climate change. This will include households practicing climate resilient agriculture and those with improved access to water for agricultural production as a result of CARLEP interventions.

- There are various options for measuring resilience at the household level based on the climate vulnerability and practices being adopted. In the context of CARLEP the risks are identified in the baseline. Therefore household resilience can be measured by looking at the key practices that are adopted at the household level to address the identified risks. A common agreement must be reached within the OPM and implementing teams at Dzongkhag level on what the main indicators for building resilience at the household level will be. Caution is required to ensure clear linkages of risks with climate change.
- An initial step is to ensure incorporation of key indicators in M&E system towards measuring the resilience. Currently these include the land that is under climate resilient practices and access to water for agricultural production. This step has already been taken by the OPM. The next step is to ensure Dzongkhag level data entry can provide the relevant inputs to report on the selected indicators. Therefore the formats being developed for the M&E system and reporting should be accompanied by consensus building on collection of data and reporting as well as capacity building if required.

Knowledge Management

19. In the development of the KM Strategy for CARLEP some products that can be produced through can be on the learning from household resilience building including from a gender perspective, permaculture practices suitable for different conditions and their benefits and also the measures for ensuring climate resilience in the vegetable and diary value chains. A mixture of stories from the field, lessons being learnt, research papers and policy briefs are among the possible products.

Environment

20. In the sustainable land management practices being promoted under CARLEP, particular attention is required for wetlands development and the land development. Terracing is a capital intensive activity where the project is providing support, which requires stabilisation of the levels and edges to prevent erosion and the washing away of the valuable top soils. Farmers should be encouraged to undertake these protective measures early. Wetland development can also be a contentious issue if steps to ensure environmental sustainability are not taken. Therefore guidelines provided must be followed in this regard. Following the good practice outlined by the Watershed

Management Division, if a wetland has to converted and it is unavoidable, efforts should be made to restore an equal area of degraded wetlands.

21. CARLEP provides an opportunity to emphasise integrated natural resources management in all project locations appreciating the interdependcy of villages within the same catchment. This is particularly the case for wetland development and the irrigation schemes in view of drying up water sources and increasing water stress in some areas. As good practice all the irrigation schemes should include Environmental and Social Management Plans developed with the WUAs to ensure they are participatory. The plans should clearly articulate the activities, responsibility and estimated budgets to ensure the sustainability of the interventions.

Annex 3.

Summary of Project Fiduciary Risk Assessment at Supervision[8]

Project : CARLEP
Implementing Agency: Ministry of Agriculture & Forest, Royal Government of Bhutan

	Risk Assessment H/M/L	Notes
Inherent Risk	**M**	N/A
Control Risks		
1. Organization and Staffing	**L**	All 8 indicators Low risk
2. Budgeting	**L**	All 4 indicators Low risk
3. Funds flow & Disbursement Arrangements	**L**	1 indicator Medium risk, 10 indicators Low risk
4. Internal Controls	**L**	3 indicators Medium risk, 17 indicators Low risk
5. Accounting	**L**	All 8 indicators Low risk
6. Financial Reporting and Monitoring	**L**	1 indicator Medium risk, 4 indicators Low risk
7. Internal Audit	**H**	No internal audit system in place
8. External Audit	**NA**	NA since first audit report not yet submitted
Overall Project Fiduciary Risk	**L**	
H=High, M=Medium, L= Low		

Comments: Overall the financial management system is in order. The accounting system is a standardized Govt system and staff are conversant with the same. Quality of WA is to be improved and audit report needs to be submitted within the prescribed period with the auditors' comments on the SOEs

8 This is a summary of the findings documented in the 'Project Supervision Financial Management Assessment – Guidance Questionnaire – see Appendix I. It is to be completed by the Finance Officer.

Appendix-I Financial Management Assessment at Supervision – Guidance Questionnaire[9/10]

Country: BHUTAN	**Loan /Grant ID:** 627 BT and Grant 838 BT
Project Name: CARLEP	
Executing Agency: Ministry of Agriculture & Forest, Royal Government of Bhutan	**CPM:** Lakshmi Moola
Reviewing Finance Officer: Pratul Dube	**Date of this review:** 24 October 2016

	Topic	Risk Rating (H/M/L)	Issues / Comments / Recommendations
	A. Inherent Risks		
	B. Control Risks		
1.	**Organization and Staffing**		
a.	Adequacy of organizational structure to meet functional needs of the project.	L	The structure is adequate to meet the functional needs of the project.
b.	Availability of clear job description for key project positions, including fiduciary positions.	L	There are clear Job descriptions for key project positions
c.	Adequacy of project financial management staff (numbers and skill) matching functional needs of project.	L	Adequate accounting staff for the project. An additional accountant would be required in the OPM..
d.	Availability and adequacy of operating manuals and guidelines for staff.	L	PIM is comprehensive and followed for the main aspects
e.	Existence of a performance based evaluation system in place and timely completion of performance evaluation for all staff.	L	They have it, in accordance with the public system in India
f.	Adequacy of health insurance coverage for all staff (where applicable).	L	Govt meets medical costs of staff
g.	Timely payment of social security fees (where applicable).	L	Amount deposited for National Pension Fund every month
h.	Staff adequately informed about IFAD's national and anti-corruption policy and relevant contact details.	L	Yes, they have also internal procedures in the Govt system
2.	**Budgeting**		
a.	Timely preparation and approval of AWPB.	L	Budget for FY 2016-17 was submitted to IFAD on time
b.	AWPB in line with expenditure categories in Financing Agreement Schedule 2.	L	Yes
c.	Financing sources and implementing agencies for each	L	Yes

9 This questionnaire should be used as guidance for and in support of the Summary Project Fiduciary Risk Assessment at Supervision. It is to be completed during the Mission.
10 Include relevant findings of project supervision and progress reports, field visits, and audit report findings.

	Topic	Risk Rating (H/M/L)	Issues / Comments / Recommendations
	category in the AWPB are identified.		
d.	Linkage between AWPB and Procurement plan are identified (for cost estimate and activities). Check assumptions to support cost estimates. Test check high value items.	L	Yes
3.	**Fund flows and Disbursements / Withdrawals**		
a.	Timeliness of funds disbursed by different sources (and co-financiers funding if applicable).	L	IFAD and Govt Funds are available.
b.	Timeliness of counterpart funds disbursed.	L	Funds are promptly released on request to the MoF
c.	Efficiency of the funding channels. Timeliness and traceability of funds flows.	L	The funding channel is quite efficient and funds can be tracked with proper controls being in place.
d.	Efficiency of the funding channelsfor credit lines. Timeliness and traceability of funds flows, if applicable.	N/A	
e.	Special Account(s)/Dedicated Account(s) Management, Disbursements.		
	i) Adequacy of the authorized allocation to ensure a smooth flow of funds	L	Yes
	ii) Appropriateness of disbursement methods used	L	Appropriate
	iii) Adequacy of documentary support for SOE disbursements, reimbursements, direct payments and Special Commitments. (refer to Appendix IV and complete, reflecting finding in rating).	L	Yes – documentary evidence available for SOEs
	iv) Timely preparation and accuracy of Withdrawal Applications	M	Project has submitted WA for six months due to not much expenditure during the first quarter. Some ineligible expenditure has been claimed which needs to be reversed
	v) Authorization of WA preparation.	L	Duly authorized
	vi) Status on expenditures withdrawn from Special Account but not yet claimed for replenishment (old cases to be noted)	L	Expenditure duly recorded and claimed for replenishment.
	vii) Regularity of Special Account(s) monitoring and monthly reconciliations signed by the project manager. Review and assess the reconciliations	L	SA has been reconciled
	viii) Disbursement rate compared to the AWPB and whether satisfactory given the remaining implementation time. Provide comments as appropriate	L	Being the first year, disbursement is 75% of the AWPB
	ix) Recovery of SA balances by loan closure	N/A	
4. Internal Controls			

	Topic	Risk Rating (H/M/L)	Issues / Comments / Recommendations
a.	Segregation of duties - are the following functional responsibilities performed by different units or persons: (i) authorization of a transaction (ii) execution of a transaction (iii) recording of the transaction; and (iv) custody of assets involved in the transaction.	L	Effective segregation of duties exists both at the OPM and at the Dzongkhags. Accounting, authorization, execution and custody of assets are segregated
b.	Clarity and adequacy of decision processes and sequence of events for control functions in project implementation reflected in the Financial Manual (or equivalent there-of).	L	Yes
c.	Adherence to Financial Manual.	L	Yes
d.	Effectiveness and efficiency of internal controls over inflows of funding sources other than IFAD.	L	Yes
e.	Adequacy of contract management (use of contracts register and monitoring form) and filing there-of.	M	Contract register is not used
f.	Effectiveness and efficiency of internal controls over expenditures (full cycle from commitment, payment, receipt of good and services, approval of payments, classification, etc.)	L	Yes
g.	Documentary evidence to confirm delivery and acceptance of contracted goods, works or services.	L	Yes
h.	Physical controls over cash, documents and records. Adequacy of filing systems. Is the petty cash subject to monthly reconciliation as well as surprise checks; custody of cash box and control of keys.	L	Yes
i.	Adequacy of physical management of cash.	L	Yes
j.	Timely payment to suppliers and consultants.	L	Yes
k.	Eligibility of expenditures with respect to Financing Agreements.	M	Some expenditure claimed is prior to loan effectiveness and therefore ineligible
l.	Legality/eligibility of advances from project funds and timely justification for use there-of.	L	Generally advances are justified in time.
m.	Compliance with financial management covenants in the Financing Agreements and LTB.	L	Yes
n.	Adequacy of up-to-date record keeping for fixed assets and inventories.	L	Yes
o.	Adequacy of controls concerning project assets including: i) Vehicle and other assets management (are assets property tagged, is a physical inventory count done on a regular basis?) ii) Fuel management (do drivers maintain a log book?) iii) Travel authorisations (incl. DSA paid to staff)	M	Registers in place but assets need to be tagged Log books are maintained and travel authorizations were found to be in place
p.	Adequacy of vehicles and assets insurance.	L	The project has vehicles from the previous project and they are insured. Other assets are not insured
q.	Workshops: i) Availability of list of participants	L	List of participants and DSA paid to them and

	Topic	Risk Rating (H/M/L)	Issues / Comments / Recommendations
	ii) DSA paid to participants iii) Receipts for workshop expenditure		expenditure on workshops is well documented
r.	Adequacy of controls and authorization process for use of funds (payments, transfers, Cash/Bank balance management) / and other operational accounts – non-special account.	L	Adequate arrangements exist for control and authorization process
s.	Banking arrangement and controls (reconciliation of bank statements with financial accounts).	L	Monthly bank reconciliations of project accounts.
t.	Existence of a proper IT support unit in place.	L	Exists
5.	**Accounting**		
a.	Basis of accounting (cash, accrual) and whether accounting standards are in line with IFAD's requirements (e.g. IFRS/IPSAS/IPSAS cash).	L	Cash basis
b.	Adequacy and reliability of accounting system, (is double entry accounting used, specify software used, is budget data entered into the accounting system, can the accounting system produce regular automated financial reports?).	L	The project relies on the Govt accounting software PEMS (including budget management). Procedures in place appear to be solid enough to ensure reliability and accuracy of accounts. It however does not generate automated financial reports and reports have to be prepared separately using Excel
b.	Recordkeeping (including documentation and filing/archiving)	L	All records are readily available, also if not always precise
c.	Fixed assets register maintained and reconciled (sample and physical check).	L	Fixed asset register maintained and reconciled with physical checks.
d.	Adequate documentation and controls for Information Systems, including documented accounting procedures, backup of financial records, integration of all sub-systems.	L	Documentation and control in place for all transactions. Data is stored in a central server
e.	Adequacy of chart of accounts for project accounting purposes	L	Chart of accounts has been prepared
f.	Timeliness of recording transactions, regularity of performance and approval of reconciliations, controls on erroneous recordings.	L	Transactions are recorded on a regular basis
g.	Appropriate/ adequate accounting and reporting of counterpart funds contributions (incl. tax and tax exemptions) as well as beneficiary contributions.	L	Tax exemptions have been obtained for procurement. Beneficiary contributions are recorded outside the accounting system for report purposes only
6. Financial Reporting & Monitoring			

Topic		Risk Rating (H/M/L)	Issues / Comments / Recommendations
a.	Completeness, accuracy, usefulness, and timeliness of financial reports.	L	Reports are quite informative also if not completely in line with IFAD requirements
b.	Interim FM reports and linkage to progress reports - timely preparation, submission to IFAD.	M	Monthly reports submitted to Project Director. Physical and financial progress are not tracked
c.	Preparation of reports showing actual vs budget income/expenditure and AWPB execution rate.	L	Yes but not linked to physical progress
d.	Follow up of previous aide-memoirs fiduciary recommendations.	L	Not applicable being the first year
e.	Reasonable alignment between disbursement rate of recurrent versus investment cost categories.	L	The disbursement rate of recurrent cost is about 15% of the total
7. Internal Audit			
a.	Existence of Internal Audit arrangements.	H	No internal audit system exists in the project.
b.	Adequacy of internal audit arrangements (organization - staff capacity).		NA
c.	Adequacy of internal audit scope of work and quality of reports.		NA
d.	Assessment of matters raised in audit reports.		NA
8. External Audit[11]			
a.	Adequacy of scope and ToR.	L	Yes
b.	Adherence to ToR.		NA- since first audit report has not been submitted
c.	Timeliness of audit report.		NA
d.	Quality of audit.		NA
e.	Implementation of audit recommendations/agreed action plan in place to address these.		NA

11 Refer to IFAD audit review.