# KINGDOM OF BHUTAN

# COMMERCIAL AGRICULTURE AND RESILIENT LIVELIHOODS ENHANCEMENT PROGRAMME

# PROGRAMME IMPLEMENTATION MANUAL (PIM)

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| Type of Report | : | Programme Implementation Manual |
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# ROYAL GOVERNMENT OF BHUTAN

# MINISTRY OF AGRICULTURE & FORESTS

# COMMERCIAL AGRICULTURE AND RESILIENT LIVELIHOOD ENHANCEMENT PROGRAMME (CARLEP)

## PROGRAMME IMPLEMENTATION MANUAL

(**FINAL**)

**May 2016**

Office of the Programme Management (OPM)
Wengkhar, Mongar
PB No.: 146

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## CURRENCY EQUIVALENTS

| Currency Unit | | Ngultrum (BTN) * |
|---|---|---|
| USD 1.00 | = | BTN 55.00 |

*/ The Bhutan Ngultrum is equal to the India Rupee.

## WEIGHTS AND MEASURES

International metric system, unless otherwise mentioned, and except for:

| | | |
|---|---|---|
| 1 kilogram | = | 1000 g |
| 1 kilogram | = | 2.204 lb |
| 1 kilometre | = | 0.62 mile |
| 1 metre | = | 1.09 yards |
| 1 square metre | = | 10.76 square feet |
| 1 acre | = | 0.4047 hectares (ha) |
| 1 hectare | = | 2.47 acres |
| 1 langdo | = | 1400 $m^2$ |

## FISCAL YEAR

1 July to 30 June

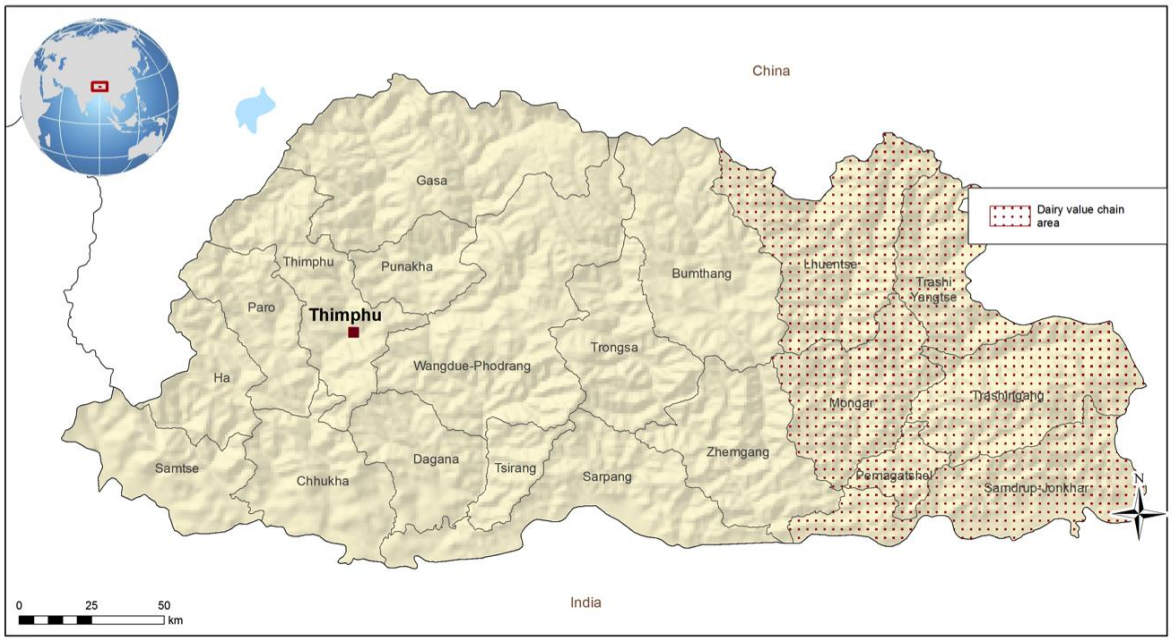
## ABBREVIATIONS AND ACRONYMS

| | |
|---|---|
| AFD | Administration and Finance Division |
| AI | Artificial Insemination |
| AMC | Agriculture Machinery Centre |
| AMEPP | Agriculture, Marketing and Enterprise Promotion Programme |
| AO | Accounts Officer |
| AOS | Annual Outcome Survey |
| APA | Annual Performance Agreement |
| AWPB | Annual Work Plan and Budget |
| BCCI | Bhutan Chamber of Commerce and Industries |
| BDBL | Bhutan Development Bank Limited |
| BOiC | Business Opportunity and Information Centre |
| BTN | Bhutan Ngultrum |
| CAHW | Community Animal Health Worker |
| CARLEP | Commercial Agriculture & Resilient Livelihood Enhancement Programme |
| CD | Capacity Development |
| CEO | Chief Executive Officer |
| CM | Component Managers |
| CMU | Central Machinery Unit |
| CSA | Climate Smart Agriculture |
| CSO | Civil Society Organization |
| DA | Designated Account |
| DAMC | Department of Agriculture Marketing and Cooperatives (MoAF) |
| DAO | Dzongkhag Agriculture Officer |
| DoA | Department of Agriculture (MoAF) |
| DoL | Department of Livestock (MoAF) |
| DLO | Dzongkhag Livestock Officer |
| DNB | Department of National Budget |
| DPA | Department of Public Accounts |
| DPO | Dzongkhag Planning Officer |
| DT | Dzongkhag Tshogdu |
| FA | Financing Agreement |
| FCBL | Food Corporation of Bhutan Limited |
| FG | Farmers Group |
| FS | Farm Shop |
| GAD | Gender and Development |
| GAO | Gewog Administrative Officer |
| GEO | Gewog Extension Officer |
| GNHC | Gross National Happiness Commission |
| GRPB | Gender Responsive Planning and Budgeting |
| GT | *Gewog*Tshogde |
| ICT | Information, Communication Technology |
| IFAD | International Fund for Agricultural Development |
| IFPRI | International Food Policy Research Institute |
| KM | Knowledge Management |
| NCB | National Competitive Bidding |
| MAGIP | Market Access and Growth Intensification Project |
| MIS | Marketing Information System |
| M&E | Monitoring and Evaluation |
| MoAF | Ministry of Agriculture and Forests |
| MoEA | Ministry of Economic Affairs |
| MoF | Ministry of Finance |
| MoHCA | Ministry of Home and Cultural Affairs |
| MoLHR | Ministry of Labour and Human Resources |
| MSP | Minimum Support Price |
| MTR | Mid-Term Review |
| NEC | National Environment Commission |
| NGOs | Non-Governmental Organizations |
| NMC | National Mushroom Centre |

| | |
|---|---|
| NOP | National Organic Programme |
| NPD | National Programme Director |
| NPHC | National Post Harvest Centre |
| NPPC | National Plant Protection Centre |
| NPSC | National Programme Steering Committee |
| NSC | National Seed Centre |
| NSSC | National Soil Service Centre |
| O&M | Operation and Maintenance |
| OPM | Office of the Programme Management |
| PA | Programme Area |
| PLaMS | Planning and Monitoring System |
| PLC | Programme Letter of Credit |
| PME | Participatory Monitoring & Evaluation |
| PPD | Policy and Planning Division (MoAF) |
| PPP | Public Pricvate Partnership |
| PRR | Procurement Rules & Regulations |
| PSF | Production Support Fund |
| RAMC | Regional Agriculture Machinery Centre |
| RCA | Regional Centre for Aquaculture |
| RDC | Research and Development Centre |
| RLDC | Regional Livestock Development Centre |
| RMA | Royal Monitory Authority |
| RAMCO | Regional Agriculture Marketing and Cooperative Office |
| RGoB | Royal Government of Bhutan |
| RIMS | Results and Impact Management System |
| RNR | Renewable Natural Resources sectors (*Agriculture, Forestry and Livestock)* |
| RMBF | Regional Mithun Breeding Farm |
| RNBF | Regional Nublang Breeding Farm |
| RPPF | Regional Pig & Poultry Farm |
| RUG | Road Users Group |
| SIF | Social Inclusion Fund |
| SLM | Sustainable Land Management |
| SOE | Statement of Expenditure |
| WA | Withdrawal Application |
| WUA | Water Users' Associations |

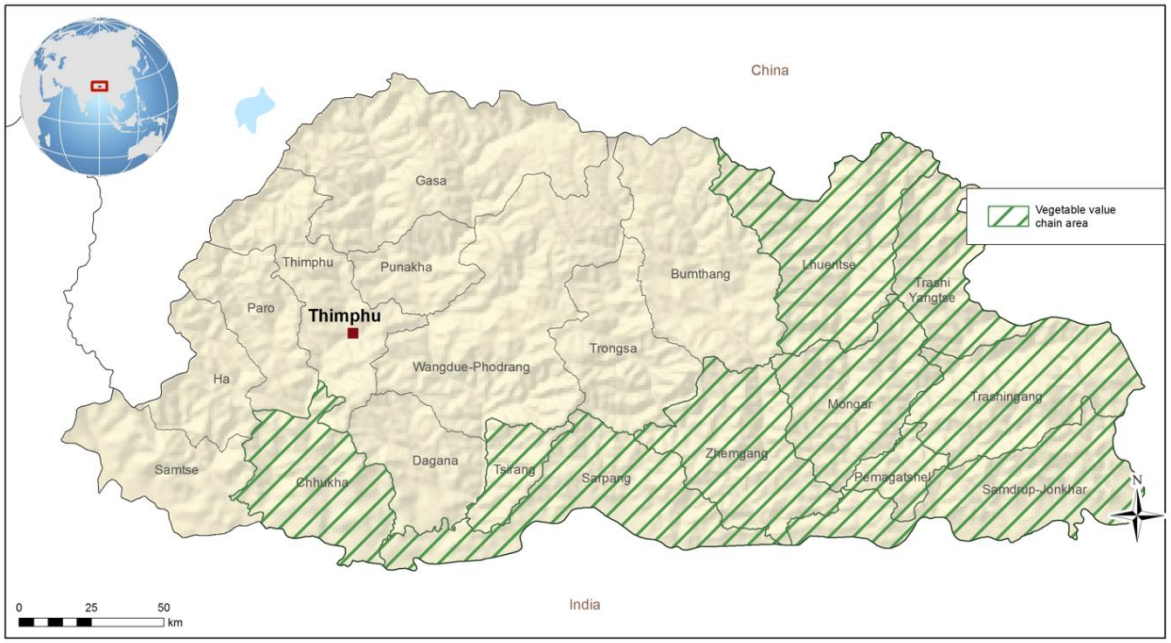
## PROGRAMME AREA MAP

### Figure 1: Map of the Programme area - Dairy Value Chain




The designations employed and the presentation of the material in this map do not imply the expression of any opinion whatsoever on the part of IFAD concerning the delimitation of the frontiers or boundaries, or the authorities thereof.
*Map compiled by IFAD* | 29-09-2014

### Figure 2: Map of the Programme area - Vegetable value chain




The designations employed and the presentation of the material in this map do not imply the expression of any opinion whatsoever on the part of IFAD concerning the delimitation of the frontiers or boundaries, or the authorities thereof.
*Map compiled by IFAD* | 29-09-2014

# CHAPTER 1: INTRODUCTION AND BACKGROUND

## 1.1 Purpose and content of PIM

The purpose of this Programme Implementation Manual (PIM) is to assist the staffs of the Office of Programme Management (OPM) and other implementing partners, who are responsible for planning, implementation, supervision and monitoring of the programme. It is also intended to promote good practice management, administration, internal controls and a standardized approach to various tasks. Therefore it is critical that all the programme stakeholders understand and familiarize themselves with this PIM.

***The PIM is a 'living and dynamic document' and will be updated regularly on the basis of learning during programme implementation.***

The PIM is presented in 10 Chapters - programme summary, programme cost estimates, organization and management, engagement of Royal Government of Bhutan (RGoB) technical agencies and Technical Assistance (TA), procurement procedures, finance management, programme components and implementation arrangements, monitoring & evaluation (M&E) and knowledge management (KM) including gender and guidelines for preparing annual work plan and budget (AWPB). The PIM also contains, among others, sample templates (for AWPB, Annual Progress Report, Annual outcome survey and M&E), RIM indicators and strategies for social and gender inclusion and knowledge management.

## 1.2 Documents Referred

The following documents were referred while preparing this PIM:

- IFAD Guidelines for Procurement, December 2004
- IFAD Guidelines for Loans and Grants Administration, 2007
- Background Notes of IFAD Workshop held in Kathmandu, November 2006
- Joint MAGIP MTR Report, IFAD, 2012
- Financing Agreement between IFAD & RGoB, 11 December 2015
- Programme Design Report (PDR) and Working Papers, October 2015
- RIMS Handbook,April 2014
- RGoB Procurement Rules & Regulations 2009
- RGoB Financial Rules& Regulations 2001

This PIM has been prepared after the signing of the Financing Agreement (FA) on 11 December 2015. It will be a dynamic document. As the programme implementation progresses and experiences are gained, the OPM will update the PIM with more relevant and field realistic information and forward the document to International Fund for Agricultural Development (IFAD) after approval by PSC.

## 1.3 Acknowledgements

The PIM was prepared by a core team consisting of members from key agencies under the Ministry of Agriculture & Forests (MoAF) and Food Corporation of Bhutan Limited (FCBL)[1]. The team acknowledges the support and guidance provided by His Excellency, Lyonpo Yeshey Dorji, Minister for Agriculture & Forests, Dasho Tenzin Dhendup, Honourable Secretary, MoAF Ms. Lakshmi Moola, the Country Programme Manager, IFAD, Rome, and Dr. Vincent Darlong, the Country Programme Officer, IFAD India Country Office, New Delhi, for the preparation of this document.

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# CHAPTER 2: PROGRAMME SUMMARY

## 2.1 Background, Programme Goal and Objectives

The Commercial Agriculture and Resilient Livelihoods Enhancement Programme (CARLEP) aims to facilitate the transformation of a subsistence-based rural agricultural economy into a sustainable value chain and market driven productive sector by promoting climate smart approaches in agriculture and strengthening capacities of communities and local institutions. It builds on prior and on-going IFAD interventions focused on increased agricultural production and makes a basic shift in approach towards marketing and climate resilient farming practices

The goal is to sustainably increase smallholder farmers' incomes and reduce rural poverty. This will be achieved through climate resilient commercialized production of crops and livestock by programme households linked to nationally organized value chains and marketing systems. The objective is "increased returns to smallholder farmers through climate resilient production of crops and livestock in nationally organized value chains and marketing systems".

## 2.2 Target Groups and Targeting

The programme will target selected Gewogs in six eastern Dzongkhags (Lhuentse, Mongar, Pema Gatshel, Samdrup Jongkhar, Trashigang and Trashi Yangtse) with high production and marketing potential in the selected value chains. The programme will benefit 28,975 smallholder households, of which 7,115 HH will directly benefit from vegetable and dairy value chains.In its second phase, the programme will also include Gewogs with high production and marketing potential for the vegetable value chain in the south-central and south-western Dzongkhags, adding 7,500 direct beneficiaries (1,500 HH).

CARLEP will follow an inclusive approach in programme implementation with special efforts being made to identify and facilitate inclusion of the poorest or most vulnerable households through the Social Inclusion Fund (SIF). Active involvement of women as well as youth will receive special focus in programme planning and implementation.

## 2.3 Programme Components, Outcomes, Outputs and Activities

CARLEP will have three interlinked programme components: 1) Market-led sustainable agricultural production, 2) Value chain development and marketing; and (iii) Institutional support and policy development. Table 1 presents the key components, its outputs and the activities.

**Table 1: Components, Sub-components and Activities**

| Component | Sub-component (output) | Activities |
|---|---|---|
| 1. Market-led sustainable agricultural production | 1.1 Increased production resilience and diversification in agriculture | (a) Strengthening existing farmers' groups and establishing new groups;<br>(b) Strengthening extension services including lead farmers outreach model and increasing their outreach;<br>(c) Supporting agricultural inputs, including seeds and seedlings;<br>(d) Water-use efficient irrigation development;<br>(e) Agricultural systems innovations; and<br>(f) Pilot on strengthening local institutions for increased climate resilience. |

| | | |
|---|---|---|
| | 1.2 Intensification and expansion of vegetable production | (a) Strengthening existing vegetable producers' groups and promoting and capacitating new groups;<br>(b) Providing vegetable production inputs;<br>(c) Vegetable seed research and production. |
| | 1.3 Intensification and expansion of dairy production | (a) Strengthening existing smallholder dairy farmer groups and establishing new groups;<br>(b) Improving service outreach for livestock;<br>(c) Support for fodder and feed production;<br>(d) Providing dairy production inputs; and<br>(e) Installing bio-gas units. |
| 2. Value Chain Development and Marketing | 2.1 Development of resilient vegetable and dairy value chains | (a) Strengthening FCBL capacity for value chain development; and<br>(b) Value chain and business plan design and implementation. |
| | 2.2 Strengthening agricultural commercialization and enterprise development | (a) Agriculture enterprise development;<br>(b) Facilitation of access to finance, including through a social inclusion fund and production support fund; and<br>(c) Development of multi-stakeholder platforms and networks. |
| | 2.3 Development of community driven market infrastructure | (a) Design, construction and supply of necessary infrastructure and equipment for the vegetable value chains; and<br>(b) Design, construction and supply of necessary infrastructure and equipment for dairy value chains. |
| 3. Institutional support and policy development | 3.1 Strengthened value chain and marketing knowledge and communication | (a) Strengthening market information systems; and<br>(b) Developing the curriculum of RNR training and education institutes. |
| | 3.2 Mainstreaming climate change resilience and value chain lessons into agricultural policies and sector strategies. | (a) Participatory policy development and monitoring approach;<br>(b) Support to MoAF in agricultural policy mainstreaming; and<br>(c) Development of a conducive regulatory framework for private sector development and Public Private Partnership (the "PPP"). |

## 2.4 Implementation and Coordination Arrangements

The MoAF with overall responsibility will lead the programme implementation in coordination with the Ministry of Finance (MoF) as the borrower. MoAF will provide policy guidance, the required technical staff for implementation from its pool of civil servants and technical backstopping through its line departments and field agencies. The OPM will coordinate all activities and ensure that specific departments within MoAF will be directly responsible for results under Components 1 and 3 and FCBL and DAMC be directly responsible for achieving the results in Component 2.

## 2.5 Programme Risks and Sustainability

The key programme risks envisaged and its mitigation measures are : (i) Limited current FCBL capacity to develop value chains, enterprises and public private partnerships is a risk, being mitigated

by allocating resources for strategy and capacity development and TA, and assigning autonomous role to FCBL to implement Component 2 in the programme design. (ii) Difficulty in harmonizing divergent individual-community and present-future stakes can hamper implementation of climate smart strategies. Provision of resources to strengthen climate-smart farm management practices, farmer group development, community-based service outreach, strengthening local institutions and Technical Assistance is expected to mitigate the risk.

Limiting the number of value chains would ensure adequate resources to successfully design and establish these. Interlinking of production, marketing and enterprise development would create shared stakes between farmers and private sector to remain engaged. Involvement of communities in design and implementation, development of groups and setting up of community-based operation and maintenance (O&M) systems is expected to ensure sustainable use and management of assets built under the Programme. Environment protection and conservation issues have been incorporated in production models through value chains, are compatible with local production activities and profitable with full accounting of operating and capital costs. Strong grassroots institutions and locally accountable support services envisaged in the Programme are the most effective means to ensure sustainability beyond the implementation phase. Strengthening FCBL and creating stakes for it to work with farmers to fulfil its own mandate would incentivise it to remain engaged with local communities while forging ground for enhancing private sector participation. Table1 presents brief exit and sustainability strategy of the programme.

**Table 2: Brief exit & sustainability strategy of the programme**

| Components | Exit/sustainability strategy |
|---|---|
| **Component 1: Market-led sustainable agricultural production** | |
| **Output 1.1:** Increased Production Resilience, Diversification and Innovation | ▪ Farmers groups and extension services strengthened; lead farmer model scaled up; Community Animal Health Worker (CAHW) revived and strengthened; CAHW tied up with community Artificial Insemination (AI) technician; regional farms strengthened; Regional centers take up post-project implementation on successful interventions; farmers/groups adopt climate smart agriculture technologies; Assured irrigation and water management systems supported. |
| **Output 1.2**: Vegetable Production Intensified and Expanded | ▪ Farmers groups and extension services strengthened; assured market and buy back mechanisms through FCBL, farm shops in place; farmers/groups skills and knowledge on agricultural technologies enhanced. |
| **Output 1.3:** Dairy Production Intensified and Expanded | ▪ Farmers groups and extension services strengthened; assured market and buy back mechanisms through FCBL, farm shops in place; farmers/groups skills and knowledge on agricultural technologies enhanced. |
| **Output 2.1:** Resilient Vegetable and Dairy Value Chains developed | ▪ Capacity of FCBL strengthened on value chain and agricultural marketing; Organization strategy and business plan for FCBL developed to ensure post-project agricultural marketing; value chains and corresponding business plans for dairy and vegetable developed and implemented. |
| **Output 2.2:** Commercial farming expanded and new farm enterprises developed | ▪ Marketing groups/agricultural enterprises established and strengthened; Farmers groups and extension services strengthened; capacity of potential marketing groups, entrepreneurs including youth and women strengthened on group organization, business planning, finance, marketing skills; |
| **Output 2.3:** Community-driven Strategic Market Infrastructure developed | ▪ Market infrastructures at strategic locations and equipments in place; business plan for privatization of farm shops on Public Private Partnership (PPP) model established; |
| **Component 3: Institutional Support and Policy Development** | |
| **Output 3.1:** Strengthened value chain and marketing knowledge and communication | ▪ Marketing Information System (MIS) strengthened and updated market information to farmers/stakeholders provided; |
| **Output 3.2:** Climate change resilience and value chain development lessons mainstreamed in agricultural policies and sector strategies | ▪ Lessons on Climate Change (CC) resilience, Value C development, gender etc., mainstreamed into agricultural policies, strategies etc.;<br>▪ Regulatory framework for private sector development and PPP in agriculture sector developed and implemented |

## 2.5 Roles and Responsibilities of Key Programme Implementing Partners

The key roles and responsibilities of the Programme implementing partners are as highlighted in Table 2 below.

**Table 3: Matrix of Roles & Responsibilities of Programme Implementing Partners**

| Programme Partners | Roles & Responsibilities |
|---|---|
| Office of the Programme Management (OPM) | Overall direction, facilitation, coordination, linkage with IFAD, MoAF, MoF and other agencies |
| RDC, Wengkhar | Technical backstopping to Programme Dzongkhags and gewogs; Lead farmer model for Agriculture; Permaculture; provide TA services wherever possible |
| RLDC, Khangma | Technical backstopping to Programme Dzongkhags and gewogs; Lead farmer model for livestock; initiate provide TA services wherever possible |
| RAMCO, Mongar | Group mobilization, market infrastructure, equipment, market information and linkages with FCBL/market, postharvest |
| Regional FCBL | Collaborate with Regional Agricultural Marketing and Cooperative Office (RAMCO) for physical marketing of agriculture and livestock products; provide buyback mechanism to farmers |
| Dzongkhags | Coordinate actual planning and implementation of programme interventions |
| Gewogs | Coordinate actual planning and implementation of programme interventions |

## CHAPTER 3: PROGRAMME COST ESTIMATES

This Chapter presents key programme costs tables with detailed cost tables being presented in Annex 26.

### Table 4: Summary Cost Estimate

| Component Programme Cost Summary | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Components | (Local Million) | | | (US$ '000) | | | % Foreign Exchange | % Total Base Costs |
| | Local | Foreign | Total | Local | Foreign | Total | | |
| 1. Market-led agricultural production | 575.1 | 109.7 | 684.9 | 10,457.2 | 1,994.8 | 12,452.1 | 16 | 52 |
| 2. Value chain development and marketing | 492.0 | 37.0 | 529.0 | 8,945.8 | 672.6 | 9,618.4 | 7 | 40 |
| 3. Institutional Support and Policy Development | 19.0 | 2.9 | 21.9 | 345.4 | 53.0 | 398.5 | 13 | 2 |
| 4. Programme management, coordination and M&E | 80.7 | 12.0 | 92.6 | 1,466.6 | 217.8 | 1,684.4 | 13 | 7 |
| **Total BASELINE COSTS** | **1,166.8** | **161.6** | **1,328.4** | **21,215.1** | **2,938.2** | **24,153.3** | **12** | **100** |
| Physical Contingencies | 84.5 | 17.7 | 102.2 | 1,536.8 | 321.1 | 1,857.9 | 17 | 8 |
| Price Contingencies | 256.6 | 48.8 | 305.5 | 4,666.1 | 887.6 | 5,553.8 | 16 | 23 |
| **Total PROGRAMME COSTS** | **1,508.0** | **228.1** | **1,736.1** | **27,418.0** | **4,147.0** | **31,565.0** | **13** | **131** |

### Table 5: Allocation by Category

| | Categories | IFAD Loan Amount (SDR) | IFAD Grant Amount (SDR) | ASAP Trust Grant Amount (SDR) | Percentage |
|---|---|---|---|---|---|
| **I** | Works | 1,890,000 | | 120,000 | 100% net of taxes and beneficiaries' contributions |
| **II** | Goods, Services and Inputs | 2,000,000 | 210,000 | 400,000 | 100% net of taxes and other contributions |
| **III** | Training | 1,230,000 | 370,000 | 2,700,000 | 100% net of taxes and Government contributions |
| **IV** | Grants and Subsidies | 180,000 | 40,000 | | 100% net of taxes |
| **V** | Operating Cost | | 70,000 | | 100% net of taxes and other contributions |
| | Unallocated | 590,000 | 70,000 | 360,000 | |
| | **Total** | **5,890,000** | **760,000** | **3,580,000** | |

### Table 6: Programme Cost Estimates by Component & Year

| Programme Components by Year -- Totals Including Contingencies | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| (US$ '000) | | | | | | | | | |
| | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Total |
| 1. Market-led agricultural production | 532.8 | 1,784.8 | 2,535.4 | 3,294.6 | 3,930.2 | 3,167.8 | 1,644.4 | 466.6 | **17,356.7** |
| 2. Value chain development and marketing | 562.0 | 1,675.9 | 2,019.9 | 1,992.4 | 2,247.4 | 1,820.7 | 1,276.4 | - | **11,594.9** |
| 3. Institutional Support and Policy Development | 30.4 | 85.6 | 144.3 | 148.4 | 43.5 | 74.0 | - | - | **526.1** |
| 4. Programme management, coordination and M&E | 270.7 | 262.0 | 283.8 | 377.9 | 329.5 | 197.0 | 205.4 | 160.9 | **2,087.3** |
| **Total PROGRAMME COSTS** | **1,396.0** | **3,808.4** | **4,983.4** | **5,813.3** | **6,550.6** | **5,259.5** | **3,126.2** | **627.6** | **31,565.0** |

### Table 7: Disbursement Accounts by Financiers

| Disbursement Accounts by Financiers | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (US$ '000) | | | | | | | | | | | | | | | | | | | |
| Categories | The Government | | IFAD loan1 | | IFAD loan2 | | IFAD grant | | ASAP grant | | Beneficiaries | | FCBL | | Total | | For. Exch. | Local (Excl. Taxes) | Duties & Taxes |
| | Amount | % | Amount | % | Amount | % | Amount | % | Amount | % | Amount | % | Amount | % | Amount | % | | | |
| 1. Works | 580.2 | 10.0 | 2,952.1 | 50.9 | 2,046.0 | 35.3 | - | - | 185.2 | 3.2 | 38.6 | 0.7 | - | - | 5,802.1 | 18.4 | 995.7 | 4,226.2 | 580.2 |
| 2. Equipment and materials | 675.1 | 10.0 | 2,298.5 | 34.0 | 2,587.6 | 38.3 | 204.4 | 3.0 | 90.2 | 1.3 | 432.7 | 6.4 | 462.3 | 6.8 | 6,750.7 | 21.4 | 1,765.8 | 4,309.9 | 675.1 |
| 3. Vehicles | 7.3 | 10.0 | - | - | - | - | 65.8 | 90.0 | - | - | - | - | - | - | 73.1 | 0.2 | 57.7 | 8.1 | 7.3 |
| 4. Goods, services and inputs | 1,241.7 | 34.8 | 826.4 | 23.2 | 727.3 | 20.4 | 47.1 | 1.3 | 533.4 | 15.0 | 187.5 | 5.3 | - | - | 3,563.4 | 11.3 | 927.3 | 2,279.7 | 356.3 |
| 5. Consultancies | 13.2 | 0.5 | 761.4 | 28.7 | 206.8 | 7.8 | 260.3 | 9.8 | 1,413.9 | 53.2 | - | - | - | - | 2,655.6 | 8.4 | 225.6 | 2,430.0 | - |
| 6. Operating costs | 446.7 | 29.0 | - | - | - | - | - | - | - | - | - | - | 1,091.1 | 71.0 | 1,537.8 | 4.9 | 127.6 | 1,256.4 | 153.8 |
| 7. Salaries and allowances | 535.8 | 13.9 | - | - | - | - | 58.3 | 1.5 | - | - | - | - | 3,249.0 | 84.5 | 3,843.1 | 12.2 | - | 3,843.1 | - |
| 8. Workshops | 0.0 | - | 192.6 | 34.1 | 190.5 | 33.8 | 166.2 | 29.5 | 14.9 | 2.6 | - | - | - | - | 564.1 | 1.8 | 47.2 | 517.0 | - |
| 9. Training | 2,238.5 | 34.7 | 969.9 | 15.0 | 238.3 | 3.7 | 215.9 | 3.3 | 2,785.0 | 43.2 | - | - | - | - | 6,447.6 | 20.4 | - | 6,125.3 | 322.4 |
| 10. Fund | - | - | 272.7 | 83.3 | - | - | 54.5 | 16.7 | - | - | - | - | - | - | 327.3 | 1.0 | - | 327.3 | - |
| **Total PROGRAMME COSTS** | **5,738.5** | **18.2** | **8,273.4** | **26.2** | **5,996.6** | **19.0** | **1,072.6** | **3.4** | **5,022.6** | **15.9** | **658.8** | **2.1** | **4,802.4** | **15.2** | **31,565.0** | **100.0** | **4,147.0** | **25,322.9** | **2,095.1** |

### Table 8: Expenditure Accounts Programme Costs Summary

| Expenditure Accounts Programme Cost Summary | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | (Local Million) | | | (US$ '000) | | % Foreign | % Total Base |
| | Local | Foreign | Total | Local | Foreign | Total | Exchange | Costs |
| **I. Investment Costs** | | | | | | | | |
| A. Works | 175.2 | 39.5 | 214.7 | 3,185.2 | 718.2 | 3,903.4 | 18 | 16 |
| B. Equipment and materials | 178.3 | 69.1 | 247.4 | 3,241.8 | 1,255.5 | 4,497.3 | 28 | 19 |
| C. Vehicles | 0.7 | 2.7 | 3.5 | 13.3 | 49.9 | 63.2 | 79 | - |
| D. Goods, services and inputs | 84.3 | 32.7 | 117.0 | 1,532.9 | 593.7 | 2,126.6 | 28 | 9 |
| E. Consultancies | 102.2 | 10.2 | 112.4 | 1,858.2 | 185.7 | 2,043.9 | 9 | 8 |
| F. Workshops | 20.5 | 2.0 | 22.5 | 372.4 | 37.2 | 409.6 | 9 | 2 |
| G. Trainings | 322.4 | - | 322.4 | 5,861.5 | - | 5,861.5 | - | 24 |
| H. Fund | 18.0 | - | 18.0 | 327.3 | - | 327.3 | - | 1 |
| **Total Investment Costs** | 901.6 | 156.2 | 1,057.8 | 16,392.5 | 2,840.2 | 19,232.8 | 15 | 80 |
| **II. Recurrent Costs** | | | | | | | | |
| A. Operating costs | 53.9 | 5.4 | 59.3 | 979.5 | 98.0 | 1,077.5 | 9 | 4 |
| B. Salaries and allowances | 211.4 | - | 211.4 | 3,843.1 | - | 3,843.1 | - | 16 |
| **Total Recurrent Costs** | 265.2 | 5.4 | 270.6 | 4,822.6 | 98.0 | 4,920.6 | 2 | 20 |
| **Total BASELINE COSTS** | 1,166.8 | 161.6 | 1,328.4 | 21,215.1 | 2,938.2 | 24,153.3 | 12 | 100 |
| Physical Contingencies | 84.5 | 17.7 | 102.2 | 1,536.8 | 321.1 | 1,857.9 | 17 | 8 |
| Price Contingencies | 256.6 | 48.8 | 305.5 | 4,666.1 | 887.6 | 5,553.8 | 16 | 23 |
| **Total PROGRAMME COSTS** | 1,508.0 | 228.1 | 1,736.1 | 27,418.0 | 4,147.0 | 31,565.0 | 13 | 131 |

### Table 9: Expenditure Accounts Components - Totals Including Contingencies

| Expenditure Accounts by Components - Totals Including Contingencies | | | | | |
|---|---|---|---|---|---|
| (US$ '000) | | | | | |
| **Expenditure category** | **Market-led agricultural production** | **Value chain development and marketing** | **Institutional Support & Policy Development** | **Programme Management, Coordination and M&E** | **Total** |
| **I. Investment Costs** | | | | | |
| A. Works | 4,239.5 | 1,562.6 | - | - | 5,802.1 |
| B. Equipment and materials | 4,683.7 | 1,379.5 | 135.8 | 551.8 | 6,750.7 |
| C. Vehicles | - | - | - | 73.1 | 73.1 |
| D. Goods, services and inputs | 3,511.1 | - | - | 52.3 | 3,563.4 |

| | | | | | |
|---|---|---|---|---|---|
| E. Consultancies | 427.3 | 1,599.8 | 390.4 | 238.2 | 2,655.6 |
| F. Workshops | 14.9 | 383.0 | - | 166.2 | 564.1 |
| G. Trainings | 4,207.5 | 2,213.2 | - | 27.0 | 6,447.6 |
| H. Fund | 272.7 | 54.5 | - | - | 327.3 |
| **Total Investment Costs** | 17,356.7 | 7,192.7 | 526.1 | 1,108.6 | 26,184.0 |
| **II. Recurrent Costs** | | | | | |
| A. Operating costs | - | 1,212.4 | - | 325.5 | 1,537.8 |
| B. Salaries and allowances | - | 3,189.8 | - | 653.3 | 3,843.1 |
| **Total Recurrent Costs** | - | 4,402.2 | - | 978.7 | 5,380.9 |
| **Total PROGRAMME COSTS** | 17,356.7 | 11,594.9 | 526.1 | 2,087.3 | 31,565.0 |
| Taxes | 1,453.8 | 526.1 | 13.6 | 101.6 | 2,095.1 |
| Foreign Exchange | 2,898.7 | 900.2 | 68.9 | 279.1 | 4,147.0 |

# CHAPTER 4: ORGANIZATION AND MANAGEMENT

The implementation of CARLEP will be managed by the OPM based at Wengkhar in Mongar under the overall direction of the Secretariat of the MoAF. The Implementation and coordination of the programme based on the experiences of Agriculture, Marketing and Enterprise Promotion Programme (AMEPP) and Market Access and Growth Intensification Project (MAGIP) will follow a hybrid organization and management structure with the OPM based in the programme region within close proximity to MoAF's regional agencies mandated for production and marketing services. In addition, to assist OPM in coordination and facilitation, there will be a be a CARLEP liaison Office at Thimphu consisting of the IFAD Focal Officer in Policy and Planning Division (PPD) and a designated Focal Accountant for CARLEP at Administration and Finance Division (AFD) of MoAF. The focal officer at PPD will coordinate supervision missions and other policy related issues while a focal finance officer at AFD will facilitate smooth fund flow, ensuring proper furnishing of withdrawal applications and follow up with MoF on other fund related issues. The office will also liaise with various agencies of RGoB and other external agencies based in Thimphu as may be required.

The OPM will be technically assisted by the MoAF's regional agencies of the technical Departments, Central Programme agencies and Commodity Programmes wherever required. The organizational structure, management and arrangement for implementation of the programme are covered in this chapter.

## 4.1 Programme Management Structure

The overall responsibility for CARLEP implementation will rest with the OPM composed of staff as listed in Table 9.Figure 3 & 4 presents the programme management and coordination structure.

**Table 10: CARLEP Programme Management Office Staffing**

| Sl. No. | Positions | No of positions | Remarks |
|---|---|---|---|
| | **PMO at Wengkhar, Mongar** | | |
| 1 | National Programme Director | 1 | RGoB |
| 2 | Finance / Accounting Officer | 1 | RGoB; |
| 3 | Accountant | 1 | Contract |
| 4 | M&E and Gender Officer | 1 | RGoB |
| 5 | Knowledge Management Officer | 1 | Contract |
| 6 | Component Manager (Agriculture Production) | 1 | DoA, RGoB; |
| 7 | Component Manager (Livestock Production) | 1 | DoL, RGoB; |
| 8 | Component Manager (Value Chain (VC)& Marketing) | 2 | FCBL and RAMCO |
| 9 | Programme Support Officer | 1 | Contract |
| 10 | Office Assistant | 1 | RGoB |
| 11 | Drivers | 2 | RGoB |
| | **Total staff at OPM** | **13** | |
| | **Liaison Office, Thimphu** | | |
| 12 | CARLEP Focal Officer at PPD, MoAF | 1 | Designated from PPD, MoAF |
| 13 | CARLEP Focal Accounts Officerat AFD, MoAF | 1 | Designated from AFD, MoAF |

**Figure 3: Programme Management Structure**

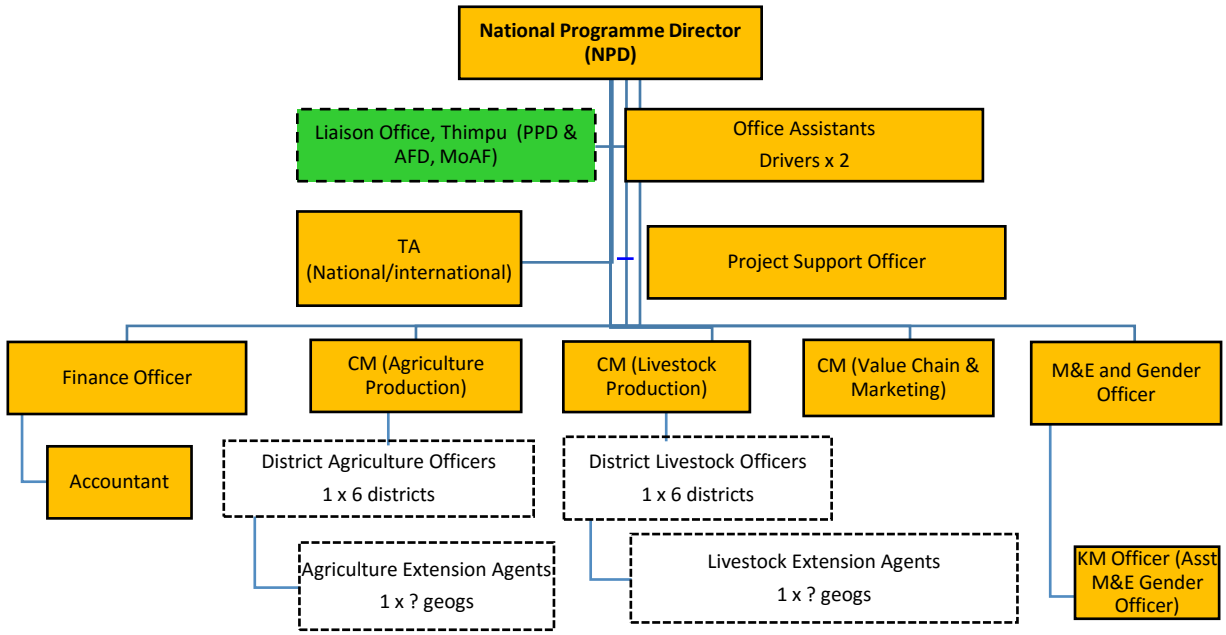
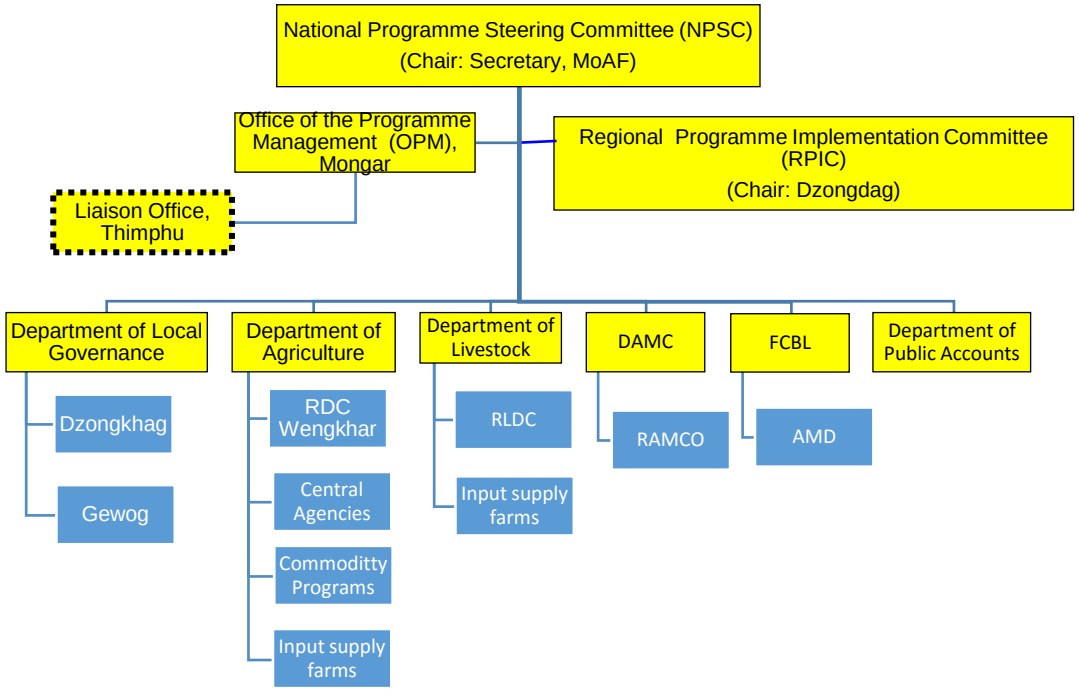



**Figure 4: Programme Management & Coordination Structure**




## 4.2 Human Resource recruitment

The OPM will be staffed with adequate human resources through recruitments following two ways.Regular staff from the line Departments – Department of Agriculture (DoA), Department of Livestock (DoL), Department of Agricultural Marketing & Cooperatives (DAMC) and FCBL will be appointed based on their experiences in working with development programmes, in production and

marketing activities, knowledge of the programme sites and appropriate qualification with approval of MoAF. Contract staff will be recruited through open competition following recruitment procedures of the RGoB.

### 4.3 Implementation Responsibilities

The major components, out puts and implementation responsibilities for the programme are as shown in Table 10.

**Table 11: Overview of Implementation Responsibilities for CARLEP**

| | Programme | Responsiblities | Key support |
|---|---|---|---|
| | **CARLEP Goal and Objectives** | **MoAF – CARLEP OPM** | **Technical support agencies, Dzongkhags, gewogs, FCBL** |
| I | **Component 1: Market-led sustainable agricultural production** | **DoA, DoL, Gewogs, Dzongkhags** | **Overall: Technical Agencies and service providers** |
| | Output 1.1 increased climate resilience: development and implementation of climate smart agriculture practices, resilient farming systems, soil and land management, seed systems, agroforestry - Permaculture, strengthening local institutions, crop diversification etc. | Component Managers (CM) Agriculture, CM Livestock<br><br>Dzongkhag Agriculture Officer (DAO) and Gewog Extension Officers (GEO) | Research &Development Centre (RDC) Wengkhar for Agriculture Lead Farmers, permaculture and Regional Livestock Development Centre (RLDC) Kanglung for Livestock Lead Farmers, CAHW and biogas |
| | Output 1.2 vegetable production: increased volumes of vegetable production through inputs, intensification, area expansion and smallholder production clustering. | CM Agriculture, DAO and GEO | DAMC/RAMCO support for groups establishment and contract agriculture with schools/institutions; RDC for technical support |
| | Output 1.3 dairy production: increased volumes of dairy production through inputs, intensification, area expansion and smallholder production clustering. | CM Livestock, DLO and Livestock Extension Officers, Production Officers, Veterinary. Officers | RLDC for lead farmer and CAHW; Service providers such as commercial farms; DAMC/RAMCO support for groups mobilization and establishment |
| II | **Component 2 – value chain development and marketing** | **FCBL, DAMC/ RAMCO, Gewogs, Dzongkhags, MoAF** | **Overall: Technical Agencies, service providers** |
| | Output 2.1 resilient value chains; design and implementation of vegetable and dairy value chains, multi-actor linking, and FCBL capacity | Marketing Value Chain Managers<br><br>FCBL, DAMC/ RAMCO, Gewogs, Dzongkhags, DoA, DoL | Value chain design specialists |
| | Output 2.2 agriculture commercialization and enterprise development: enterprise development, access to finance, networking | Marketing Value Chain Managers, FCBL, DAMC/ RAMCO, Gewogs, Dzongkhags, DoA, DoL | PPP and business model development specialist; service providers financial institutions, Entrepreneurship service providers |
| | Output 2.3 market infrastructure: planning, design, business plans, investment | FCBL, DAMC/ RAMCO, Gewogs, Dzongkhags, DoA, DoL | Infrastructure design specialist |
| III | **Component 3 – Institutional support and policy development** | **MoAF's PPD** | **Overall: Technical Agencies service providers** |
| | Output 3.1 value chain and marketing | Marketing Value Chain | ICT expertise, education and |

| | | | |
|---|---|---|---|
| | knowledge/communication: DAMC market information system, Bhutan Commodity Exchange, Curriculum development | Manager (RAMCO)<br><br>Knowledge Management (KM) Officer<br><br>PPD, Renewable Natural Resource (RNR) training and education institutes | training expertise<br><br>Commodity exchange/FCBL |
| | Output 3.2 CC resilience and VC lessons mainstreamed: knowledge management, regulatory framework for private sector collaboration, participatory policy development | KM Officer<br><br>Marketing Value Chain Manager<br><br>PPD, RNR training and education institutes, Gross National Happiness Commission (GNHC) PPD, National Environment Commission (NEC), Bhutan Chamber of Commerce & Industries (BCCI), Ministry of Economic Affairs (MoEA), Ministry of Labour & Human Resources (MoLHR), Civil Society Organizations (CSOs) | Private sector collaboration regulatory framework specialist |
| IV | **Component 4. Program Management** | OPM | MoAF Secretariat |
| | Coordination of implementation, Monitoring and Evaluation, Gender Mainstreaming, Knowledge Management | All CMs, | Technical Agencies, Dzongkhagsand Service Providers |

### 4.3 Programme Coordination Arrangement

The OPM lead by National Programme Director (NPD) will be responsible for the overall implementation of the programme. The OPM will mainly facilitate linkages and coordination on the AWPB, National Program Steering Committee (NPSC) and Regional Programme Implementation committee (RPIC) and will also ensure programme requirements. The actual implementation of the components will be led by the respective CMs with technical assistance from the Regional Agencies through appointment of key focal persons. The CMs and the focal persons from the regional production and marketing agencies will maintain consistent interaction with the Dzongkhag and Gewog Extension officers (GEO) for agriculture and livestock and assist them in the programme implementation.

### 4.4 Implementing Agencies and responsibilities

***Programme Management Office:*** CARLEP will be implemented by OPM assisted by the agencies under the line Departments – DoA, DoL, DAMC and FCBL.The OPM will be responsible for overall coordination and implementation of planning, progress monitoring& reporting, fund allocation and disbursement to implementing agencies, knowledge generation and dissemination to RGoB, IFAD and other concerned agencies.

***Dzongkhags and Gewog Extension Centres**:* The Dzongkhags and gewog extension centres operating in the programme sites will be responsible for identifying programme interventions in consultation with the Gewog Tshogde (GT), Gup, Gewog Administrative Officer (GAO) and Tshogpas with support of the Dzongkhag Agriculture and Planning Officers. They will also lead implementation of the Dzongkhag and gewog based activities with TA from the service agencies of the line Departments including central program agencies and commodity programs.

***Food Corporation of Bhutan Limited*.** FCBL in coordination with the Component Manager for Marketing (Value Chain) will put in place a systematic physical marketing system in the programme sites through establishment of appropriate infrastructures such as storages and Farm Shops (FS). These will be operated by FCBL for providing farm input services such as seeds, fertilisers, farm implements and essential grocery items. A buy back mechanism of farm produces will be initiated with in-kind credit facility for grocery items, inputs to be paid in-kind during harvest time. All produces collected through buy back mechanism shall be bulked, processed, packaged and marketed by FCBL to be sold at market rate. The government will assist FCBL, and thereby local farmers indirectly, through schemes such as Minimum Support Price (MSP) to cover the cost differences. Contract farming schemes with local farmers/groups/cooperatives will also be initiated by FCBL through this programme and will gradually move to an online commodity exchange for agricultural produce along with traditional auction yard operations.

***Regional Agriculture Marketing Office (RAMCO):*** The CM for value chain and marketing at OPM deputed from RAMCO will be responsible for market research and information sharing, identifying farm shop sites, establishing new structures for farm shops, identification of active groups and linking with schools and institutions, strengthening and forming new community production and marketing groups and their capacity development.

Considering the increasing youth unemployment problems in the country, RAMCO shall also promote entrepreneurial development and youth engagement in commercialisation of farming and inculcate cost sharing through establishing proper linkages with credit schemes and agencies.

***Regional Research and Development Centre (RDC Wengkhar):*** RDC Wengkhar will assist implementation of the agriculture production component by providing TA in agriculture production (cereal crops and horticulture). The centre will also initiate promotion of the concepts of permaculture innovations and lead farmer approach in agriculture extension and outreach to enhance production and commercialisation of agriculture in the region mainly focussing on off season production, integration of fruits, vegetables and cereal crops. RDC Wengkhar with the programme support will also develop, test and promote climate resilient agriculture technologies for both cereal and horticulture crops, enhance technical capacity of farmers through hands on practice and link with the establishment of commodity based villages in the region. The centre through its communication sector will also support and complement the knowledge management through development of knowledge sharing mechanism, knowledge products, activity write ups, updates, etc.

The RDC will also seek assistance from the central service agencies namely National Plant Protection Centre (NPPC), National Soil Services Centre (NSSC), National Post Harvest Centre (NPHC), National Mushroom Centre (NMC), National Organic Program (NOP), Agriculture Machinery Centre (AMC) and National Seed Centre (NSC) in their respective areas of TA.

***Regional Livestock Development Centre (RLDC Khangma):*** RLDC Khangma will assist in the implementation of livestock production component by providing TA in livestock production (dairy production technology).The RLDC will lead the implementation of Lead Farmers in livestock for farmers-to-farmers extension services and CAHW model. The Centre will operate, implement and manage these extension models with the aim of scaling-up nation-wide and also sustaining the operations to benefit the livestock and dairy farmers as also self-sustaining engagements for the CAHW in due course of programme. With its regional mandate, it will provide technical support and backstopping to Dzongkhags for livestock development activities, while ensuring adequate monitoring of activities in the field. The Centre will also contribute to the KM aspect of the programme in the areas of good practices in livestock and dairy activities.

The RLDC Khangma will also seek assistance and mobilise necessary production inputs from other regional agencies mandated for input supplies in the region namely Regional Pig and Poultry Farm (RPPF), RegionalNublang Breeding Farm (RNBF), Regional Mithun Breeding Farm (RMBF) and Regional Centre for Aquaculture (RCA).

### 4.5 Institutional Arrangements

The implementation of CARLEP will adopt the following institutional arrangements:

***Ministry of Finance*:** The MoF as a borrower will appoint a focal officer in the Department of Public Accounts (DPA) for IFAD who will be responsible for coordinating with the OPM, MoAF and IFAD for timely fund flow, disbursements, financial reporting, and clearance of Withdrawal Applications (WA) and operation of designated accounts (DAs).

***Ministry of Agriculture and Forests*:** The MoAF will be the Lead Programme Agency (LPA) providing policy guidance, policy priority direction and facilitate in programme implementation. MoAF will also provide required technical staff for the programme and arrange technical backstopping through its line departments and field agencies. In order to ensure stability in the OPM, the MoAF in collaboration with MoF and RCSC will ensure that appointed staff especially for OPM is kept through till completion of the programme.

***National Programme Steering Committee (NPSC*):** The NPSC will be composed of the Secretary, MoAF as the chair of the committee and will be represented by Heads of the line Departments of Agriculture, Livestock, Agricultural Marketing& Cooperatives, Public Accounts (MoF), MoHCA and Chief Executive Officer (CEO) of FCBL. The NPD, CARLEP will be the Member Secretary of the NPSC. The NPSC will meet once a year to review progress, provide policy directives for smooth implementation of the programme and guide the programme management. Any issues related to programme that are not resolved by RPIC shall be put up to NPSC for discussion and resolution.

***The Regional Programme Implementation Committee (RPIC)***. The RPIC will be composed of Dzongdags, Dzongkhag Tshogdu (DT) Chairpersons, DAOs, Dzongkhag Livestock Officers (DLOs), Dzongkhag Planning Officers (DPOs), Accounts Officers (AOs), Programme Directors (PDs) from RDC Wengkhar and RLDC Kanglung and OPM staff (see Annex 25 for detail lists). The chairperson of RPIC will be one of the Dasho Dzongdags on rotational basis (depending on where the RPIC is being held) and the NPD will serve as the member secretary. The key roles and responsibilities of RPIC will be: i) to synchronise and endorse the AWPB including annual procurement plan and ii) to discuss and resolve issues pertaining to programme implementation. The RPIC will meet once a year.

**Other institutional arrangements:** CARLEP will also be guided by other institutional arrangements and mechanisms such as Procurement Committees (as detailed in Chapter 6), AWPB preparation guidelines (as detailed in Chapter 10). Other agencies associated with the implementation of the programme and their roles are as detailed in Chapter 5.

# CHAPTER 5: ENGAGEMENT OF RGoB TECHNICAL AGENCIES AND TAs

The Implementation of CARLEP will be assisted by RGoB Technical Agencies (both at National and Regional Levels), relevant corporations, private sectors, financial institutes and schemes. The approach for CARLEPs TA will follow exploration of expertise available within MoAF and other government agencies in the country. Appropriate services from private sectors, Corporations and financial institutes, training institutes within the country will also be explored depending on the need. The programme will also seek TA from both national and international agencies and organizations in areas of expertise beyond the capacity of the existing technical agencies within the country. These agencies and their expected roles are described in this section of the Manual.

## 5.1 Departments and Other Agencies

The line departments under MoAF will provide technical backstopping and explore avenues whereby local farmer group (FG)s/Coops/Youth groups can participate in Agriculture and Livestock production. The line departments will assist with establishment of infrastructures such as irrigation, collection and bulking centres, processing plants, etc. Once established, the marketing and value addition facilities will be taken over by FCBL for operation. Similarly, the livestock department will establish production farms particularly for dairy, pork, chicken, and fish which may be leased to FG/Coops for operation if interested or best it should be allowed for educated youth entrepreneurs (individually or in groups) or Private Sector to operate. This will not only allow commercial level production but also help generate employment and provide avenue for business opportunities to youths. The Departments under MoAF will also facilitate in linking FGs/Coops/Youth Entrepreneurs with Bhutan Development Bank Ltd (BDBL) for Business Opportunity and Information Centre (BOIC) loan, Non-Governmental Organizations (NGOs), CSOs with financial institutions for accessing loans and grants.

### *5.1.1 Department of Agriculture*

The DoA under the MoAF reaches out to clients through a network of Extension, Research and Central program offices established across the country. At the policy and coordination, the DoA HQ comprise of Agriculture, Horticulture and Engineering Divisions including Extension Information System. The implementation of CARLEP by the implementing agencies of DoA, MoAF in the region will be guided and supported by the DoA secretariat.

The DoA has 20 Dzongkhag Agriculture Offices and 205 gewog extension centres of which 6 Dzongkhag and 70 gewog extension centres are in the programme sites. They will be actively involved as an implementing agency at the grass roots level. In addition, there are five central programs under DoA namely AMC, NPHC, and NSC based in Paro; and NSSC and NPPC based in Thimphu. The NMC based in Yusipang and Central Machinery Unit (CMU) based in Bumthang and RDCs.

These Centres provide research, extension and other services backstopping the Dzongkhag extension system and the implementation of CARLEP will seek services from them and also render support to enable them deliver services that contributes to the implementation of the programme. Some of the agencies under DoA which will be involved in the implementation of CARLEP are mentioned below:

#### *Regional Research and Development Centre (RDC Wengkhar)*

RDC Wengkhar will assist implementation of the agriculture production component by providing technical assistance in agriculture production (horticulture and cereal crops). The centre will also initiate promotion of the concepts of permaculture innovations and lead farmer approach in agriculture extension and outreach to enhance production and commercialisation of agriculture in the region mainly focussing on off season production, integration of fruits, vegetables and cereal crops. RDC

Wengkhar with the support of the programme will also develop, test and promote climate resilient agriculture technologies for both cereal and horticulture crops, enhance technical capacity of farmers through hands on practice approach and link with the establishment of commodity crop based villages in the region. The centre through its communication sector will also complement in the knowledge management by developing extension materials, activity write ups, updates and develop a knowledge sharing mechanism.

***Regional Seed Production Farm, Trashi Yangtse***

The Regional Seed Production Farm at Trashi Yangtse is mandated for seeds and seedlings production. The farm will link their seed production in line with the CARLEP production component to fulfill the input requirements.

***Agriculture Machinery Centre / Regional Agriculture Machinery Centre (RAMC Khangma)***

CARLEP implementation focused on commercial level farming will require farm mechanization services which RAMC Khangma under the Agriculture Machinery Centre at Paro is mandated. Wherever appropriate, CARLEP will avail or link farmers with farm mechanization services of RAMC Khangma and AMC Paro such as hiring of farm machineries..

***National Plant Protection Centre (NPPC)***

The National Plant Protection Centre (NPPC) is mandated for plant protection services. As such the centre will provide plant protection and advisory services to the programme either directly or through RDC Wengkhar. Some of the major pest and disease problems that can affect production in the region are fruit fly, citrus greening, potato tuber moth, potato and chilli blight and fungal diseases in maize, etc.

***National Soil Service Centre (NSSC)***

Soil survey, soil fertility and plant nutrient management, sustainable land management (SLM) and soil and plant analytical services are provided by the NSSC at Semtokha. The implementation of CARLEP will avail these services from the centre or through RDC Wengkhar as the Department is working on strengthening these services from the RDCs. SLM and soil fertility improvements knowledge and skills will be required under the Lead Farmer and Permaculture innovations.

***National Mushroom Centre (NMC), Yusipang/Mushroom Spawn Production Unit at Khangma***

National Mushroom and RDC Wengkhar has opened a mushroom production unit in Khangma which was also supported through MAGIP-IFAD. This unit will provide support services to mushroom development under agriculture production component of the programme.

***National Post Harvest Centre (NPHC), Paro***

CARLEP implementation especially under enterprisedevelopment and youth engagement will require agro processing skills improvement services which the programme will avail from the NPHC and its personnel appointed with RDC Wengkhar.

### *5.1.2 Department of Livestock*

Similar to DoA, the DoL under the MoAF also reaches out to clients through its network of Extension, Research and Central program offices established at strategic locations throughout the country. At the policy and coordination, the DoL comprises of Livestock Production, Animal Nutrition and Animal health divisions. The implementation of CARLEP activities by the implementing agencies in the region will be guided by these divisions at DoL.

At the local level, the department has its network of extension services through the 20 Dzongkhag livestock offices and 205 gewog extension centers and several veterinary hospitals and AI centres. The DoL agencies in the six eastern Dzongkhags will be the key implementing agencies at the grass roots level for CARLEP. These agencies in the region will work closely with the Department, the Research Centres and Central Programs to provide assistances to address the livestock production challenges of the local farming communities.

The regional level livestock development support is provided by the 4 regional livestock development centres located in Khangma, Tsimasham, Wangdi and Zhemgang. The technical support and input supply services are provided through the specific national centers for poultry, piggery, dairy, aquaculture, riverine and lake fisheries and animal nutrition. The implementation of CARLEP will seek services from them and also render support to enable them deliver services that contributes to the implementation of the programme.

### *5.1.3 Regional Livestock Development Centre (RLDC), Khangma*

The RLDC will lead in the implementation of Lead Farmers in livestock through farmers-to-farmers extension services and CAHW model. The Centre will operate, implement and manage these extension models with the aim of scaling-up nation-wide and also sustaining the operations to benefit the livestock and dairy farmers as also self-sustaining engagements for the CAHW in due course. Livestock production related component of the programme will be coordinated and managed by the RLDC in Khangma. With its regional mandate, it will provide technical support and backstopping to Dzongkhags and gewogs for livestock development activities, while ensuring adequate monitoring of activities in the field. The Centre will also contribute to the knowledge management aspect of the programme in the areas of good practices in livestock and dairy activities.

### *5.1.4 Regional Pig and Poultry Breeding Farm (RPPBF), Lingmethang*

CARLEPs livestock production component will rely on the livestock inputs such as piglets and pullets which the RPPBF at Lingmethang produces. RPPBF will prioritize input generation through their collaboration with the RLDC Khangma in implementing the livestock breed improvement activities and establishment of commercial farms.

### *5.1.5 Regional Centre for Aquaculture*

The regional centre for aquaculture located in the southern belt of the country will be engaged in supporting the fishery farms proposed in the programme through supply of fishery inputs, fingerlings, fish production technical support and in conducting monitoring and evaluation specific to fisheries development.

### *5.1.6 Regional Nublang and Mithun Breeding Farms (RNBF, Tashiyangphu and RMBF, Arong)*

Similar to the RPPBF Lingmethang, the RNBF and RMBF is mandated for production and supply of livestock breeding inputs for Nublang and Mithun. The RLDC in collaboration with these farms will link production improvement with breed improvement for which the production farms will link their production with the CARLEPs livestock production components.

### *5.1.7 Department of Agricultural Marketing and Cooperatives (DAMC)*

DAMC will facilitate and promote effective and efficient marketing of RNR products through market policy, information, research, intelligence and capacity building support. On the policy front, the department will formulate enabling policy to develop proper market infrastructures, logistics and market linkages. DAMC through RAMCO, Mongar will promote and strengthen producer & marketing groups, associations and cooperatives. It will also help in establishing agro processing units and enhancing the value of products through value addition and post-harvest management in collaboration with NPHC, DoA, MoAF. The focus will be also in terms of strengthening the domestic

distribution and exploring export. DAMC/RAMCO will coordinate closely with FCBL in development of marketing infrastructures for effective implementation of CARLEP.

#### *5.1.8 Food Corporation of Bhutan Ltd (FCBL)*

With this proposed approach in enhancing domestic production, FCBL will put in place a systematic physical marketing system, initiate contract farming scheme with local farmers/groups/cooperatives and facilitate establishment of farm shops and market infrastructures in collaboration with RAMCO.

#### *5.1.9 Private sectors and financial service providers*

CARLEP is focusing on commercialization of farming and will make every effort to link farmers, groups and commercial farms with the private sectors, financial service providers including credit schemes to initiate the PPP model. CARLEP will take advantage of any existing financial institutes supporting rural development.

#### *5.1.10 Farmers/Farmers Groups/Cooperatives/Youth Entrepreneurs' involvement in large scale production*

The majority of production is expected to occur in farmers' field supported by different departments under MoAF including FCBL in organizing mechanized farming with quality inputs and systematic marketing. Individual farmers will be encouraged to take up large scale production, form groups and cooperatives. The government is also emphasizing on youth engagement in farming for creation of employment opportunities. CARLEP will give attention to groups and youth entrepreneurs in the programme sites by prioritizing them under the production, marketing and enterprise development components.

### 5.3 National and International Technical Assistance for CARLEP

#### *5.3.1 Key areas of Technical Assistance and Terms of Reference*

CARLEP has identified some of the specific TA requirements where fielding of national and international TAs are likely to be required especially in areas beyond the capacity of RGoB Technical agencies. Some of the key areas of TA needs include:

- Climate Smart Agriculture (CSA) Production and Management
- Strengthening local institutions for increased climate resilience of smallholders.
- Capacity strengthening of FCBL in strategic value chain and marketing development, business development support
- Planning and design of value chain and market infrastructure;
- Strengthening of Market information system
- Vegetable value chain design and business plan
- Mainstreaming climate resilience and value chain development lessons in agricultural policies and strategies
- Dairy value chain design and business plan;
- Developing a conducive regulatory framework for private sector development and Public Private Partnership
- Support to agriculture enterprise development;

The key areas for external TAs with their broad Terms of Reference are mentioned in Table 11.

**Table 12: Key Areas of External TAs & Terms of Reference**

| Sl. No. | Activity/Areas | Terms of Reference (ToR) |
|---|---|---|
| 1 | Climate Smart Agriculture Production and Management | • Support to assessment and upgrading of existing farmer group training packages, specifically for i) mainstreaming CSA technology and practices, ii) improved farming/soil management practices, iii) on-farm climate-induced disaster preparation. For agricultural crop (vegetables) as well as dairy sectors;<br>• Provide Training of Trainers (ToT) for selected FCBL/DAMC/ extension staff;<br>• Provide training to extension agents. |
| 2 | Strengthening local institutions for increased climate resilience of smallholders | • Development of a research proposal for a long-term area-based sustainability plan for service investments and O&M, including estimation of costs and (agricultural) benefits. The research should address capital and recurrent investments in infrastructure and services provided by dzongkhag, as well as recommendations on improvement of existing approaches and models for O&M of infrastructure based on existing guidelines (e.g. irrigation Water User Association (WUA) and Road User group (RUG), including community capacity and ability to contribute. The research has the objective to assess if overall investment in strengthening local institutions to sustain area-based services and infrastructure, are cost-effective in generating increased community benefits in commercial agriculture as well as in social sectors as health and education |
| 3 | FCBL capacity strengthening for value chain development | • Design of an organizational strategy and business plan for FCBL as a whole and specifically its marketing division.<br>• Targeted capacity development (CD) interventions for strategy implementation, providing (as per the CD Plan) for value chain and marketing related organizational functions. |
| 4 | Vegetable value chain design and business plan | • Undertake a detailed design of the value chain involving all stakeholders, including farmers, input suppliers, traders and marketers. |
| 5 | Dairy value chain design and business plan | • Detailed Value Chain design will be prepared to understand and address issues at all levels in the chain from farmers to consumers; market research/studies to assess the dynamics of existing and the potential of new markets within the selected value chains |
| 6 | Value chain development, strengthening and expansion | • Market research/studies to assess the dynamics of existing, and the potential of new, markets in support to implementation of the value chain designs and business plans, ensuring that designs are adapted based on new insights or changing local context and dynamics |
| 7 | Support to agriculture enterprise development; | • Development of an entrepreneur identification and engagement process<br>• Strengthening of the existing marketing and cooperative capacity development packages,<br>• Developing and providing technical training for vegetable marketing groups and entrepreneurs |
| 8 | Planning and design of value chain and market infrastructure; | • Infrastructure designed, in line with the vegetable and dairy value chain designs and business plans, based on i) demand or community-driven, ii) a multi-use perspective, iii) economic feasibility for direct privatization or PPP management models, iv) climate resilience specifications |
| 9 | Strengthening of Market information system | • Market information demand studies<br>• ICT and interactive information delivery technologies |
| 10 | Participatory policy development and monitoring approach | • Development of a multi-stakeholder consultation process for policy development, as well as a participatory monitoring process |
| 11 | Mainstreaming climate resilience and value chain development lessons in agricultural policies | • Screening of agriculture policies and provide recommendations on new policy areas and strengthening of existing policies on climate resilience, sustainable farming practices, CAHWs and lead farmer models, value chain development, marketing, new institutional role of FCBL, and engagement with training and education institutes. |
| 12 | Developing a conducive regulatory framework for private sector development and Public Private Partnership | • Assessment of the regulatory environment for private sector engagement in the agricultural sector and for PPPs in value chain service delivery; participatory development of a PPP framework and recommendations on institutional strengthening |
| 13 | Audio visual and extension materials | • Development of audiovisuals from the programme archives of implementation records and package into KM materials |

# CHAPTER 6: PROCUREMENT PROCEDURES

## 6.1 Procurement Regulations for CARLEP

The procurement of goods, works and services financed by IFAD under Component 1 and 3 shall be carried out in accordance with the provisions of the RGoB Procurement Rules and Regulations (2009) and under Component 2 shall be carried out in accordance with the provisions of FCBL Procurement Rules and Regulations, to the extent such are consistent with the IFAD Procurement Guidelines and Procurement Handbook and as amended from time to time.

## 6.2 Procurement Methods

The procurement methods and thresholds for goods and works will be as per the RGOB Procurement Rules and Regulations (Clause 4.1.1) and FCBL Procurement Rules and Regulations (Clause 5.2.1) and as per subsequent amendments.

The applicable selection method (threshold) for procurement of consultancy services, service provider and individual consultant shall be agreed to and decided on the basis of the approved procurement plan.

**Consultancy and Services**. Consulting service will include programme management technical assistance, implementation support technical assistance for different components, conducting studies, mobilisation/establishment of community groups, technical training and strengthening of community groups, and monitoring and evaluation. Services could be provided by consulting firms and non-profit organization. The selection of consultancy services could be done following any one of the selection methods listed below:

- Quality and Cost Based Selection
- Fixed Budget Selection
- Least Cost Selection
- Selection Based on Consultants Qualification
- Single Source Selection

**Selection of individual consultants**. Individual consultants are selected on the basis of their qualifications for the assignment of at least three candidates among those who have expressed interests in the assignment or have been approached directly by PMO or Implementing Agencies. Individuals employed by the OPM and Implementing agencies shall meet all relevant qualifications and shall be fully capable of carrying out the assignment. Capability is judged on the basis of academic background, experience and, as appropriate, knowledge of the local conditions, such as local language, culture, administrative system, and government organization.

Consultancy Services and Individuals consultants may be selected on a sole-source basis with due justification in exceptional cases such as: (a) tasks that are a continuation of previous work that the consultant has carried out and for which the consultant was selected competitively; (b) assignments lasting less than six months; (c) emergency situations resulting from natural disasters; and (d) when the individual consultant or consulting firm is the only consultant qualified for the assignment.

## 6.3 Procurement Procedures

During procurement, wherever possible, items will be bulked into sizeable bid packages to make procurement more cost-effective.

The OPM will be responsible for procurement of TA and other consultant services. For procurement of any contract of any value the agency responsible for the procurement will follow the appropriate (i) procedure for the procurement of goods, services and civil works, (ii) evaluation of bids and negotiation, and (iii) award and management of contracts, with the following exception:

Any procurement of goods, services and works, which require prior review from IFAD, will need to be routed through OPM. This is elaborated under section 6.5 of this manual.

No taxes and duties will be financed out of the proceeds of the IFAD loan and/or grant and OPM will obtain necessary tax waiver from the relevant authorities if necessary.

### 6.4 Procurement Planning

All procurement should be undertaken consistently in accordance with the consolidated Procurement Plan submitted by OPM, CARLEP and approved by IFAD. The OPM, CARLEP will submit a 18-month Procurement Plan immediately after the programme enters into force and in the subsequent programme years submit an annual 12 month Procurement Plan.

As provided in appendix I, paragraph 1 of IFAD's Procurement Guidelines, IFAD review of and no objection to the consolidated procurement plan is compulsory and the 18 month procurement plans submitted by the Recipient must include as a minimum:

a) A brief description of each procurement activity to be undertaken during the period and name of the implementing agency responsible for the procurement.
b) The estimate value of each procurement activity;
c) The method of procurement to be adopted for each procurement activity and;
d) The method of review IFAD will undertake for each procurement activity indicating either post review or prior review.

The procurement plans must ensure consistency based on the provision of Module E pages 29 to 33 of the IFAD Procurement Handbook and updated regularly seeking IFAD's No Objection to the revised procurement plan in case of changes and amendments.

The procurement plan is an integral part of the AWPB and should be associated with the AWPB providing clear indication of the implementing units which would be managing the procurement.

Any procurement undertaken which is not include in the approved procurement plan will be deemed as an ineligible expenditure in accordance with the provision of the Financing Agreement and its General Conditions.

### 6.5 Review of Procurement Decision

IFAD will undertake to review the provisions for the procurement of good, works and services to ensure that the procurement process is carried out in conformity with its Procurement Guidelines. For the purposes of IFAD's Procurement Guidelines, the following procurement decisions shall be subject to prior review by the Fund for the award of any contract for goods, equipment, materials, works, consultancy and services under CARLEP.

i) Procurement of goods, materials and works
   - Prequalification documents and shortlist when prequalification is undertaken;
   - Bid Documents for goods, materials and works;
   - Evaluation Report and Recommendation for Award; and
   - Draft contract and amendments.
ii) Procurement of consultancy services and services
   - The Terms of Reference, Prequalification documents and shortlist when prequalification is undertaken;
   - Request for Proposal;
   - Technical evaluation report;
   - Combined (technical and financial) evaluation report and the recommendation for award; and
   - The minutes of negotiations, draft contract and amendments.

**Prior or Post Review.** Except as IFAD may otherwise agree, the prior or post which applies to various procurement of good, works and consultant recruitments shall be defined as in Table 12:

**Table 13: Prior & Post Review**

| Procurement Method | Type of Review Prior or Post | Comments |
|---|---|---|
| **Procurement of Goods and Works** | | |
| ICB Works and Goods | Prior | All Contracts |
| NCB Works | Post | Except procurement of the first two procurement in each district as per the approved AWPB and procurement plan for each fiscal year and thereafter any procurement valued above USD 200,000 |
| NCB Goods | Prior | Except procurement valued below USD 50,000 |
| Shopping for works (quotations) | Post | |
| Shopping for goods (quotations) | Post | |
| Direct Works | Prior | Except procurement valued below USD 2,000 |
| Direct Goods | Prior | Except procurement valued below USD 2,000 |
| **Recruitment of Consulting Firms** | | |
| Quality and Cost-Based Selection (QCBS) | Prior | Except procurement valued below USD 30,000 |
| Fixed Budged Selection (FBS) | Prior | Except procurement valued below USD 30,000 |
| Least Cost Selection (LCS) | Prior | Except procurement valued below USD 30,000 |
| Selection Based of Consultants Qualification | Prior | Except procurement valued below USD 30,000 |
| Sole Source Selection (SSS) | Prior | All contracts |
| **Recruitment of Individual Consultants** | | |
| Individual Consultants | Prior | Except procurement valued below USD 20,000 |

The aforementioned thresholds may be modified by IFAD during the course of Programme implementation. IFAD may establish its prior review requirement for procurement below and above thresholds during its review and approval of the Procurement Plan.

All contracts must be listed in the Register of Contracts, which should be updated and submitted to the IFAD Country Programme Manager on a monthly basis. The sample form to be used and instructions are detailed in Annex 6 to the Loan Disbursement Handbook.

## 6.6 Procurement Committee

The Procurement Committee of Programme will comprise of the following officials & representatives:

1. The Secretary, Ministry of Agriculture & Forests - Chairperson
2. Programme Director, RDC Wengkhar - Member
3. Programme Director, RLDC Khangma - Member
4. Regional Marketing Coordinator, RAMCO - Member
5. Finance Officer or Representative (CARLEP) - Member
6. National Programme Director (CARLEP) - Member Secretary

For Dzongkhag Tender Committee, the composition shall be:

1. Head of Dzongkhag (Chairperson)
2. Finance Officer
3. Concerned Sector
4. Procurement Officer
5. In case of civil works, Engineer or Engineering Consultant responsible for preparing the technical documents and in the case of goods/services, appropriate Procurement Officer and technical expert or consultant.

For FCBL, depending upon the type of tender, it has different opening, evaluation and award committees consisting of mix of members representing different departments. Each level of committee is chaired by one of the General Managers of the Departments.

The committee may co-opt any other person or expert as the case may be, which is subject to type of procurement to be made in order to have expert opinion in the matter. The procurement committee will also decide on the constitution of bid evaluation committees as and when required and also for each contract and bid.

Responsibilities of the procurement committee are to ensure that procurement plans have been prepared for each year, review of draft procurement notices, invitations, MoUs, agreements and provide overall policy guidance; ensure that the procurement procedures are in compliance with the Financing Agreement and are within the rules and regulations of the RGoB/IFAD; ensure that the proposed procurement packages, methods and arrangements are within agreed limits of Procurement Rules &Regulations 2009 of RGoB and or IFAD Programme Procurement Guidelines.

# CHAPTER 7: FINANCE MANAGEMENT

## 7.1 Programme Cost and Financing Arrangement

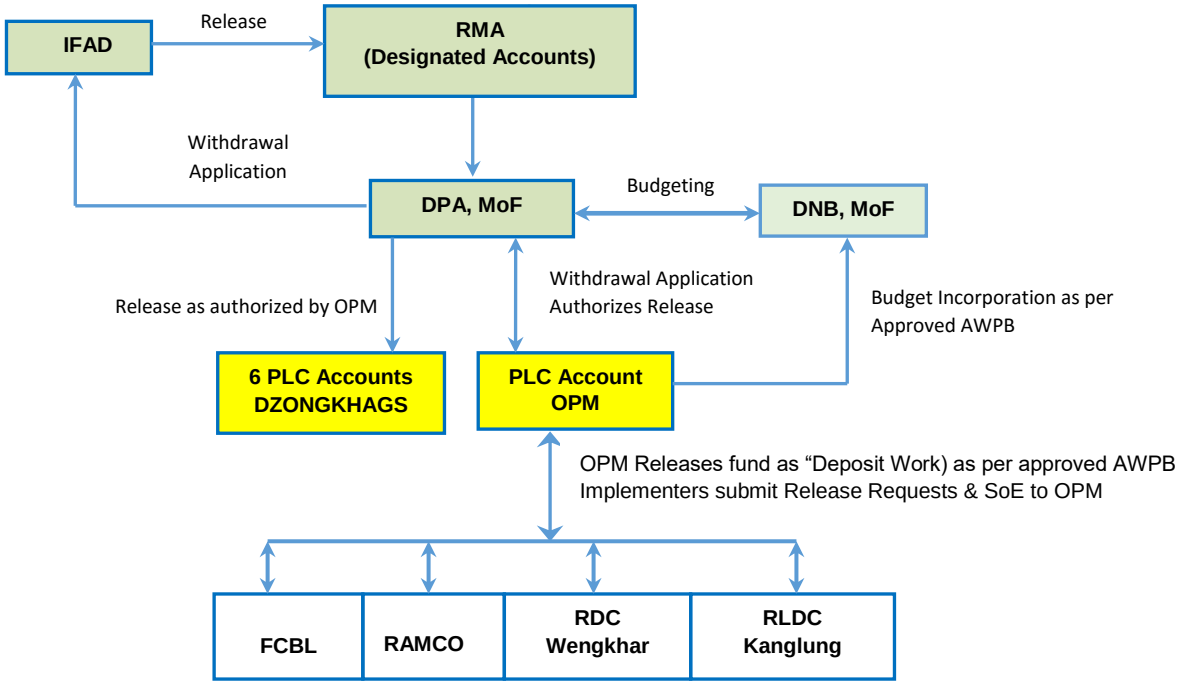
The total programme cost is estimated to USD 31.58 million over a period of seven (7) years, including contingencies. The programme will be financed by: (i) an IFAD loan of USD 8.25 million (26.2% of total programme costs); (ii) an IFAD grant of USD 1.05 million (3.4% of total costs); (iii) an ASAP Grant of USD 5.0 million (15.9% of total costs); (iv) the contribution of beneficiaries estimated to around USD 0.6 million (2.1% of total costs); (v) the contribution of RGoB corresponding to around USD 5.7 million (18.7% of total costs); (vi) the co-financing of the FCBL amounting to USD 4.8 million mainly through recurrent costs (15.2 % of total costs) and (vii) a financing gap anticipated to be filled by the IFADII (2019-2021) PBAS (based on fund availability and priorities of the RGoB's 12 FYP) of around USD 6.0 million (19.0% of total costs). The RGoB will finance most of the recurrent costs, taxes and duties as well as re-training as part of the mandate of the MoAF. Similarly, the FCBL will co-finance most of its recurrent costs, while the beneficiaries will provide their contributions in kind and in the form of labour.The IFAD loan will finance all incremental programme costs except: (i) duties and taxes on vehicles, and the costs of ongoing office utilities (ii) the contribution provided by the beneficiaries.

## 7.2 Fund Flow Mechanism

Funds for Loan and Grants from IFAD shall be deposited to the Designated Accounts (DAs) maintained in USD at Central Bank of Bhutan, Royal Monitory Authority (RMA), acceptable to IFAD and operated by the MoF. On request by the OPM, MoF will release the fund to the Project Letter of Credit (PLC) accounts of PMO and Dzongkhags based on the approved AWPB. The MoF will release the IFAD funds quarterly from the DA to the Programme account held in any commercial bank acceptable to IFAD. For other programme implementers namely, FCBL, RAMCO, RDC Wengkhar and RLDC Kanglung, the fund will be released as "deposit work" as per their approved AWPB and the expenditure reports received from them.

The OPM and the Department of Public Accounts (DPA) shall have an understanding that no releases are made to the implementing entities, mainly Programme Dzongkhags without the authorization of the OPM. The fund flow mechanism for CARLEP will be as shown in Figure 5.

**Figure 5: Fund Flow for CARLEP**



The OPM will submit statement of expenditure (SoE) and account reconciliation reports to the NPSC.

Requests for supplementary budgets and re-appropriation of approved budget shall likewise be submitted by implementing entities/disbursing units through the OPM.

### 7.3 Type of Programme Accounts

Loan/Grant Finance Administration, which is the part of the responsibility of the OPM, deals with the issues of disbursement and flow of funds, procurement of goods and services and financial control and management aspects of implementation such as budgeting and accounting, financial planning and reporting and audit. Prior to the first disbursement, the DA and the PLC accountswill have been opened.

. The Programme will have the following categories of accounts:

- Three DAs to be maintained in USD at RMA and operated by MoF, and
- PLC accounts maintained in BTN by PMO and implementing entities

**Designated Account (DA):** The RGoB/MoF will open DA and thereafter maintain in any of the bank of Bhutan acceptable to IFAD, an account denominated in USD, for the purpose of financing the Programme. After the DA is opened, upon the RGoB request, IFAD will deposit the fund aggregating to weighted average of 6 months programmed expenditures. The authorised allocation of DA may be reviewed during Programme implementation upon request of the RGoB.

Replenishment and use of funds from the designated Account will be on the basis of the AWPB. The DA and the PLC Accounts will be protected against set-off, seizure or attachment on terms and conditions proposed by the Borrower and accepted by IFAD.

**PLC Accounts:** The Lead Programme Agency, the MoAF will open and thereafter maintain in any Bank acceptable to IFAD, a PLC account denominated in BTN for Programme operations. The NPD and the AO of the OPM will be fully authorised to operate the OPM PLC Account and both their signatures will be required to make any withdrawal from the Programme Account. The heads of Dzongkhags and the AO will be fully authorized to operate their own PLC accounts.

**AWPB:** The MoF will advise the MoAF to make budgetary allocations for each Fiscal Year equal to the funds called for in the AWPB for the relevant Programme Year and make such allocations available to the OPM and each Programme Party promptly as required to carry out the Programme. In addition to the proceeds of the Financing, the MoF will advise the MoAF to make available to the OPM and each other programme party, promptly as needed, such funds, facilities, services and other resources as may be required from time to time to carry out the Programme. The Programme will use the proceeds of the Loan/Grant exclusively to finance eligible expenditures of the Programme in accordance with the FA.

**Authorised Signatories:** Before withdrawal can commence (after the FA is declared effective), the MoF will send a letter designating the persons authorised to sign withdrawal applications, together with their authorised specimen signatures. The initial deposit of the Authorised Allocation to the DA should be applied under the disbursement Procedure 1. No documentation is required in support of the WA for the Authorised Allocation; however, the Application must be accompanied by:

A copy of the letter confirming the establishment of the DA, providing the account number for loan and Grant for the operations of the account; and a list of persons (names and functions) authorised to operate the DA; with their specimen signatures.

**Financial Statements:** The Programme accounts will reflect all financial transactions during the programme period, by standard expenditure categories. The Programme accounts will be maintained separately from any routine budget accounts or other externally funded programme account. The OPM will consolidate the programme accounts and will submit annual financial statements of programme expenditures for each fiscal year to IFAD no later than 90 days after the close of the fiscal year, i.e. **30th September** of each year. All expenditure should be in accordance with the approved AWPB.

The OPM shall submit the annual consolidated eligible expenditure statement based on Component wise annually to the DPA, MoF. The DPA shall submit the consolidated statement to IFAD after preparing the fund reconciliation statement.

### 7.4 Disbursement Procedures and Withdrawals

There are four standard procedures that are used for disbursing Loan and Grant funds from IFAD as shown in Table 13 below.

**Table 14: Disbursement Procedures**

| Disbursement Procedure | Disbursement Type | Description | FORM |
|---|---|---|---|
| Procedure I | Designated Account | This involves advance Funding from IFAD to start up programme activities and is used for claiming further deposits to replenish the Designated Account | FORM: 100<br>FORM: 101 A<br>FORM: 102 B<br>FORM: 103<br>FORM: 104<br>FORM: 105 |
| Procedure II | Direct Payment | IFAD makes direct payment to a third party on the basis of programme's instructions | FORM: 100<br>FORM: 101B<br>FORM: 105 |
| Procedure III | Special Commitment | This is used for items imported by the programme under a Letter of Credit requiring guarantees for reimbursement | FORM: 301<br>FORM: 302<br>FORM: 303 |
| Procedure IV | Reimbursement | This procedure is used for claiming reimbursement where eligible programme expenditure reimbursable by IFAD have been pre-financed by the government | FORM: 100<br>FORM: 101 A<br>FORM: 102 B<br>FORM: 103<br>FORM: 105 |

**Procedure I Designated Account:** This procedure provides a mechanism like a revolving fund to assist the government in financing eligible expenditures defined in the Financing Agreement as payment falls due. While the programme implementation is underway the account is replenished when satisfactory evidence of expenditure incurred is received.

Deposits to replenish the Designated Account are claimed under this procedure using APPLICATION for Withdrawal – FORM 100.

Summary sheet (SS) Form 101 is used when additional space is required, that is, more than one contractor, or if expenditures relate to multiple suppliers on a reimbursement basis. Summary sheet FORM 101 is used to summarise several invoices or receipts claimed for replenishment. Separate summary sheets are used for each disbursement category

SS Form 102 is used when expenditures are claimed under Statement of Expenditures (SOEs).

If expenditures are claimed under an SOE, supporting documents are not submitted with the withdrawal applications; a SS Form 102 is attached to the withdrawal application, supported by Summary Sheet(s) in Form 101 in which the corresponding itemised expenditures and related information is provided.

If the expenditures are not claimed under a SOE, the supporting documents (bills, invoices, receipts, evidence of payment and evidence of shipment) are submitted and attached to the withdrawal application.

**Procedure II Direct Payment**: Under this procedure, the government requests the Fund to pay suppliers directly from the loan/grant funds. The procedure is similar to Procedure I described above but the payment is made direct to the third party as advised and instructed by the programme, for example, payment to TA and suppliers of vehicles and equipment.

**Procedure III Direct Payment to a foreign supplier**: Under this procedure, the programme uses a Letter of Credit (LC) as a mode of payment to a foreign supplier. Form 301, an Application for a Special Commitment, Form 302 Letter of Commitment from IFAD to a Bank and Form 303 Bank's Request for Payment. This is extensively used for financing import of goods and under this procedure IFAD gives assurance to the suppliers.

**Procedure IV Reimbursement**: All eligible expenditures pre-financed by the government are claimed for reimbursement under this procedure using Application for Withdrawal–Form 100 and Summary Sheets Forms 101 & 102 as with Procedure I above.

The Reimbursement procedure is followed when expenditures have already been incurred, that is, the suppliers of goods or services have already been paid by the RGoB/Programme from its own funds. The reimbursement procedure is generally suitable for payment of (i) local currency costs, (ii) petty purchases; and (iii) small civil works payments. The reimbursement procedure normally requires full documentation. However, there are special cases where the IFAD accepts simplified documentation:

**Statement of Expenditures (SOEs):** This is applicable where it is impractical or unduly burdensome to submit full documentation in support of application for withdrawal of loan or Grant proceeds.

**Force Account Works:** This procedure is applicable when the implementation agency uses its own work forces, equipment, and other resources in carrying out civil works. This procedure involves submission of periodic certification of progress or completion of civil works in support of application for withdrawal of loan proceeds instead of the usually required supporting documentation such as invoices, bills and receipts.

**Taxes and duties:** No taxes and duties will be financed out of the proceeds of the IFAD loan or Grant. Requests for replenishment with necessary supporting documents or certification of SOEs will be made by the OPM for processing and then for funds transfer from the Designated Account to the PLCs of OPM and implementing entities. The OPM will compile and consolidate, on a timely basis, eligible Programme expenditures for all programme activities and consolidate and process, on a timely basis, withdrawal applications for all eligible Programme expenditures from all agencies submit those withdrawal applications to IFAD through MOF for reimbursement or replenishment of the Designated Account.

**Disbursement Thresholds:** Disbursement for civil works, vehicles, materials, equipment, technical assistance and studies each costing USD 50,000 equivalent or more for a single payment will require detailed supporting documentation. Disbursements for items each costing less than USD 30,000 equivalent for training and workshops, Demonstrations and for operating costs will be made against SOE. The Programme will retain the relevant documents and make them readily available for inspection and review by IFAD supervision missions and external auditors.

**Withdrawal from Loan & Grant Account:** Between the date of entry into force of the Agreement and the Financing Closing Date, the programme may request withdrawals from the loan and/or grant account of amount paid or to be paid for Eligible expenditures. The minimum amount in a withdrawal application specified by the Fund is 25% of the impress advance or more or quarterly whichever is earlier.

No withdrawal can be made in respect of eligible expenditures until: (i) the PSC shall have been duly established; (ii) the OPM shall have been duly established; (iii) the MoF shall have duly opened the Designated Accounts and the PLCs accounts respectively; (iv) The first AWPB, including the Procurement Plan for the initial 18 months of Programme implementation, shall have been submitted and no objection issued by the IFAD.

Withdrawals to meet the cost of starting up the programme shall be made from the date of entry into force of the Agreement.

### 7.5 Withdrawal Application

When the programme wishes to request for a withdrawal from the loan and/or grant account the programme shall submit to the Fund an application in the form specified by the Fund, together with

such documents and other evidence in support of the application as the Fund shall reasonably request.

The DPA shall furnish to the Fund satisfactory evidence of the authority of the person or persons authorised to sign such applications and the authenticated specimen signature of each person.

**Reallocation of Financing Proceeds**
If the amount of Financing allocated to a category of eligible expenditure is insufficient, the programme shall request the Fund/IFAD for:

i) Reallocation for such category of amount from another category to the extent required to meet the estimated shortfall; and/or

ii) If such reallocation does not meet the estimated shortfall, the programme shall reduce the percentage of such eligible expenditure and notify the Fund accordingly

**Allocation of Unallocated Fund**

The MoF shall process for obtaining approval of IFAD for allocating the unallocated fund to any sector that the MoF prioritizes during the programme period.

### 7.6 Checklist for sending Withdrawal Applications

Following aspects need to be checked and verified before an Application for withdrawal is sent to IFAD for re-imbursement or payment:

- Designation of WA signatory
- Designation for operation of the Designated Account
- WA Sequential number
- WA signatory
- Currency and the amount due
- Account Number
- Banking instructions
- Correspondent Bank
- Supporting documents
- Percentage of Financing
- Disbursement procedure used
- Procurement details
- Contract or purchase order no and date
- Description of goods, works or services
- Currency and total amount of contract
- Invoice numbers and net amount of invoice covered by this application
- Withdrawal details: category and % of expenditures to be financed by IFAD

### 7.7 Audit Procedures

**Annual Audit:** As required by IFAD, the government will have the programme accounts be audited on a yearly basis by an independent auditor acceptable to IFAD. Audit will be carried out in accordance with the international Standards on Auditing and the Standard of auditing must be disclosed in the Audit report. The Audit report will provide a separate opinion stating that the proceeds of the Loan & Grant finance that have been withdrawn on the SOEs have been used for the purposes for which they were provided.

**Independent Auditor:** The Royal Audit Authority (RAA) is the designated Auditor for CARLEP in accordance with the Financial Manual 2001 of RGOB and following the provisions of Section 9.03 of the Financing Agreement. The RAA shall undertake the audit of accounts annually and shall complete the annual audit no later than three months from the end of fiscal year. The annual audit schedule

shall be drawn by the RAA in consultation with the MoAF and the OPM-CARLEP to accommodate the reporting schedule of the programme requirement. During the audit exercise, the OPM-CARLEP and the respective implementing entities /disbursing units shall be responsible in providing records/evidences and in settling audit queries as may be required by the auditors of the RAA. The audit shall be carried out in accordance with International Standards on Auditing.

**Audit Report Format:** The audit report along with certified financial statement will be submitted to IFAD within six months after the end of the each fiscal year.

The Audit Report will contain a separate management letter, which will include a report on the efficiency of the flow of funds procedures and internal controls. The reply by the OPM to the management letter will be submitted to IFAD within **30 days** of the receipt of the audited accounts. Certified copy of the audited Financial Statements, Audit Report and Management Letter will be submitted to IFAD within six months of close of Financial Year.

**Compliance with Audit requirements:** In case of programme delays to furnish the required audit report on time or in satisfactory form, the Fund will determine that the programme is unlikely to do so within a reasonable period, then the Fund may engage independent auditors of its choice to audit the accounts relating to the period. The fund may finance the cost of such audit by withdrawal from the Loan and/or grant account.

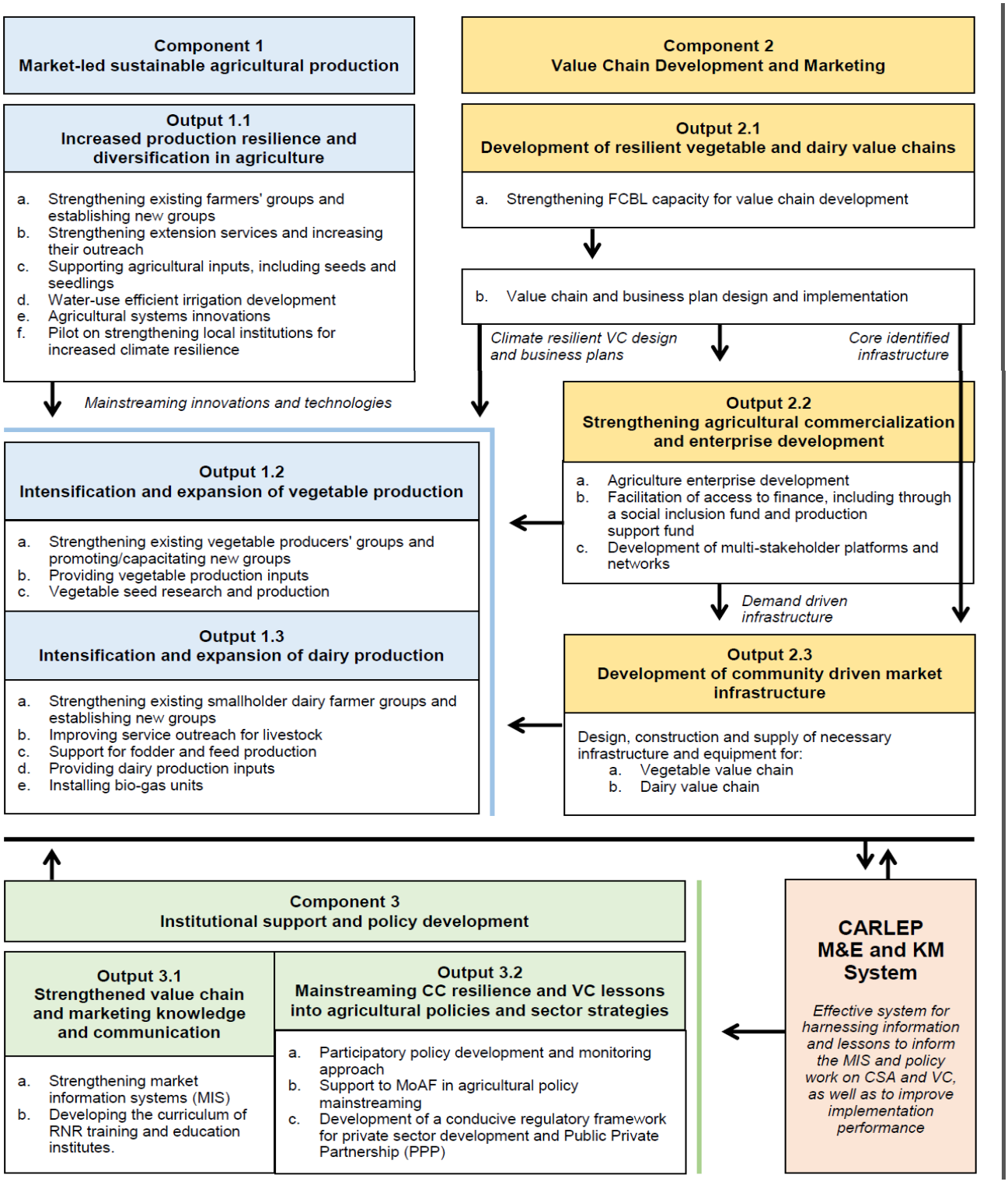
**Annual Audited Financial Statements:** The OPM will submit progress reports to IFAD in English. These reports will use a predetermined format to be agreed at programme start-up to provide essential information on the physical and financial progress of programme activities and regular assessment of the programme impact. Reports will be prepared at Dzongkhag level and consolidated at the Programme area level by the OPM. All financial Statements of the operations, resources and expenditures relating to the Programme will be prepared by OPM for each fiscal year. These statements will be sent to IFAD within three month after the end of the fiscal year i.e. September each year.

The auditors should also provide: (i) an opinion on the certified statements of expenditure and the operation of the Designated Accounts of Loan and Grant and the Programme Accounts; and (ii) a separate management letter, addressing the adequacy of the accounting and internal control systems. The OPM will deliver the above-mentioned reports through MoF to IFAD within six (6) months of the end of each such Fiscal Year.

# CHAPTER 8: PROGRAMME COMPONENTS AND IMPLEMENTATION ARRANGEMENTS

## 8.1 Programme Components

CARLEP will have three major technical components: **1) Market-led sustainable agricultural production, 2) Value chain development and marketing,** and **3) Institutional support and policy development**, interlinked and implemented in close coordination. The system of components/sub-components and activities (as per Financing Agreement) is as follows:



## COMPONENT 1. MARKET-LED SUSTAINABLE AGRICULTURAL PRODUCTION

### Outcome 1. Resilient agricultural production by rural households has sustainably increased

The objective of the Market-led Sustainable Agricultural Production Component is to bring about sustainable increase in agricultural production by rural households and enhanced resilience of agricultural production systems to climate risks.

To successfully link smallholder production with markets through value chains, a substantial but sustainable increase in production volume is necessary. For this, the following key issues must be addressed:

- inadequate research and insufficient production of resilient seeds
- lack of reliable irrigation systems and low irrigation efficiency
- low quality of production
- pre- and post-harvest losses
- weak farm input supply and outreach of services
- limited innovation and diversification of farm production to ensure resilience
- low farmer group organization capacity
- limitations of gewog/dzongkhag based production planning
- near absence of private sector and civil society service providers

While these constraints and challenges are applicable to both vegetable and dairy productions, some additional livestock specific challenges include:

- lack of scientific basis for cross-breeding and limited research on production improvement
- inadequate quality and outreach of animal extension, health and breeding services
- inadequate production of quality fodder and feed
- unsustainable approaches to common property management

Ongoing programmes and value chain and market-led approaches provide clear opportunities to address the above production challenges. Through existing research on climate smart agriculture and farmer-based pilots, well documented approaches in sustainable water, land and soil management, several climate resilient technologies and best practices are available for fine-tuning and scaling up. In addition, proven practice from other countries is also available.

Integrating the identified opportunities, innovative technologies and best practices, the following three outputs are expected to contribute to the outcome of this component:

| Outcomes and Outputs | Key Performance Indicators |
|---|---|
| Outcome 1: Community-based Resilient Agricultural Production has sustainably increased | At least 23 000 HH adopt technologies or practices which support coping with the impacts of climate change *(ASAP)* |
| 1.1.Increased production resilience and diversification in agriculture | At least 6 000 HH adopt sustainable land management practices |
| 1.2.Intensification and expansion of vegetable production | At least 4 500 HH organized into vegetable farming groups (minimum 60% female members) |
| | Vegetable farmer groups produce a total of at least 3600 MT / year by the end of the programme |
| 1.3.Intensification and expansion of dairy production | At least 2600 HHs organized into dairy farming groups (with minimum 50% female members) |
| | Dairy groups produce a total of at least x MT / year by the end of the programme |

These production related programme activities will be implemented in close coordination and in complement with the value chain, marketing and policy related programme activities presented under Component 2 and 3.

**IMPLEMENTATION ARRANGEMENT, ROLES AND RESPONSIBILITIES**

| **Component 1. Market-led sustainable agricultural production** | | |
|---|---|---|
| **Primary responsibility** | **DoA / RRDCs (Wengkhar)**<br>**DoL / RLDCs (Kanglung)** | |
| **Output** | **Agencies involved** | **Implementation Arrangement** |
| Increased production resilience and diversification in agriculture | All | Component Manager will lead the Programme in collaboration with Dzongkhags and with consultation to line Departments/ Agencies. |
| | | RDC will identify two staffs (Horticulture and Field Crops) to work closely with CM to facilitate to undertake the agriculture activities. |
| | | RDC will link with the input supplying Agencies to provide required inputs to the Programme beneficiaries. |
| | | RDC will undertake the innovative activities such as Lead Farmers Approach, Permaculture and e-agriculture. |
| Intensification and expansion of vegetable production | RDC (DoA), DAMC/RAMCO, Dzongkhags NSC (DoA), PMO | RAMCO will designate staffs to support agriculture activities (Group strengthening and development) |
| Intensification and expansion of dairy production | RLDC (DoL), DAMC/ RAMCO, Dzongkhags, Livestock Central Farms (DoL), PMO | CM will lead the Programme in collaboration with Dzongkhags and with consultation to line Departments/ Agencies. |
| | | RLDC (DoL) will identify two Staffs to work closely with CM to facilitate to undertake the Livestock activities. |
| | | RLDC will link with the input supplying Central Farms to provided required inputs to the Programme beneficiaries. |
| | | RLDC will undertake the innovative activities such as Lead Farmers Approach, CAIT/CAHW. |
| | | RAMCO will designate staffs to support livestock activities (Group strengthening and development) |

**KEY SUCCESS FACTORS**

- DAO and DLO of Dzongkhags are fully aligned with the Component 1 and project implementation strategy in coordination with the Gewog administrations including the extension staffs.
- Selected Gewogs (with all its administration) are fully involved in the planning and implementation of Component 1 activities.
- Trust and rapport built by the DAO and DLO and the Gewog administration with the participating village community.
- Quality of farmers groups, both old and new groups, participating in the activities.
- Timely availability of quality inputs and services for agriculture and livestock.
- Quality and timeliness of technical support from technical agencies besides the DAO and DLO, including farmer friendly extension materials.

- Quality of facilitation and technical extension by RDC and RLDC along with quality outreach extension for agriculture and CAHW services for livestock.
- Facilitation of good and prompt market linkages by FCBL.
- Development of water-use efficient irrigation infrastructures and normal monsoon (for rain-fed areas).
- Effective cost sharing mechanisms for production inputs that engender ownership and encouragement
- Sustainable incentive mechanisms for extension workers – lead farmer and CAHW
- Efficient coordination between gewog officials/extension staff and lead farmers/CAHW, with clear demarcation of responsibilities to prevent overlap and duplication
- Timeliness and sequencing of activities across components, especially aligned with the agriculture calendar – business strategies and plans > group formation - agri-enterprise development > financing/infrastructure > production inputs…with appropriate extension services at all stages
- M&E and KM of innovative practices for improving design and scaling up across programme districts, with the inclusion of climate and gender sensitive indicators

## DESCRIPTION OF ACTIVITIES

### Output 1.1. Increased production resilience and diversification in agriculture

To promote climate smart agricultural production and management, and strengthen the resilience of smallholders, the programme will provide support on: a) Strengthening existing farmers' groups and establishing new groups, b) Strengthening extension services including lead farmers outreach model and increasing their outreach, c) Supporting agricultural inputs, including seeds and seedlings, d) Water-use efficient irrigation development, e) Agricultural systems innovations, and f) Pilot on strengthening local institutions for increased climate resilience.

**A. Strengthening existing farmers' groups and establishing new groups**

Initially implemented in the six eastern dzongkhags, the programme will provide capacity development support to existing groups on climate smart agriculture. Support will also be provided for promoting new farmers' production groups and their capacity development. Trainings will cover improved farming practices for crops as well as livestock, sustainable land management practices and on-farm climate-induced disaster preparation, including cropping patterns and crop rotation, sustainable farming systems, soil health management, prevention of soil erosion and rainwater management. Development of training and extension materials for such capacity building activities based on ongoing field tests will also be supported. Training on climate resilience to farmer production groups will be implemented as part of the capacity development of farmer groups under Output 1.2.

**B. Strengthening extension services and increasing their outreach**

The outreach, quality and sustainability of extension service delivery is a key factor for success in CARLEP. As part of this activity, the existing extension services at the gewog level will be strengthened through training on climate smart agriculture and improved farming practices.

In addition, the **lead farmer model**[2] piloted under MAGIP will be further developed, expanded and prepared for nation-wide scaling-up. The outreach of extension agents is largely due to farm populations scattered across remote mountainous terrain, and connected by poor transportation systems. Therefore, collaboration between gewog extensions and lead farmers will enable a more dynamic system for extension services delivery. Further, this will also allow for a learning process where good practices can be captured and shared between farmers and gewogs for scaling up.

Support will be provided to Samdrup Jongkhar dzongkhag to strengthen and expand its lead farmer model and farmer group strengthening programme. During initial two to three years the lead farmer model will be implemented across the Samdrup Jongkhar dzongkhag. Consequently, the dzongkhag

[2] See MAGIP supervision mission report, Annex 4 'The Proposed Master Farmer Approach: decentralized agriculture extension at the Geog level. MAGIP/IFAD November 2014.

will support scaling up of the model and practices to two adjacent dzongkhags. In the second phase of the CARLEP a nation-wide scaling up strategy will be developed and implemented.

Activities will include: i) recruitment and training of lead farmers, ii) training of agriculture extension agents and gewog/dzongkhag staff, iii) farmer group strengthening and technical training, iv) strengthened resilience of farmers through CSA, diversification, value addition, post-harvest technology, and local market development, v) developing (adapted) training materials to be used nation-wide for farmer group training, and vi) documentation of lessons learned and systemizing the lead farmer model, as well as proven farming practices. The trainings will be provided through Technical Assistance adopting a Training of Trainers approach, from which also relevant Dzongkhag/Gewog staff can benefit.

Additional inputs for demonstration purposes will be provided to farmer groups with a lead farmer to facilitate commitment and uptake of climate smart practices. The programme will initially target recruiting and training 100 lead farmers whose groups will be provided additional inputs, including seeds and 50 poly-tunnels for demonstration purposes.

**C. Supporting agricultural inputs, including seeds and seedlings**

CARLEP will support the provision of seed kits to farmers' production groups to promote diversification of agriculture in order to enhance climate resilience and farm productivity, including maize and rice production. Seeds will be provided in addition to those covered under the value chains. For diversification and resilience building, production support may also be provided to other livestock commodities besides dairy, including back-yard poultry and piggery.

**D. Water-use efficient irrigation development**

The programme will support the development of enhanced climate-resilient engineering norms. Based on these norms, training will be provided to district engineers, extension agents and the RNR Engineering Division on climate resilient irrigation scheme design (including feasibility studies) and construction (supervision) for all six eastern dzongkhags.

Guided by the enhanced climate-resilient engineering norms, and with support from the trained engineers, the programme will provide support for undertaking technical feasibility studies and climate resilient design to upgrade the climate resilient standards of 700 acre of existing dysfunctional gravity-based irrigation schemes in the four southern dzongkhags of the east (high potential production areas).

The lack of adequate capacity of Water User Associations (WUA) to operate and maintain the irrigation schemes effectively was assessed as the main reason for the schemes becoming dysfunctional. Therefore, the programme will also support the training of WUAs (as per DoA training modules and climate resilience focus) to ensure adequate O&M capacity (in the four southern dzongkhags of the east, including WUA managing irrigation schemes directly targeted under CARLEP).

In addition to upgrading existing irrigation systems, the programme will also provide support to three pilot irrigation schemes with water pumping stations, including technical feasibility studies, climate resilient designs, cost and benefits for the farmers (including O&M and fee structure), and the actual construction of the scheme.

**E. Agricultural systems innovations**

To strengthen agricultural research and climate resilience CARLEP will support two pilots, respectively, on the use of information and communication technology (ICT) and permaculture as a climate-smart alternative farming system.

To complement extension services to farmers through ICT, the programme will consider the use of tablet-based e-agriculture technology for soil monitoring and management. Based on the performance and results of the on-going e-pest surveillance initiative, the programme will test the e-Agriculture System developed by Grameen Intel Social Business (GISB) in one Gewog where the lead farmer model is being implemented. GISB will provide technical assistance for the research and development phase, including resource persons to develop the research proposal and training of participants.

CARLEP will support training of dzongkhag staff, extension agents, lead farmers, RNR RDC research staff and selected staff of the National Soil Centre in the use of this technology. At the MTR it will be decided whether and to which extent scaling-up will be supported.

The pilot on permaculture will be led by RDC Wengkharwith technical support from a regional or international permaculture institute. The permaculture institute will develop training material suited for Bhutan and provide on-farm training for RDC Wengkhar and agriculture extension staff. Within a Dzonghkag, about 10-12 permaculture demonstration farms will be established along an altitudinal gradient to test the different combinations of crop and floral species suitable for each altitude for creating a permaculture system that generates multiple benefits.

Lead farmers with an acre or more of unutilised dryland will be selected for conversion into productive permaculture plots. To incentivise the piloting of permaculture, lead farmers will be provided with inputs such as planting material (tree saplings, leguminous vegetation, seed, vines, beneficial plant species etc.), poultry (ducks and chickens), basic agriculture implements, materials for building mobile chicken/duck pens, fencing, initial capital of up to USD 200 per farm for undertaking soil and water conservation (S&WC) infrastructure work, and a biogas unit. These farmers will also receive cattle on a partial grant basis via the programme component on dairy. Drawing on the results of the permaculture pilot, a scaling up strategy with incentive mechanisms and policy notes for reaching an additional 1000 households will be drafted in year 4 of the programme. It is anticipated that the pilot will have a demonstration affect and allow for a farmer-to-farmer exchange of the permaculture methodology.

**F. Pilot on strengthening local institutions for increased climate resilience**

The programme will pilot an integrated approach to sustainable local level service delivery for strengthening the national development approach. A financial sustainability model will be developed for service delivery and O&M of production and service infrastructure by local institutions. The design and implementation modality of the pilot will be detailed by the PMO with support from TA.

The pilot will be taken up in a cluster of communities where CARLEP supported value chain development activities are being implemented. Initiatives will include: capacity development of existing farmer and user groups to ensure commitment and capacity to maintain the new and upgraded infrastructure supported under CARLEP, development of adequate O&M models based on existing guidelines (e.g. for irrigation and farm roads) with feasibility tests comparing community contributions versus paid labour provisions.

**Output 1.2. Intensification and expansion of vegetable production**

Bhutan has a comparative climatic advantage for production of seasonal vegetables for export to readily available markets in neighbouring countries. However, adequate volume with acceptable quality, coupled with timely production is necessary to establish sustainable value chains and market linkages. To achieve this, activities under this output will focus on: a) Strengthening existing vegetable producers' groups and promoting and capacitating new groups, b) Providing vegetable production inputs, and c) Vegetable seed research and production.

Production intensification to increase output of vegetables would initially be taken up in gewogs with high production potential, identified during the planning and design of the vegetable value chain by FCBL under Outcome 2.

**A. Strengthening existing vegetable producers' groups and promoting and capacitating new groups**

The programme will be provide capacity building support to vegetable producer groups on all relevant aspects of (market-led) production, including climate resilience (linked to Output 1.1), vegetable production intensification and crop health management for improved production quality and reducing risks, will be addressed in the training. In addition to technical and commercial capabilities to produce vegetables for the market, capacity building will also address issues of group development, group management and democratic governance of groups and leadership skills. This is especially relevant considering the additional responsibilities and tasks concerning marketing and linking with value chain

actors. Trainings will therefore be designed and provided by DoA and DAMC in close collaboration with FCBL to ensure progression towards marketing groups and cooperatives aligned with market demand.

Under MAGIP, a total of 120 vegetable producer groups were formed and linked to schools for better market access. Through CARLEP, the existing groups will be strengthened, and a total of 300 new groups will be promoted and capacitated during the project period.

CARLEP will also support developing training and extension materials for vegetable production through identification and adaptation of good existing materials and suitable need-based TA support. Existing materials in other hill regions like Nepal, Himachal, Uttarakhand and the Northeastern states of India, will also be collected and analyzed in developing material for Bhutan. The training (materials) will be adjusted to different target groups, including RNR officials, MoAF officials, extension workers, lead farmers, farmers' groups and other implementing agencies. Different topics to be covered in training would include resilient and sustainable production and farm practices for vegetable production, post-harvest management of vegetables, quality aspects and assessing and tuning into market demand for vegetables.

**B. Providing vegetable production inputs**

In order to substantially increase vegetable production so that viable value chain can be established, production groups will be supported under the programme with inputs and equipment on cost-sharing basis[3]. The inputs to be provided would include climate resilient vegetable seeds as per production and marketing plans developed jointly by farmer groups and FCBL, 4700 sets water efficient irrigation equipment (sprinkler[4] or drip) and production and post-harvest tools and equipment.

**C. Vegetable seed research and production**

CARLEP will support field trials and research to identify vegetable seeds suitable to local agro-climatic conditions that are most critical for value chain development. A Package of Practices (POPs) will be developed for specific crops to ensure effective farming practices are used on quality seeds for maximising results. Support will also be provided to stimulate production of selected seeds by farmer groups and farm-level producers (enterprise based) who are members of production groups. Potential seed producers will be trained and provided handholding support to ensure that quality is maintained. In addition production support will be provided to the National Seed Centre at Paro and its regional subsidiary at Trashigang through provision of glasshouses and seed processing units.

**Output 1.3. Intensification and expansion of dairy production**

The climate in Bhutan is suitable for dairy development and has large domestic market. For sustainable value chain and marketing development, adequate production volumes of high quality milk needs to be ensured. The programme, therefore, aims to increase milk production through clusters of smallholder producers in high production areas (gewogs) as identified in the design and planning of the dairy value chain under Outcome 2. Dairy production will be supported in the six eastern dzongkhags through: a) Strengthening existing smallholder dairy farmer groups and establishing new groups, b) Improving service outreach for livestock, c) Support for fodder and feed production, d) Providing dairy production inputs, and e) Installing bio-gas units.

**A. Strengthening existing smallholder dairy farmer groups and establishing new groups**

The Programme will support capacity development of 43 existing dairy farmers' groups, and establishing and capacity development of 150 new groups. Capacity development will include training on livestock husbandry, including feeding practices, animal health, housing and hygiene, good dairy farm management practices, hygienic milk production and processing, farm record keeping and accounting, and group dynamics and management. To facilitate capacity development the programme will also support development of training and extension materials for different stakeholders, including

[3] CARLEP will develop a detailed cost-sharing scheme to stimulate scaling up of production, and where possible, will link farmer groups to lending institutions to obtain investment loans.
[4] Each complete sprinkler set costs about USD 300 and can service about 1 acre. See SNV Cost Benefit Analysis for Water Management Technology, SNV Bhutan, in Collaboration with RAMCO, DAOs, under MAGIP-IFAD, November 2012.

DoL officials, extension workers, Community Animal Health Worker (CAHWS), RNR centers, lead farmers and farmers, civil society and private sector entities and other agencies engaged in the dairy sector. Relevant existing materials available locally as well as in neighbouring countries will be collected to develop training materials through short-term TA where appropriate.

**B. Improving service outreach for livestock**

Intensification and expansion of dairy depends critically on the outreach and quality of livestock service delivery. Inadequate number of health professionals combined with inadequate supply of medicines and vaccines lead to outbreaks of several diseases, and high morbidity and mortality rates. Further, poor breeding services lead to poor genetic development of animals resulting in very low milk productivity. Therefore, the programme will address this critical impediment by supporting the development and scaling-up the community animal health worker (CAHW) and lead farmer models for extension services.

**CAHW.** Through CARLEP, CAHWs will provide AI and breeding services, as well as curative and preventive health services. The inputs in the form of medicines, vaccines, semen straw and liquid nitrogen will be provided by the Government along with breeding bulls for isolated areas. This model will be initially implemented in the 38 gewogs identified for intensive dairy development, to ensure adequate livestock population for the viability of the model, and may be further expanded following the MTR to cover all the 65 gewogs.

The programme will develop and implement a suitable incentive mechanism for CAHWs in the form of stipend and/or service fee for the initial 2-3 years, in order to cover travel costs and to ensure a reasonable income for the CAWHs to continue as private service entrepreneurs beyond programme completion. Further, identified from within the supported dairy groups, the CAHWs will be supported through robust training and continued refreshers. The programme will arrange the training of CAHWs in India, by inviting resource persons to Bhutan, or a combination of both approaches.

Where appropriate, the Programme will engage TAs to facilitate the development and implementation of the CAHW model, especially the process aspects of bringing CAHWs on board, getting them engaged as service providers with adequate follow up and handholding support, and continued review and revision of the model.

**Lead farmer model for dairy production**. The lead farmer model described for agricultural crop production will also be implemented for improving outreach of dairy services to Smallholder Dairy Farmers' Groups. The model will initially be developed and scaled-up in Samdrup Jongkhar dzongkhag. DoL and its service centres will provide technical support.

**C. Support for fodder and feed production**

There is very limited land available for fodder cultivation. In addition, there are very limited number of mills in the country to produce feed concentrates. Therefore, to ensure adequate fodder availability, the programme will support fodder production in fallow and marginal land by providing training to 85 Smallholder Dairy Farmers' Groups on the use of crop residues and feed/fodder. Dairy farmers' groups will be provided supply of seeds and cuttings for fodder development. In complement, RGoB extension staff and lead farmers will supply seed for winter crop demonstrations and give training and follow-up/ refresher training on fodder development as part of extension services. The programme will also support training of feed producers on feed formulation and quality control to ensure good quality feed for improved cattle. To guide this activity, a joint strategy for dairy development will be formulated, through TA if necessary, designed to limit damage to forests through dialogue with the Department of Livestock and the Department of Forests along with other key stakeholders.

**D. Providing dairy production inputs**

Similar to MAGIP, CARLEP will provide support to Smallholder Dairy Farmers' Groups for the purchase of crossbred cows under the same terms, with 40 percent subsidy towards purchase of the animal, and the remaining 60 percent contributed by the farmer. Considering the poor income status of the target groups and their inability to access institutional credit on their own, CARLEP will pro-

actively support linking farmers to financial institutions. A total of 2000 crossbred cattle will be purchased during the course of the programme. In order to minimize risks, provisions will be made for covering the entire cost of quarantine and insurance for the animal for one full year.

While the cost-sharing arrangement will generally be limited to the purchase of one animal per household, in select cases this may go up to 2 animals per household. Providing 2 animals per HH might reduce the number of beneficiary households to some extent, but it will help to hasten the commercialization process by increasing milk production per household and ensuring availability of marketable surplus of milk throughout the year.

The programme will also provide support for construction of cow sheds to farmer groups who purchase crossbred animals by providing building materials that need to be purchased from the market, such as CGI roofing sheets and cement. The farmer groups will contribute local building materials and labour. A total of 2000 cowsheds will be supported under the programme. While some farmer groups may receive 2 crossbreds each, the support for remaining cow sheds will be provided to farmers with biogas plants, and those who received crossbreds under MAGIP without support for a cow shed. The programme will also provide small equipment, such as chopping machines for fodder production.

**E. Installing bio-gas units**

As part of an overall strategy of promoting climate smart farming systems, CARLEP will provide support to install 2000 bio-gas units, one for each of the households participating in the dairy programme, and possessing cross-bred cattle. This will help reduce pressure on forests for firewood, improve supply of quality manure for agriculture, especially vegetable production, will reduce drudgery for women and have health benefits by reducing smoke and soot in the house in the course of cooking. Availability of bio-gas will also enable dairy farmers to provide warm drinking water to cattle for drinking, especially in colder areas and seasons.

## COMPONENT 2. VALUE CHAIN DEVELOPMENT AND MARKETING

### Outcome 2: Increased smallholder income from crop and livestock value chains

Scattered and remote settlements with small land holdings per household and limited marketable surplus has been one of the major bottlenecks in developing the agriculture sector. Component 2 therefore focuses on instituting organized value chain and marketing systems for vegetable and dairy products by establishing and clustering farmer groups into networks.

To enhance farmers' incomes, the programme will enable farmer groups, cooperatives and enterprises to engage in profitable market-oriented agricultural production and processing activities, and will promote partnerships and market linkages with value chain actors. FCBL will be the main vehicle for market-led value chain development, working in close collaboration with the DAMC. FCBL will be responsible for providing all physical agricultural marketing services. The DAMC, on the other hand, will be responsible for facilitating agricultural marketing, development of marketing groups and cooperatives, and putting in place required infrastructures jointly identified with FCBL and Dzongkhag RNR sectors.

For the successfully development of value chains and marketing infrastructure, programme activities will be implemented to produce three outputs:

| Outcomes and Outputs | Key Performance Indicators |
|---|---|
| Outcome 2: Increased smallholder income from Crop and Livestock Value Chains | At least 140 commercial enterprises established are profitable by the end of the programme |
| 2.1. Development of resilient vegetable and dairy value chains | FCBL fully staffed and operational |
| | Strategies and business plans for vegetable and dairy value chains developed |
| 2.2. Strengthening agricultural commercialization and enterprise development | 115 marketing groups (total) are operational in vegetable and dairy value chains by the end of the programme |
| | 200 agriculture enterprises (including cooperatives) established and with business plans |
| 2.3. Development of community driven market infrastructure | Collection, aggregation and storage facilities and farm shops established according to Value Chain Strategies and business plans |

## IMPLEMENTATION ARRANGEMENT, ROLES AND RESPONSIBILITIES

| Component 2. Value Chain Development and Marketing | | |
|---|---|---|
| **Primary responsibility** | **FCBL** | |
| **Activity** | **Agencies involved** | **Implementation Arrangement** |
| Strengthening FCBL capacity for value chain development | FCBL, OPM, RDC (DoA), RLDC (DoL), DAMC/ RAMCO, NPHC, Dzongkhags/ Gewogs | Component 2 will be implemented by DAMC/RAMCO and FCBL with required TA inputs and support from the line Departments/Agencies |
| | | PMO/MoAF will sign Subsidiary Agreement with FCBL to implement the Vegetables & Dairy Value Chain Development and Marketing. |
| | | FCBL has deputed Manager Value Chain Development at PMO to coordinate and implement the programme. |

| | | |
|---|---|---|
| | | |
| Value chain and business plan design and implementation | | DAMC/ RAMCO and FCBL in close collaboration with the line Departments/Agencies and Dzongkhags/ Gewogs will implement the value chain designs and business plans, adapting those to local contexts and dynamics. |
| Agriculture enterprise development | | DAMC/ RAMCO in close collaboration with the Dzongkhags/ Gewogs will identify and support capacity development of farmers' (marketing) groups, cooperatives and individual entrepreneurs |
| Design, construction and supply of value chain infrastructure and equipment | | DAMC/RAMCO and FCBL in close collaboration with Dzongkhags will identify strategic location for development of infrastructures and develop designs of infrastructures required. |
| | | The DoA (NPHC) and DoL will provide technical assistance whenever required. |
| Facilitation of access to finance | OPM, DAMC/RAMCO, FCBL, Dzongkhags | DAMC/ RAMCO, Dzongkhags and FCBL will pro-actively link entrepreneurs to available funding sources to finance enterprise investments. |
| | | DAMC/ RAMCO, OPM will provide fund and other appropriate support for social inclusion |
| Development of multi-stakeholder platforms and networks | OPM, DAMC/ RAMCO/ FCBL | The OPM, DAMC/ RAMCO/ FCBL will facilitate the development of value chain actor networks/ multi-stakeholder platforms. |

**KEY SUCCESS FACTORS**

- FCBL capacity for VC and BP development – TA staff recruitment and capacity building
- Clear responsibilities and coordination between FCBL and DAMC
- Focused approach on the vegetable and dairy value chains to maximizing performance and results
- Climate resilience, exposure and sensitivity assessment of the VC, and adaptation considerations integrated in the plan
- Close M&E on VC investment performance, to identify required change or support in a responsive manner
- Strategic location selection for infrastructure, such as collection centres and farm shops
- O&M systems for infrastructure sustainability, including management capacity and repair fund

**DESCRIPTION OF ACTIVITIES**

**Output 2.1: Development of resilient vegetable and dairy value chains**

In the lead of FCBL, and in coordination with the PMO, the first phase of the programme will focus on the development of the vegetable and dairy value chains. The programme will provide support for: a) Strengthening FCBL capacity for value chain development, and b) Value chain and business plan design and implementation.

**A. Strengthening FCBL capacity for value chain development**

Mandated to spearhead the commercial marketing of farm produce, including value chain development, FCBL must fully develop its internal organization and human capacity[5]. Considering FCBL's expanded responsibilities, new competencies need to be acquired in varied technical, financial and social fields, and an organisation structure must be instituted separating its social mandate of distributing essential food commodities from its commercial function of profitably marketing farm produce. Thus, the design of a strategy and business plan for FCBL and implementation of the strategy are the two tasks under this capacity that would lead to strengthening of FCBL.

**FCBL strategy and business plan development.** CARLEP will support the design an organizational strategy and business plan for FCBL as a whole and specifically for its marketing division. Developed through a suitable Technical Assistance, the strategy will include developing skills and systems in the organization to account for and allocate costs of service delivery, including for warehouse/collection center management. The strategy will also address FCBL's exit strategy whereby it will hand over possible responsibilities to farmers' groups, young entrepreneurs and private service providers, without jeopardizing sustainability and effectiveness of the value chains/marketing systems and the interests of farmers. The organization strategy will also comprise a detailed capacity development plan which addresses institutional, organizational and staffing capacity requirements. The capacity development plan will go beyond the traditional 'training' focus, and will capacitate staff on effectively engaging with and nurturing farmers' groups, cooperatives and agriculture enterprises, and further, creating an enabling environment for beneficiary groups to take over the responsibilities to further develop and sustain the value chains.

**Implementation of FCBL strategy and business plans.** CARLEP will support the implementation of the plans developed for capacitating FCBL at the institutional, organizational and staffing levels, especially for marketing related functions. The strategies and plans will be monitored with respect to their relevance and effectiveness, and updated as and when required. The plans will be updated at least on a yearly basis as part of the AWPB development.

### B. Value chain and business plan design and implementation

Led by FCBL, with support from DAMC and line agencies at the dzongkhag and gewog levels, the tasks within this activity include the design and implementation of vegetable and dairy value chain and business plans.

**Design of vegetable value chain and business plan.** The first step towards developing the nation-wide vegetable value chain will be to undertake a detailed design of the value chain involving all stakeholders, including farmers, input suppliers, traders and marketers. The design will build upon the existing successful approach of linking local vegetable production to local institutions (schools) and international niche markets developed under the MAGIP with the Vegetable Value Chain Programme in East (VVCP-E). The design will address all relevant issues, including backward and forward linkages, infrastructure requirements and the economic and financial feasibility of the same, production volumes, costs and margins, financing needs and sources, input supply needs and sources, capacity building needs and mechanisms and sustainability/exit strategy. Locality specific conditions and design features will be linked to regional/national value chain structures. The design will also address issues of **climate resilience** by analysing sensitivity of value chain actors, processes and infrastructure to climate risks and climate related extreme events, with recommendations on appropriate mitigation strategies.

Considering the main attribute of successful value chains are the relationships of stakeholders and their individual capacities, stakeholder workshops will be organized involving donors, policy makers, researchers, government departments, potential investors, traders and farmers' groups before the designs are finalized. Core elements of the value chain will be identified for direct support from the

[5] A Review of the Food Corporation of Bhutan (FCB): Overall Performance and Marketing Functions, vis-a-vis Food Security Objectives, Compiled by MoAF Task Force – GB Chettri DoA, NK Pradhan, CoRRB, Kencho Wangdi CoRRB, Pema Khandu, MoEA, Tshewang Norbu, DAMC, 2012; and Operational Improvements Study –Support to the Food Corporation of Bhutan (FCB), Bastiaan Bijl iD Consultancy (Asia), Consultant for World Food Programme (WFP), 2008.

programme, while other elements will be supported over time based on emerging value chain demand from stakeholders.

**Design of dairy value chain and business plan.**Building on the existing FCBL and DoL infrastructure, networks and experience, a detailed value chain design will be prepared to understand and address issues at all levels in the chain, ranging from farmers to consumers.Similar to the vegetable value chain, the design of dairy value chain will address all value chain issues and follow similar design processes of consultation and contextualisation. Issues of climate resilience will also be identified and mitigation strategies built into the designs. Core elements of the value chain will be identified for direct support from the programme, while other elements will be supported over time based on emerging demands from value chain actors.

**Value chain implementation, strengthening and expansion.** Implementation of value chain designs will be led by FCBL, with the support of DAMC and the departments at dzongkhag and gewog level. Further, FCBL will receive support from the OPM and suitable TA, especially on quality assurance, research, design adaptation, stakeholder engagement, business plan development, capacity development of value chain actors, process facilitation and creating change momentum. As part of value chain development FCBL will undertake facilitation of multi-stakeholder collaboration through market visits, buyer seller meets, participatory stakeholder processes, networking, research as well as the provision of infrastructure and equipment. Market research/studies will also be undertaken to assess the potential for private sector partnerships, and to analyse the dynamics of existing and potential new markets in the selected value chains, including domestic/export markets and promotion of inter-dzongkhag/regional trade. In addition, a major activity towards market linkage will be engaging private sector to ensure reliable and sustainable marketing of agricultural products. Awareness programs on importance of public private partnership (PPP) will be conducted in all parts of the region with design of suitable incentive schemes to be offered under the programme.

**Output 2.2. Strengthening agricultural commercialization and enterprise development.**

In order to strengthen the value chains, support will also be provided to groups and enterprises that work along the vegetable and dairy value chains, including input supply, production, processing, and marketing. The programme will support: a) Agriculture enterprise development, b) Facilitation of access to finance, including through a social inclusion fund and production support fund, and c) Development of multi-stakeholder platforms and networks.

**A. Agriculture enterprise development**

Under this activity, the programme will support to develop capacities of farmers' production (and marketing) groups, cooperatives, and individual enterprises on organizational and business development. The FCBL and DAMC, with support from DoA and DoL will:

- develop an entrepreneur identification and engagement process as part of the value chain development process, targeting existing entrepreneurs as well as potentially interested people, specifically women and youth
- identify potential marketing groups from established production groups in vegetable and dairy value chains and provide group organisation and technical training
- strengthen the existing marketing and cooperative capacity development packages, based on the value chain approach
- develop and provide technical training for vegetable marketing groups and entrepreneurs on vegetable marketing aspect like quantity, quality, size, seasonality, cleanliness, packaging, transport, and marketing options
- develop and provide technical training for dairy marketing groups, entrepreneurs and technologists for developing technology for longer shelf life of local (butter and *datse*) and new products (*lassi*, ice-cream) along with suitable packaging size and ensuring availability in local markets, including training in dairy marketing to ensure a proper supply chain for RNR scientists in dairy technology so that they can in turn provide support to private entrepreneurs interested in setting up dairy enterprise

- develop training packages for agriculture entrepreneurs, in close collaboration with relevant service providers as well as with other relevant stakeholders
- support capacity development for making business plans, contract management and group saving schemes for producer/ marketing groups
- provide training to farmer (marketing) groups, cooperatives, and individual enterprises, including general training initially by FCBL and also by service providers recruited for specific topics and targeting purposes, e.g. the Youth Media Foundation for youth entrepreneurs, the Bhutan Association of Women Entrepreneurs for women groups and women entrepreneurs, the SAARC Business Association of Home based workers for outreach and training models
- provide on-the-job support to cooperatives and agriculture entrepreneurs with business plan implementation and fulfilling financial loan obligations (if any)

**B. Facilitation of access to finance, including through a social inclusion fund and production support fund**

To promote RNR enterprises, a supportive credit policy and delivery system is necessary to facilitate access to finance for farmer groups, cooperatives and agriculture enterprises, particularly women and youth.This, the programme will facilitate farmer entrepreneurs' access to institutional finance, social inclusion in producer groups and provide support for market-led production.

**Facilitation of access to institutional finance.** The programme will support and enhance accessibility under the agreements (MoUs) between BOiC/BDBL and FCBL as well as MoAF/DAMC to pro-actively link entrepreneurs to available funding sources for enterprise investments. Considering interests from both BOiC and BDBL to support programme beneficiaries, focal persons in DoA, DoL and DoF will facilitate access to revolving funds. The programme would further support MoAF/DAMC in the technical appraisal of proposals in line with the complementary programme interventions. Support will also be provided to help cooperatives and individual enterprises develop business and financing plans and proposals to seek BOiC funding, and assisting entrepreneurs with business planning and fulfillment of financial obligations for the loan obtained.

**Social inclusion in producer groups.** As many poor households are unable to join existing farmers' producer groups due to their inability to match the contributions made by existing group members to the group fund, the programme will support their inclusion by making the required contribution. This will facilitate inclusion of poorer farmers in the value chains being developed.

**Support for market-linked production.** Based on business plans developed and marketing agreements established with FCBL assistance, the programme will provide a revolving fund of Nu 50 000 each to farmers' producer groups to support market-linked production by group members. Members will borrow from the group to procure necessary inputs and services for production and repay out of revenues from the sale of produce to FCBL.

**C. Development of multi-stakeholder platforms and networks**

Value chain development depends to a large extent on understanding the different needs and interests of different value chain actors and on the quality of actor relationships. Opportunities, risks, costs and benefits need to be assessed and understood in order to develop fair contractual arrangements and trust. The OPM with appropriate TA will facilitate the development and strengthening of value chain actor networks and multi-stakeholder platforms for example production and market information exchange, to discuss and share opportunities for investments along the value chains, to address key bottlenecks and constraints that may hamper value chain development and/or to negotiate and monitor informal and formal agreements. These platforms will also be used to address specific programme targeting issues, including pro-poor development, engagement of women and youth, environmental sustainability and climate change.

**Output 2.3. Development of community driven market infrastructure**

CARLEP will support FCBL to create value chain infrastructure at the local community level, such as village storage houses, cold stores, small trucks, market sheds, etc. to be owned and managed by

communities, farmers' groups/ cooperatives or small entrepreneurs. While the focus during the first phase would be on vegetable and dairy value chains, where possible, a multi-use perspective will be followed in the design to accommodate future value chains and commodities.

Activities will include the design, construction and supply of necessary infrastructure and equipment for:

**A. Vegetable value chain**
**B. Dairy value chain**

For both activities or value chains, support will include planning and design of market infrastructure, development of business plans for and setting up of Farmers' Shops (FS), investment support in vegetable value chain infrastructure and investment support in dairy value chain infrastructure as described in the following.

**Planning and design of market infrastructure.** FCBL will prepare detailed plans and designs for the infrastructure necessary based on the vegetable and dairy value chain designs and business plans. Infrastructure will be designed based on i) demand projections, ii) a multi-use perspective, iii) economic feasibility for direct privatization or PPP management models, and iv) climate resilience specifications.

**Business plans for and setting up of Farm Shops (FS):** The programme will fund the preparation of site-specific business plans for 12 Farm Shops or Three Window Shops (TWS). The constructions will also be supported, based on the operational, economical and financial viabilities as defined in the business plans. The FS will facilitate better access of farmers to required inputs including seeds, fertilizers and pesticides as well as access to marketing services, as broadly identified in the value chain studies, and detailed in the site-specific business plans before investments are made. Operated and managed by FCBL initially, privatised management will be recruited, based on a PPP model, to eventually run and manage these FS.

**Investment support in vegetable value chain infrastructure.** CARLEP will support investment in equipment and infrastructure needed for post-production and marketing activities for the vegetable value chain, such as, packaging of produce, transport to the market place, storage/warehousing and marketing. Based on the vegetable value chain design, the programme will support FCBL to supply post-production and marketing equipment[6] and infrastructure[7] such as refrigerators for schools participating in vegetable value chain. Initially, FCBL will also supply packaging materials (crates, bags), etc. to the farmers to promote the use of such materials; these would later be purchased at a cost from FCBL by farmers.

**Investment support in dairy value chain infrastructure.** The programme will support investments in equipment and infrastructure for collection, storage, chilling, processing as well as marketing of milk and milk products through retail outlets. Based on the dairy value chain design, the programme will support FCBL to provide dairy groups with necessary equipment, such as improved milk cans. FCBL will also be supported to construct milk processing and marketing infrastructure. While the actual number and specifications of infrastructure units would be decided on the basis of the value chain design, an estimated 90 milk collection sheds, 24 milk collection centres with chillers, and 4 dairy processing units fitted with essential equipment will be supported.

## COMPONENT 3: INSTITUTIONAL SUPPORT AND POLICY DEVELOPMENT

### Outcome 3: Agricultural institutions and policies strengthened for improved and resilient agricultural and marketing practices

The objective of this component is to build the necessary institutional and policy environment that fosters collaboration and partnerships for climate resilient, market-led production and value chain

[6]Equipment under vegetable and dairy value chains will be owned and managed by farmer groups, schools and FCBL.
[7]Infrastructure under vegetable and dairy value chains will be owned and managed by FCBL, marketing groups, or dzongkhag/geog, as per value chain design; management of infrastructure can be outsourced under PPP.

development in the RNR sectors, and for addressing the prevailing structural development constraints. As part of the programme knowledge management, CARLEP will capture and document knowledge and good practice from programme implementation, especially related to climate resilience, value chain and market development. The knowledge products developed will be shared with programme stakeholders and beyond to leverage policy support for broader value chain and market development.

Programme outputs under this component include:

| Outcomes and Outputs | Key Performance Indicators |
|---|---|
| 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 |
| | Regulatory framework for private sector development and Public Private Partnership in vegetable and dairy value chains developed |
| 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 |
| 3.2. Mainstreaming climate change resilience and value chain lessons into agricultural policies and sector strategies | Engineering norms for irrigation systems revised to increase climate resilience |
| | Based on evidence from the programme, policy recommendations formulated and disseminated to the MoAF |

**IMPLEMENTATION ARRANGEMENT, ROLES AND RESPONSIBILITIES**

| **Component 3. Institutional support and policy development** | | |
|---|---|---|
| **Primary responsibility** | **PPD** | |
| **Activity** | **Agencies involved** | **Implementation Arrangement** |
| Strengthening of DAMC market information system | OPM, DAMC/ RAMCO, RDTC, CNR, RDC, RLDC, BAFRA | DAMC/RAMCO will lead to strengthen the MIS. |
| Curriculum development of RNR training and education institutes | | OPM, RDC, RLDC, DAMC/ RAMCO in close collaboration with CNR, RDTC, and BAFRA will develop training manuals. |
| Participatory policy development and monitoring approach | | OPM will facilitate in providing required inputs and technical support from line Departments/Agencies. |
| Support to MoAF in agricultural policy mainstreaming | | OPM will lead to develop lessons on climate resilience and value chain development in agricultural policies. |
| Developing a conducive regulatory framework for private sector development and Public Private Partnership | | OPM will be supported by MoAF to develop and strengthen the PPP regulatory framework. |

**KEY SUCCESS FACTORS**

- Effective M&E and KM System in place to harness information and lessons to inform MIS and policy work, as well as support in improving implementation performance
- Adequate and quality human resource to manage the DAMC MIS
- Effective coordination and communication among stakeholders

- PPP regulations and policies supporting climate resilience, value chain and market development

**DESCRIPTION OF ACTIVITIES**

**Output 3.1. Strengthened value chain and marketing knowledge and communication**

Success of value chains depends on proactive collaboration and information exchange between multiple players in the chain. Similarly, climate resilient practices require proactive communication and collaboration between various stakeholders, including training institutions and researchers. Therefore, this programme output will include two activities: a) Strengthening market information systems, and b) Developing the curriculum of RNR training and education institutes.

**A. Strengthening market information systems**
DAMC will be supported for strengthening the existing market information system, to ensure real time market information is made available to farmers. DAMC will also be supported to expand on the type of information and the means of making information accessible and interactive, including the promotion of mobile technology to inform and empower farmer groups.

**B. Developing the curriculum of RNR training and education institutes**
CARLEP will engage with the RNR training and education institutes such as the Rural Development Training Centre (RDTC) in Zhemgang and the College of Natural Resources (CNR) in Lobeysa for the development of training materials. Where possible, CARLEP will recruit these institutes as training providers and their teachers as resource persons, since both institutes already presently provide programme relevant training. As part of this exchange, both institutes will also be supported with to upgrade their course curricula with knowledge and proven practices developed under CARLEP. Areas to be considered include climate resilience, climate smart agriculture, sustainable farming practices, value chain development, agricultural marketing, enterprise development, CAHWs and lead farmer models, and others.

**Output 3.2: Mainstreaming climate change resilience and value chain lessons into agricultural policies and sector strategies**

Through the knowledge management programme under CARLEP, communication and collaboration between policy makers and market actors will be facilitated, and the knowledge and lessons learned from programme implementation will be used to leverage policy support for climate resilience, value chain and market development. Therefore, this output will include three activities: a) Participatory policy development and monitoring approach, b) Support to MoAF in agricultural policy mainstreaming, and c) Development of a conducive regulatory framework for private sector development and Public Private Partnership (PPP).

**A. Participatory policy development and monitoring approach**
CARLEP will support the MoAF with the development of a multi-stakeholder consultation process for policy development, as well as a participatory monitoring process. Innovative models and approaches supported by CARLEP regarding participatory and collaborative service delivery will also be applied in the development and monitoring of sector policies and rules and regulations. Engagement of policy beneficiaries as citizens, private sector, civil society and local governments in the development of policies is important in an increasingly more vocal society. Also, a feedback and monitoring process to measure the intended and un-intended effects and impacts of the policy is useful to fine-tune policies during implementation.

**B. Support to MoAF in agricultural policy mainstreaming**
CARLEP will support MoAF with a screening of existing agriculture policies on their climate resilience as well as on opportunities to strengthen or adapt them based on lessons from programme areas on sustainable farming practices, CAHWs and lead farmer models, value chain development, marketing, the new institutional role of FCBL and engagement with training and education institutes.

**C. Development of a conducive regulatory framework for private sector development and Public Private Partnership (PPP)**

Engagement with private sector is key for agriculture enterprise development, employment and generating additional private investments for developing sustainable and growing value chains. However, the creation of business opportunities need to be complemented by suitable regulatory and policy frameworks that ensure competition to avoid monopolies and exploitation of less powerful value chain actors. Negative environmental and social externalities of businesses also need to be addressed, for which adequate rules and regulations as well as detailed cost and benefit analyses are required. Therefore, MoAF will be supported to strengthen the regulatory framework for private sector development and PPP, with especial considerations given to the rural context of the value chains, and to ensure fair distribution of the associated costs, benefits and risks.

# CHAPTER 9: M&E, KNOWLEDGE MANAGEMENT AND GENDER

## 9.1 Purpose and objectives

The objective of this chapter is to guide the implementation of the programmes planning, monitoring and Evaluation, Knowledge management (KM) and gender mainstreaming. The detailed strategies and implementation arrangement for KM and gender would be guided by the programmes KM strategy and Gender and Social Inclusion Strategy. Similarly the next chapter will extensively cover the planning process in terms of preparation of the AWPB.

## 9.2 Planning

The overall guidelines for the preparation of AWPB is presented in Chapter 10. In brief, the planning process in CARLEP will entail seven steps: 1) the GEOs in consultation with the gewog administrations, communities and FGs/coops will prepare a draft AWPB and submit it to the Dzongkhag sector heads, 2) at the Dzongkhag level, the DAOs and DLOs will review and consolidate into a draft Dzongkhag AWPB and submit it to the PMO; 3) at PMO, the component Managers, in consultation with the Programme Finance Officer and other technical focal persons, will review the draft Dzongkhag and Agencies AWPB and consolidate it into a programme AWPB, 4) the draft AWPB will then undergo further review, discussion and endorsement during the annual Review & Planning Workshop or Annual RPIC meeting, 5) the RPIC endorsed AWPB will then be presented to NPSC for approval, 6) submit the PSC approved AWPB and procurement plan to IFAD for final endorsement with a copy to Department of National Budget (DNB), MoF, and finally 7) the PMO will share with the implementing agencies the AWPB which is endorsed by IFAD for implementation.

## 9.3 Monitoring and Evaluation

The RGoB's Planning and Monitoring System (PlaMS) would provide the overall guidance for the M&E framework in CARLEP. To the extent applicable, the ***outputs, outcomes*** and ***impact indicators*** of CARLEP would be aligned to the sectoral key result areas and the programme output and outcome indicators of the ministry in the PLaMS. The CARLEP OPM will ensure this alignment and share with the Planning Officers and RNR sector heads of the Dzongkhags and the Research Development Centres, who in turn will take into account the integration of the programme with the Annual Performance Agreement (APA)[8] of the Dzongkhag or that of Ministry.

The Dzongkhag RNR sectors, RAMCO and FCBL will ensure collection of data at the activity and output level from village/gewog and compiled validated progress in the prescribed M&E formats will be submitted to the respective component managers at the OPM on a quarterly basis. Component Managers will review progress, validate information and submit to M&EO for consolidation and documentation of the half-yearly and annual progress reports. Submission of physical and financial progress report at all stage will follow prescribed M&E templates (attached in Annex 23) which will be similar to the AWPB template with slight modifications to avoid confusions of different templates and for consistent reporting on physical progress against the annual targets. The annual progress updates from all implementing partners will be submitted to the OPM within two weeks after closure of the financial year. This will ensure OPM to complete the annual progress report within two months after the financial year closes.

[8]Annual Performance Agreement are part of the Government Performance Management System where at the Ministry/Dzongkhag level, Minister/Dasho Dzongdag signs with the PM an agreement to deliver certain results within a finanacial year. APA is instituted as a guiding document for the preparation of the annual budgets.

M&E officer will maintain an updated database of progress activities on a regular basis to generate cumulative progress of the programme as deemed necessary and for institutional memory in the event of unforeseen Human Resource changes.

The basic M&E framework for CARLEP will follow a systematic collection, analysis and reporting of information/data at three different levels of programme implementation: (i) outputs; (ii) outcomes; and (iii) impact.

**Output monitoring** will measure the progress of activities and achievement of outputs against annual targets in the AWPB for each programme component. This can be linked to the financial expenditure on the concerned activities and reported as part of M&E activity. The type of output data to be collected and monitored will be carefully merged with the programme logical framework indicators and RIMS indicators.

**Outcome monitoring** measures the immediate changes coming about as a result of programme interventions. The outcome indicators to be monitored are briefly outlined in the programme logical framework. The outcome indicators are aligned with RGoB's 11$^{th}$ Five Year Plan outcomes in the RNR sector. Data for outcome monitoring of the programme will be collected through the conduct of Annual Outcome Surveys (AOS) starting from the second year of the programme implementation. An AOS may also be carried out on a thematic basis in order to focus on a specific area of programme intervention, such as dairy or agriculture-based enterprises created as a result of programme intervention.

**Impact evaluation** is the process to assess the contribution of CARLEP in achieving the overall goal of the programme. It will consist of baseline and end-of-programme surveys. CARLEP will undertake baseline (at Programme Year One) and end-line (Last Programme Year or PY 5) study. A table showing RIMS indicators to be considered during the baseline and end-line study is given in annexure17. This survey will be coordinated by the OPM M&E unit and contracted to an external agency with specific expertise in such assessments. Information to be collected will include the impact level indicators of IFAD's Results Impact Management System (RIMS) and include mandatory indicators relating to household assets, food security and child malnutrition (anthropometric data of children under five years of age). Data will also be collected to relate changes in all these indicators following participation in programme activities and delivery of programme outputs. As outlined in the PDR, the International Food Policy Research Institute (IFPRI) M&E grant for India and Bhutan will support the baseline survey in 2016. Along with baseline study, CARLEP will also undertake Climate Change Vulnerability Assessment by outsourcing the study to a suitable agency.

### 9.4 Results and Impact Management System

The M&E unit at OPM will also prepare and submit the RIMS report as per IFAD's guidelines. As far as possible to avoid duplication of efforts, indicators required for RIMS reporting would be integrated in the M&E templates.RIMS looks at three levels of results:

a. ***First Level Results*** correspond to the programme activities and outputs, derived from the programme logframe. The results measure financial and physical progress, mostly quantitative and reported on an annual basis, which can be captured from output monitoring. CARLEP will only report on the first level results of the RIMS till the Mid Term Review (MTR) of the programme.

b. ***RIMS second level results*** correspond to programme outcomes, measure improved functioning or behavioural change, are more qualitative and normally take longer to realize. This level corresponds to either the output or objective level of the programme log-frame. The RIMS second level results are in the form of assessment, looking at the extent to which a given programme activity has successfully led to specific outcome, which is the assessment of effectiveness. It also looks at the extent to which benefits are likely to be sustained after the programme ends, which is the assessment

of sustainability. Various methods (such as studies, participatory approaches, questionnaire surveys, focus group discussions, etc.) can be used to measure and report on this. Since results under this level usually take longer time to realize, CARLEP will report on the Second Level Results post mid-term review of the programme.

c. ***Third-level results*** correspond to programme impact, which measure combined effects of the first and second level results, are quantitative (e.g. households reporting increased assets) and are measured usually at three points during programme life (baseline or benchmark, mid-term and completion or end-line). These refer to the goal and objective level of the programme log-frame.

### 9.5 Knowledge Management

Every M&E activity in IFAD- funded programmes has another purpose to generate knowledge and learning. A KM strategy including action plan and a 'learning system' will be developed that will guide the knowledge management and learning in CARLEP. It is the duty and responsibility of the KM officer to disseminate right knowledge to the right communities for further replication in up scaling programme activities and for successful implementation of KM strategy.

CARLEP will continuously endeavor to capture and disseminate lessons learned, successful case studies and good practices. The programme will adopt various knowledge sharing methods and tools including designing and facilitating knowledge events such as meetings and workshops at various level. Knowledge products will be developed through collaboration with relevant RDCs and TA on a regular basis. Among others, this will include:

- Case studies/articles reporting in the RNR newsletters (in English and Dzongkha). The RNR newsletter published on a monthly basis will dedicate 2 pages for CARLEP as has been done with the MAGIP.
- A separate website for the programme will be established as a knowledge sharing tool which will be regularly updated and its wider use will be encouraged. Information on good practices and innovations will also be posted on the IFAD- Asia web portal for information sharing with other IFAD programmes in the Asia Pacific region.
- Special effort would be made to prepare audio-visual knowledge products and other print materials such as briefs, technical manuals, posters on key programme activities. Reports including but not limited to progress reports, field monitoring reports, supervision/support missions, and newsletters will be archived and disseminated for information sharing.
- To avoid duplication with other programmes in the region, OPM will maintain and update similar external funded program in the programme funded area. This will also ensure complementarities of the programme activities with those of other programmes in the region.
- Developing skills and competencies of programme staffs to improve human resources in the areas of knowledge management. Learning events on specific themes relevant to the programme such as (but not limited to) value chain development, lead farmer approach, gender mainstreaming, and climate smart agriculture will be organised.
- Programme will make available such materials and factsheets for providing firsthand information to visitors including mission members.

While OPM will be responsible for the overall implementation of the strategy, it is highly recommended that reporting on the above KM activities becomes part of the regular monitoring and reporting system for CARLEP. As such, OPM will ensure that the KM activities are reflected when and where relevant in the annual work plan and budget.

**Learning system:** The programme learning system would comprise of various activities relating to M&E and KM functions. Some of these would include monthly, quarterly and annual review meetings; partners review meetings; capturing information on progress, lessons and finding solutions for implementation constraints. KM and lesson learning would be used as a tool for internal learning by programme stakeholders such as staff of various implementing agencies, participating village communities and farmers, both women and men. Participatory tools such as "most significant

change", "story telling" and "participatory monitoring & evaluation" (PME) may be used at these meetings.

**Enhancing Use of Knowledge from M&E**: CARLEP will use its M&E data and information for improved learning, enhancing accountability of the programme for learning, use the knowledge and learning from M&E for programme planning, implementation and improved monitoring, and document innovations and success stories so as to contribute in the overall local, regional, national and global knowledge pool in investing in rural people.

### 9.10 Gender Mainstreaming

Gender mainstreaming in CARLEP will follow a Gender and Development (GAD) approach that seeks to have both women and men participate, make decisions and share benefits from the programme. This approach aims at meeting practical needs as well as promoting strategic interests of women and men and is in line with the IFAD Gender Equality and Women's Empowerment Policy and the Bhutan Gender Policy note. CARLEP will clearly identify the extent to which the programme has reached women and the degree to which they have benefited from programme activities and outputs. This involves collecting gender disaggregated data on programme activities and outputs to see if women have fully participated in group membership, group leadership, training and other livelihoods activities. Further, gender disaggregation to assess if women have benefited in terms of outcomes, such as increasing production, or impacts, such as increased income and assets shall be undertaken. The results of these indicators could be verified through Annual Outcome Surveys and/or focused group discussion by M&E or programme staff visiting the fields.

As some indicators are better measured on a household basis, these need to be disaggregated by sex of the household head.

The **Gender and Social Inclusion strategy** that will be developed as part of the programme will be the main guiding document for mainstreaming gender and poverty in the programme implementation. This document will clearly underline detailed action plans and implementation modalities for mainstreaming gender and poverty. The strategy will have gender check list in all components/subcomponents or activities of the programme. The experiences of MAGIP can be drawn in preparing the strategy and action plan

Over the course of programme implementation detailed gender analysis (from the collection of sex disaggregated data) will be undertaken periodically. This will help to streamline service delivery based on the needs of the situation and generate information on activity profile and access and control aspects to develop and refine the gender strategy for the programme. Thus, the gender and social inclusion strategy will be a dynamic document that will be updated as and when required[9] by the PMO based on the experiences with programme implementation.

The Gender focal person at the OPM will provide input for decision-making on programme interventions and ensure mainstreaming of gender and social development issues at the various levels of the programme activities.

Gender mainstreaming in programme management will ensure the following key activities and results:

- Actions identified in the gender strategy are translated in the AWPB, M&E framework and financial reporting
- Specific targets are set for women and men participants in different activities and components.
- Ensure gender balance in programme-related decision-making bodies such as FGs, cooperatives, etc. with an emphasis in leadership positions.

[9]The strategy will need to be updated at least once at the MTR of the programme.

- Assess training needs of the OPM, Dzongkhag and Gewog staff on gender sensitization and social inclusion and facilitate provision of need based training.
- To the extent possible, gender balance is maintained in staffing of the OPM. Include responsibilities for gender mainstreaming in the Terms of Reference of all OPM Staff
- The OPM organizational set up and work environment will be gender sensitive with adequate enabling environment for women staff to work with dignity, safety and respect.

### *9.10.1 Mainstreaming in programme components*

Gender mainstreaming and social inclusion in programme components would be ensured through the inclusion of sex-disaggregated and target group categorization in the activities and outputs of the components where applicable. Reporting formats including but not limited to AWPB and M&E templates will be designed to collect sex-disaggregated information. Adequate sensitization and capacity building will be provided to staff involved in collecting, reporting and analyzing data. Some of the gender and vulnerability disaggregated data could include:

- Women and men as a percentage of member of farmers groups, cooperatives and village level development committees;
- Women and men as president or in leadership position in groups or committees;
- Women and men as a percentage of beneficiaries of programme-related training activities.

### *9.10.2 Gender Responsive Planning and Budgeting (GRPB)*

CARLEP will attempt achieving substantial results and impact by allocating adequate financial resources under different components/sub-components capable of benefiting the poor or vulnerable target groups/households. Ensuring adequate and balanced funding is made for women and men will be a key step at the time of preparation of annual work plan and budget. This will be in line with the Governments recent initiative on GRPB that aims to analyze how effectively governments policies, programmes and budgetary allocations responds to the differentiated needs of and impacts on women, men, girls and boys and the extent to which they promote gender equality.

### *9.10.3 Gender sensitive Monitoring and Evaluation*

The programme will develop a gender sensitive M&E framework. The baseline for the programme will cover information that will help the programme to monitor progress with the focus on the gender and vulnerability aspects. Some of these aspects that can be captured may include: (i) main livelihood and income sources of men and women; (ii) expenditures by men and women; and (iii) ownership and control over household assets by men and women.

***Special studies and field verifications***: CARLEP will also endeavor to undertake at regular intervals some special qualitative studies with quantitative data as applicable to assess the programme influence/outcomes/impacts on some key areas or indicators. Some of these could be:

- Changes in livelihood and income patterns of men and women from smallholders.
- Changes in division of labour between women and men.
- Changes in the leadership levels for women and men.
- Differences in access to, and control of, resources between women and men.
- Changes in decision making patterns between women & men at the household & community.
- Changes in men's and women's attitudes, perceptions, practices, knowledge and feeling of empowerment and attainment of general wellbeing and happiness.

# CHAPTER10: GUIDELINES FOR PREPARATION OF AWP&B

## 10.1 Purpose and objective

The guidelines outlined in this section will detail out the AWPB processes. This is expected to help the programme implementers in conforming to the set targets, outputs, outcomes and thus the programme goals and objectives.

The AWPB shall be the guiding document for the activities to be carried out during that particular financial year and shall serve the following purposes and objectives:

- Provide the framework for planning the work and the budget required during that particular period of time.
- Identify the goals, activities and resources required in that particular time period.
- Set timelines/completion dates for each of the stated activities and outputs.
- Provide transparency as the AWPB shall be circulated amongst all stakeholders who has a need and right to know what is being done with the program support during that particular time and space.
- Serve as a necessary tool for planning, executing, implementation and monitoring & reporting of the program activities.

The following listed documents shall be closely referred to while preparing the AWPB:

- *Annual Performance Agreement (APA)*
- *Programme Log-frame*
- *Cost-tables*
- *AWPB template*
- *Financing plan*
- *Financing rules in the procurement methods,*
- *Financial Agreement (FA)*
- *Previous Year programme progress report.*
- *KM & Gender Management Strategy.*
- *Subsidiary agreement signed between MoAF and FCBL.*

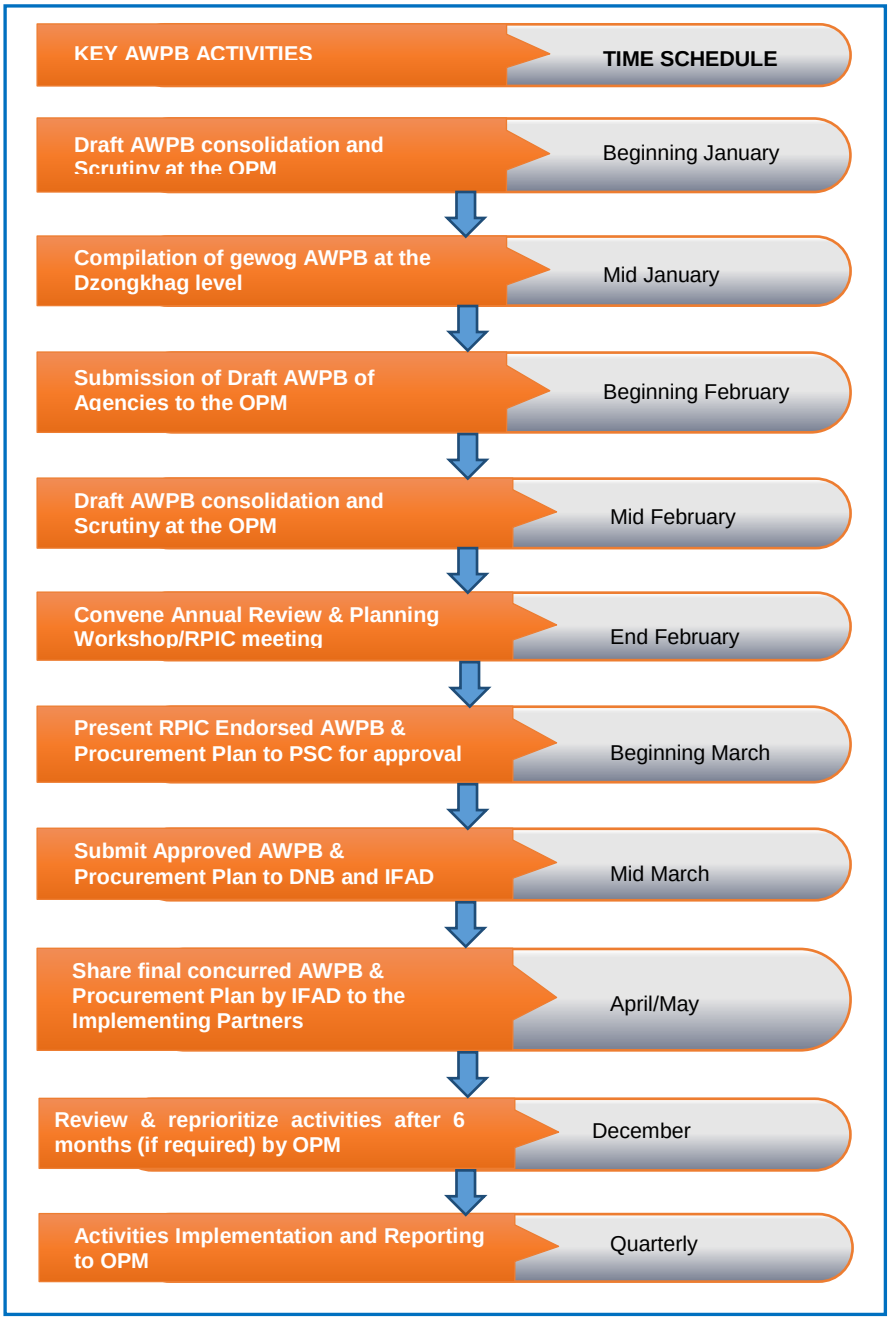
## 10.2 General Guidelines

The AWPB preparation shall be guided by the following:

- All AWPB should be prepared in the prescribed format/template provided by the OPM.
- All AWPB outcomes and outputs should be aligned to the planning and monitoring system (PLaMS) of the RGoB.
- All AWPB should be prepared based on the concept of result-oriented approach.
- All AWPB should be prepared using both Cost Tables and Programme Log frame.
- The respective programme Dzongkhags and the concerned agencies shall prepare their draft AWPB by the mid of January of each financial year.
- The draft AWPB will be submitted to the OPM by the third week of January of each financial year.
- The respective CMs shall scrutinize and review the AWPB and check conformity to the programme goals and objectives. This shall also include technical review of sector-related activities in proposed district-level draft AWPB and their subsequent technical clearance. This step shall be completed by the first week of February.

- The reviewed AWP&B shall then be presented, discussed, harmonized and endorsed in the AWPB Workshop where all the RPIC members will be invited. The AWPB workshop will be conducted by the end of February each year.
- The AWPB endorsed by RPIC shall then be submitted to the NPSC and IFAD for their concurrences prior to submission to the MoF.The NPSC shall be convened sometime in March-April of each year.
- The final AWPB concurred by the IFAD shall be shared with all Dzongkhags and concerned agencies by the month of May each year.
- The steps for the preparation and finalization of CARLEP AWPB are presented in Figure 6.

Figure 6: Steps for Preparation & Finalization of AWPB



### 10.3 Changes in the AWP&B

Under **unavoidable circumstances** should there be a need for changes to be incorporated into the final approved AWPB, the following due processes shall come into effect:

- The proposed changes should be submitted to the OPM with proper justification signed by the head of the agencies.
- The concerned CMs at the OPM shall scrutinize the proposed changes and if reviewed positively, the proposed changes will be considered further.
- If the proposed changes are found inappropriate, the same shall be communicated to the concerned dzongkhags/agencies no later than 2 weeks from the date of receipt of the request by the OPM.
- If the proposed changes are found appropriate, the OPM shall accord approval for the recommended changes.
- The final approved AWPB shall then be forwarded back to the dzongkhags with a copy to the IFAD for information.

**NOTE: No changes to the AWPB shall be admissible after the last scheduled RPIC meet in that particular financial year.**

## Annex 1: Programme Logframe

| Narrative Summary | Key Performance Indicators | Means of Verification | Assumptions |
|---|---|---|---|
| **Goal:** | | | |
| Sustainably increase smallholder producers' incomes and reduce poverty through commercialization of production within programme households. | ▪ 5000 direct beneficiary HH in vegetable and dairy value chains report at least 25% increase in HH asset and income, as compared to baseline (disaggregated by sex of HH head)<br>▪ 15% reduction in the prevalence of child malnutrition, as compared to baseline<br>▪ >=23,000 smallholder HH supported in coping with the impacts of climate change (ASAP) | ▪ RIMS and baseline surveys<br>▪ Programme M&E | No major socio-economic slowdown, or natural disasters<br>Increasing support for collaboration between different Agencies, civil society and private sector to develop value chains<br>Continued MoAF support for innovative approaches<br>Agricultural approaches and technologies primarily remain profitable<br>Programme investments are realized as designed |
| ***Development Objective***:<br>To increase 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 vegetables(MT) by the end of the programme<br>▪ >= 30% increase in production of dairy (milk in MT) by the end of the programme<br>▪ ≥ 20,000 HH have improved access to water for agriculture production | ▪ Baseline survey<br>▪ Sector studies<br>▪ Technical agencies' reports and studies<br>▪ Research and academic studies<br>▪ Programme M&E | |
| **Component 1: Market-led Sustainable Agricultural Production** | | | |
| **Outcome 1:**<br>Community-based Resilient Agricultural Production has sustainably increased | ▪ ≥ 23 000 HH (of which 50% are female headed) adopt technologies or practices which support coping with the impacts of climate change (ASAP) | ▪ Programme M&E reports<br>▪ Contracted studies<br>▪ RIMS and benchmark<br>▪ Scientific and conference papers | Collaboration between Government Agencies/staff and non-state service providers is successful<br>RGoB complementary financing and supportive annual block grants (dzongkhags) is allocated and utilised |
| **Output 1.1:**<br>Increased Production Resilience, Diversification and Innovation | ▪ >= 6000 HH adopt sustainable agricultural practices | ▪ Base line studies<br>▪ Programme progress report<br>▪ Line agencies' reports | RGoB earmarked funding (including other donors) of agricultural inputs and capacity development of farmer groups is allocated and utilized as per programme design |
| **Output 1.2**:<br>Vegetable Production Intensified and | ▪ >= 4500 HH organized into vegetable farming groups (minimum 60% female members) | ▪ Base line studies<br>▪ Programme progress report | Capacity of Government Agencies/staff and non-state service providers is adequate to |

| | | | |
|---|---|---|---|
| Expanded | ▪ Vegetable farmer groups produce a total of at least 3600 MT / year by the end of the programme | ▪ Line agencies' reports | achieve results as per programme design.<br><br>Farmers/beneficiaries are interested/forthcoming and have the potentials to form groups based on value chain strategy. |
| **Output 1.3:** Dairy Production Intensified and Expanded | ▪ >= 2600 HHs organized into dairy farming groups (with minimum 50% female members)<br>▪ Dairy groups produce a total of at least x MT / year by the end of the programme | ▪ Base line studies<br>▪ Programme progress report<br>▪ Line agencies' reports | |
| **Outcome 2**: Increased smallholder income from Crop and Livestock Value Chains | ▪ At least 140 commercial enterprises established are profitable by the end of the project | ▪ Programme M&E reports<br>▪ RIMS and benchmark<br>▪ Line agencies' reports<br>▪ Sector studies and reports<br>▪ Enterprise surveys | As above under Component 1<br><br>Willingness for collaboration between Government Agencies/staff, FCBL and non-state actors, including small entrepreneurs and businesses, to develop and manage value chains and market infrastructure |
| **Output 2.1:** Resilient Vegetable and Dairy Value Chains developed | ▪ FCBL fully staffed and operational<br>▪ Strategies and business plans for vegetable and dairy value chains developed | ▪ Programme progress report<br>▪ Sector reports and studies<br>▪ Strategy and Business plan documents | FCBL has adequate financial allocations to develop its own capacity next to programme support. |
| **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.<br>▪ 200 agriculture enterprises (including cooperatives) established and with business plans | ▪ Programme progress report<br>▪ Sector reports and studies<br>▪ | As above<br><br>Adequate number of interested and able entrepreneurs come forward to establish businesses Access to finance for small rural agricultural entrepreneurs is adequately facilitated |
| **Output 2.3:** Community-driven Strategic Market Infrastructure developed | ▪ Collection, aggregation and storage facilities and farm shops established according to Value Chain Strategies and business plans | ▪ Programme progress report<br>▪ Sector reports and studies | Complementary financing from RGoB and FCBL will be provided as earmarked |
| **Component 3: Institutional Support and Policy Development** | | | |
| **Outcome 3:** Strengthened Agricultural Institutions and Policies for Improved and Resilient Agricultural and Marketing Practices | ▪ 70% of vegetables and dairy groups and enterprises report the use of market information<br>▪ Regulatory framework for private sector development and Public Private Partnership in vegetable and dairy value chains developed | ▪ Programme M&E reports<br>▪ Line agencies', DAMC, FCBL and reports<br>▪ Sector studies and reports<br>▪ Programme survey<br>▪ Regulatory framework document for private sector and PPP | MoAF will pro-actively implement the 11th FYP strategy for enabling private sector engagement and participation within the process of commercialisation of agricultural development |

| | | | |
|---|---|---|---|
| **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 | ▪ Programme M&E reports<br>▪ Line agencies', DAMC, FCBL and reports<br>▪ Sector studies and reports | Adequate technical and process support is provided to develop the models and approaches on the ground, to access learning and to document good practice (presently a weak part of IFAD projects) |
| **Output 3.2:** Climate change resilience and value chain development lessons mainstreamed in agricultural policies and sector strategies | ▪ Engineering norms for irrigation systems revised to increase climate resilience | ▪ Programme M&E reports<br>▪ Line agencies' reports<br>▪ Sector studies and reports<br>▪ Policy documents | Dialogue and collaboration between Government Agencies/staff and external stakeholders is successful and generates meaningful lessons and insights for policy development. |
| | ▪ Policy recommendations formulated and disseminated to the MoAF based on evidence from the programme | ▪ Policy recommendations | |

## Annex 2: Criteria for selection and identification of programme interventions Matrix

| Key Interventions | Criteria | Agency responsibility |
|---|---|---|
| Irrigation infrastructure development including water efficient technologies | Area coverage; Beneficiary household; | |
| Lead farmer/ CAHW model | Interest of farmers and individuals capacity to lead; Ability to demonstrate, lead and willingness to share knowledge and provide services; willingness to spare minimum 0.5acres of their land (preferably near the farm house) in demonstration; part of existing group; preference to youth, early school leavers and women; Owning livestock and has past experiences in livestock farming (CAHW) | RDC Wengkhar/ RLDC Khangma; |
| Commercial farms (dairy) [10] | Willingness and ability to share costs/invest, uptake technologies, land availability for pasture development, business plan, | RLDC Khangma; |
| Commercial farms (agriculture) | Willingness and ability to share costs/invest, uptake technologies, land availability, business plan, | RDC Wengkhar |
| Capacity building | Knowledge gap | |
| Buy back mechanism | Bulk produce; quality and market driven crops and livestock; have proper storing and processing facilities; | |
| Farm shops | Strategic locations; road accessibility; no of beneficiaries; other facilities such as communication, electricity, banking etc, accommodation facilities | RAMCO/DAMC |
| Value chain (Dairy/vegetable) | Value addition, processing, packaging and marketing; potentials for bulk production; functional farmers groups; scope for product marketing; | |
| Production Support fund | | |
| Social Inclusion fund | | |
| Market infrastructures and equipment (storage, cold storage, chilling van | | |
| Enterprise development | | |
| Extension services improvement | | |
| Support to production and marketing groups | | |

[10]These criteria will be widely sensitized and proper consultations will be done during selection.

## Annex 3: Cost Tables by Disbursement Category with financing rules

| Sl. No. | Category | IFAD Loan Amount (SDR) | IFAD Grant Amount (SDR) | ASAP Trust Grant Amount (SDR) | Percentage |
|---|---|---|---|---|---|
| I | Works | 18,90,000 | | 1,20,000 | 100% net of taxes and beneficiaries' contributions |
| II | Goods, Services and Inputs | 20,00,000 | 2,10,000 | 4,00,000 | 100% net of taxes and other contributions |
| III | Training | 12,30,000 | 3,70,000 | 27,00,000 | 100% net of taxes and Government contributions |
| IV | Grants and Subsidies | 1,80,000 | 40,000 | - | 100% net of taxes |
| V | Operating Cost | - | 70,000 | - | 100% net of taxes and other contributions |
| | Unallocated | 5,90,000 | 70,000 | 3,60,000 | |
| | **Total** | **58,90,000** | **7,60,000** | **35,80,000** | |

## Annex 4: Terms of Reference for OPM staff

### TOR FOR THE NATIONAL PROGRAMME DIRECTOR

The NPD will coordinate programme management and ensure that implementation be realized according to the conditions of the FA and based on the PDR for CARLEP. The NPD will oversee the establishment of efficient administrative, financial and technical management procedures to serve National, Dzongkhag and Gewog implementation needs. The NPD will also ensure the M&E requirements are developed and implemented in a timely fashion.

In particular, the NPD shall be responsible to:

- Make sure the business of the programme is conducted in an efficient manner through:
    a. Supervision and monitoring of programme implementation;
    b. Provision of guidance and capacity building for OPM staff;
    c. Installation and maintenance of appropriate systems and procedures (M&E, administrative, financial, operations and others); and
    d. Installation of check and balance and control mechanism for OPM operations;
- Develop close working relationship with all programme participants and stakeholders to ensure integration of program interventions congruent with program goals, purpose and objectives. The responsibility involves sensitization of program entities, keeping open lines of communication, initiating quick response mechanism and effective control system.
- Maintain close liaison with the NPSC to facilitate the resolution of program issues and with the IFAD Focal Officers at the MoAF for proper coordination and facilitation at the national level.
- Ensure timely preparation of SOEs and WAs to ensure sufficient resources for program operations; this includes maintaining close liaison with the DPA, IFAD and MoAF's PPD & AFD.
- Facilitate and support the conduct of missions, reviews, meetings and other program activities in ways that foster a joint learning process that identifies how the programme could be improved further to achieve impact.
- Facilitate the conduct of annual audits and respond to audit queries in a timely manner.
- Ensure timely preparation of the AWPB by seeking inputs from all the stakeholders and present to approval bodies in a timely manner for review and approval.
- Ensure the prompt submission of AWPBs, procurement plans and progress reports.
- Ensure compliance with the provisions of the Loan Financing Agreement.
- Ensure that IFAD supervision missions are facilitated and provided with logistic support.
- Others as the PSC may require.

**TOR FOR MONITORING & EVALUATION AND GENDER OFFICER**

The M&E and Gender Officer shall report directly to the PD and shall be responsible for guiding, development and operation of the M&E and Gender cell of the program.

Specifically, the M&E and Gender Officer is expected to:

- Set up the PME system and ensure it is implemented effectively by the key stakeholders
- Coordinate the programme planning, such as consolidation of the AWPB, conducting, preparation and submission of programme reports (such as Annual Progress Report, RIMS and AOS) and conducts of surveys (such as baseline, AOS, and end-line surveys) and programme completion report (PCR).
- Input all the key indicators (outputs, outcomes and impacts) of CARLEP to be captured in the PLaMS of RGoB
- Ensure timely updation of the programme logframe.
- Responsible for timely data collection and entry, data analysis and report writing. Recommend measures to enhance program performance based on the analysis of reports.
- Closely coordinate with programme Dzongkhags and other agencies of the RGoB such as FCBL participating in CARLEP for timely generation and collection of programme data/results for which a system will be established.
- Coordinate all IFAD related compliance reporting and implementation of support/supervision mission, MTR, annual reviews and completion review.
- Act as counterpart to TAs on PME.
- Coordinate with all the component managers, implementing units on reportorial requirements on regular basis.
- Assist NPD in the preparation and conduct of NPSC and RPIC meetings.
- Undertake regular visits to the field to support implementation of M&E and to identify where adaptations might be needed.
- Initiate and lead the coordination for implementation and updating of the KM strategy for the programme
- Guide Assistant KM, Gender and M&E officer in the implementation and updating of the the KM strategy (including action plans) for the programme.
- Integrate gender indicators into the M&E system and in the AOS surveys to ensure collection of gender segregated data on programme activities and outputs
- Help Assistant KM, Gender and M&E officer in analysing gender disaggregated data and contribute to reporting on gender and KM in the annual progress report and RIMS.
- Conduct gender sensitization/gender capacity building trainings/workshops in the programme areas at least once every financial year;
- Develop and maintain a knowledge database on gender and gender issues, impacts and strategies on respective sectors serviced by the programme, and raise awareness amongst staff.
- Advise,initiate, support and advocate gender mainstreaming efforts in the programme interventions
- Undertake special studies/assessments on gender related and other themes relevant to the programme.
- Assists in developing and disseminating quality knowledge products depending on the target audience and information needs. The knowledge products could be in the forms of publications, documented case stories, photo documentation, videos, charts, manuals, etc.
-

**TOR FOR KNOWLEDGE MANAGEMENTOFFICER**

The Knowledge Management (KM) officer shall report directly to the NPD and also assist M&E and Gender Officer in the development and operation of the M&E, Gender and KM cell of the programme.

Specifically, the KM, Officer will perform the following tasks:

- Take lead in developing and disseminating quality knowledge products depending on the target audience and information needs. The knowledge products could be in the forms of publications, documented case stories, photo documentation, videos, charts, manuals, etc.
- Capture and disseminate lessons learned, successful case studies and good practices on a regular basis by adopting various knowledge sharing methods and tools
- Design and facilitate cross-programme learning and best practice transfer within and outside programme through workshop/meeting, documentation and sharing of lessons learned, media trip and learning routes.
- Create and maintain knowledge repositories to store and organize articles, reports and other resources related to the programme.
- Coordinate with all the component managers and implementing units on reportorial requirements and on issues relating to programme results, documentation, preparation/consolidation of learning and preparation/dissemination of communication/learning materials
- Assist the M&E and Gender officer (M&EGO) in the coordination of the programme planning, such as consolidation of the AWPB, conducting, preparation and submission of programme reports (such as Annual/Half Yearly Progress Report, RIMS and AOS) and conducts of surveys (such as baseline, AOS and end-line surveys) and programme completion report (PCR).
- Assist M&EGO in timely data collection and entry, data analysis and report writing
- Analyse gender disaggregated data and contribute to reporting on gender and KM in the annual progress report and RIMS.
- Closely coordinate with programme Dzongkhags and other agencies of the RGoB such as FCBL participating in CARLEP for timely generation and collection of programme data/results for which a system will be established.
- Initiate and lead the coordination for implementation and updating of the KM strategy for the programme.
- Integrate gender indicators into the M&E system and in the AOS surveys to ensure collection of gender segregated data on programme activities and outputs
- Conduct gender sensitization/gender capacity building trainings/workshops in the programme areas at least once every financial year;
- Develop and maintain a knowledge database on gender and gender issues, impacts and strategies on respective sectors serviced by the programme, and raise awareness amongst staff.
- Support and advocate gender mainstreaming efforts in the programme interventions
- Undertake special studies/assessments on gender related and other themes relevant to the programme.

**TOR FOR PROGRAMME SUPPORT OFFICER**

The Programme Support Officer (PSO) will provide support to the Programme Management team and help them to deliver on the programme outputs on time, within budget and required quality. She/he shall report directly to the NPD.

Specifically, the PSO shall carry out the following:

- Responsible for logistic arrangements of external and internal programme meetings, workshops, study tours, visits, travels, and training courses to ensure that they are properly organised and conducted and that minutes are accurately recorded and circulated to related people.
- Prepare contracts with programme partners and counterparts upon requirements of the Programme Manager, and follow up with finance team to ensure payments are made on time
- Prepare contracts with suppliers, service providers, and consultants upon requirements of the Programme Manager, ensure the compliance with contract management procedures of the organisation, and follow up with finance team to ensure payments are made on time
- Provide support to the monitoring and evaluation of the programme and preparation of reports when required
- Coordinate on behalf of the Programme with various stakeholder institutions such as Dzongkhags, Gewogs, RDC, RLDC, NSC, NSSC, NPPC, etc. who are involved in the programme.
- Documentation of programme meetings, workshops and preparing monthly updates to NPD/RPIC/PSC.
- Facilitating workshops and meetings with the Programme stakeholders.
- Making logistical arrangements and on-ground support to programme activities at the National level
- Facilitate programme meetings and other relevant events or forums on request including invitations, facilities booking, agenda production, minute-taking and issuing.
- Maintain Programme Calendar.
- Arrange Programme related travel and/or events.
- Generate simple documents such as letters, memos, spreadsheets and presentations.
- Assist the Programme Team in planning and execution of work schedules, programme reviews and programme highlight reports.
- Responsible for ensuring that all programme documentation is stored logically and securely in accordance with agreed document management processes.
- Liaise with the CARLEP Liaison office at the Ministry of Agriculture and Forests for necessary follow-up.
- Assist Finance Officer (FO) in the Procurement of goods, services and works for CARLEP in line with the loan agreement and the RGoB Financial Manual.
- Other responsibilities as the NPD may assign.

**TOR FOR FINANCE OFFICER**

The Finance Officer (AO) will be responsible for Finance, Accounts and Procurement section of CARLEP.

Specifically, the FO shall:

- Be responsible for proper implementation of payments including co-signatory of the programme account.
- Facilitate preparation of Annual Budget for OPM and Dzongkhags for timely submission to DNB, Ministry of Finance.
- Monitor & ensure timely release of funds to the Implementing Units/Entities.
- Prepare WA and submit to DPA, MoF.
- Monitor the financial transactions of the implementing units/entities and ensure that the financial disbursements are made in compliance with RGoB financial rules and Regulations and as per the provisions of the Loan/grant Financing Agreement.
- Assist and provide guidance to the entities on financial reporting system.
- Prepare financial reports and liaise with M&E cell for inclusion of financial report in the progress reports.
- Facilitate Audit in auditing the OPM accounts.
- Liaise with the IFAD focal officer at the DPA on submission of WA and Statement of Expenditure (SoE) to IFAD and
- Others as PD/PSC may assign.

**TOR FOR ACCOUNTS ASSISTANT**

The Accounts Assistant shall be responsible to assist the Finance Officer (FO) in day to day functions of the Finance section of the programme.

Specifically, the Accounts Assistant is expected to:

- Maintain books of accounts for the OPM as per RGoB Financial Rules & Regulation & as per the provisions of the Loan/grant Financing Agreement.
- Assist AO in preparation of Procurement Plan and Annual Work Plan & Budget.
- Collect expenditure statements from the Entities (FCBL, Dzongkhags & RAMCO) for preparation of Withdrawal Application(WA)
- Disbursement of funds for the OPM.
- Assist AO in preparing financial report for submission to GNHC, MoF/IFAD
- Facilitate audit by providing all relevant documents.
- Prepare Statement of Expenditure (SoE) for the OPM
- Maintain Payment Log for the works, Goods & Services
- Prepare monthly fund reconciliation statement.
- Prepare consolidated monthly expenditure statements of OPM & Entities.

**TOR FOR ADMINISTRATIVE ASSISTANT**

The Administrative Assistant shall be responsible for the overall administrative functions of CARLEP covering procurement, personnel, travel, property maintenance, human resource development and others.

Specifically, the Adm. Asst. is expected to:

- Assist AO in the formulation of the Procurement Plan for CARLEP in line with the loan agreement and the RGoB Financial Manual.
- Assist AO in procurement processes in keeping with the provisions of the RGoB Financial Manual 2001 and the conditions in the Loan Financing Agreement.
- Initiate the formulation of HRD plan congruent with the Bhutan Civil Service Rules and Regulations 2010 or any amendments thereafter (BCSRR) and facilitate its implementation.
- Undertake personnel functions in accordance with the BCSRR 2010 or any amendments thereafter.
- Procurement of stationery, Equipment & Furniture, etc. for the OPM.
- Maintain Stock/Asset Register for OPM.
- Facilitate the processing of leaves, travel requests and the placement of program personnel.
- Initiate and facilitate the conduct of bidding processes in a manner consistent with the RGoB Financial Manual and the Loan Financing Agreement.
- Coordinate with other focal points/component managers on administrative matters.
- Report regularly to the PD on matters related to administration.
- Other responsibilities as the PD may assign.

**TOR FOR COMPONENT MANAGER – AGRICULTURE PRODUCTION**

The Agriculture CM shall be the focal person for the Agricultural program component under CARLEP. He will be responsible for the planning, implementation, monitoring and evaluation of all activities related to the agricultural development.

- Coordinate, in conjunction with the RDC Wengkhar and the programme area (PA) Dzongkhags, the lead farmer approach including training and the monitoring and evaluation of the overall system.
- Assist the OPM in technical review and clearance of proposals and requirements developed by the PA Dzongkhags, FCBL/RAMCO and RDC Wengkhar.
- Technical backstopping to the PD, FCBL/RAMCO, RDC Wengkhar and Dzongkhag staff and implementation support.
- Based on the observation and evaluation of the agricultural program recommend to OPM measures to enhance its performance.
- Assist and facilitate the conduct of various farmers training to be conducted by the Dzongkhags as and when requested.
- Coordinate with other focal persons to ensure integration of above activities with the rest of program operations.
- Monitor the implementation of the planned agricultural activities in the PA on a quarterly basis and report and suggest to the OPM the progress and gaps in the field.
- Other responsibilities which the PD/PSC may assign.

**TOR FOR COMPONENT MANAGER – LIVESTOCK PRODUCTION**

The Livestock CM shall be the focal person for the livestock program component under CARLEP. He will be responsible for the planning, implementation, monitoring and evaluation of all activities related to the livestock development.

- Guide and assist in planning and development of annual work plan and budget of PA Dzongkhags related to livestock development.
- Facilitate technical review and clearance of proposals and requirements developed by the PA Dzongkhags and RLDC Kanglung, FCBL/RAMCO and RDC Wengkhar through OPM.
- Technical backstopping to the NPD, FCBL/RAMCO, RLDC Kanglung, RDC Wengkhar and Dzongkhag staff and implementation support.
- Initiate, in conjunction with the PA Dzongkhags, the establishment of the farmer groups including the formulation of training design and the monitoring and evaluation of the overall system.
- Based on the observation and evaluation of the livestock program recommend to OPM measures to enhance its performance.
- Assist and facilitate the conduct of various farmers training to be conducted by the Dzongkhags.
- Coordinate with other focal persons to ensure integration of above activities with the rest of program operations.
- Supervise programme activities in the PA on a quarterly basis and report and suggest to the PMO on the progress and gaps in the field.
- Other technical responsibilities which the NPD/PSC may assign.

**TOR FOR COMPONENT MANAGER – VALUE CHAIN AND MARKETING**

The CM for value chain and marketing shall be the focal person for the marketing program component under CARLEP. He will be responsible for the planning, implementation, monitoring and evaluation of all activities related to value chain development and marketing.

- Ensure liaison between the OPM and the programme implementing partners mainly RAMCO and the PA Dzongkhags
- Support the OPM in programme supervision.
- Guide and assist in planning and development of annual work plan and budget of FCBL/RAMCO related to value chain development and marketing.
- Technical backstopping to the NPD, RDC Wengkhar, RLDC Kanglung and Dzongkhag staff and implementation support.
- Assist the OPM in technical review and clearance of proposals related to value chain development and marketing developed by the PA Dzongkhags, RDC Wengkhar and RLDC Kanglung.
- Initiate, in conjunction with the PA Dzongkhags, strengthening the existing farmers groups and establishment of new farmer groups including the formulation of training design and the monitoring and evaluation of the overall system.
- Initiate and undertake relevant studies on value chain and disseminate the information to the marketing groups.
- Based on the observation and evaluation of the marketing program recommend to OPM measures to enhance its performance.
- Assist and facilitate the conduct of various farmers' training to be conducted by the Dzongkhags.

**TOR FOR IFAD FOCAL OFFICER AT PPD AND IFAD FOCAL AO AT AFD, MOAF**

The Focal Officer at PPD and the Focal Accounts Officer at AFD, MoAF will liaise with the NP for coordination and facilitations tasks at the national level related to CARLEP. In particular, the Focal Officer and the Focal Accountant will perform the following tasks.

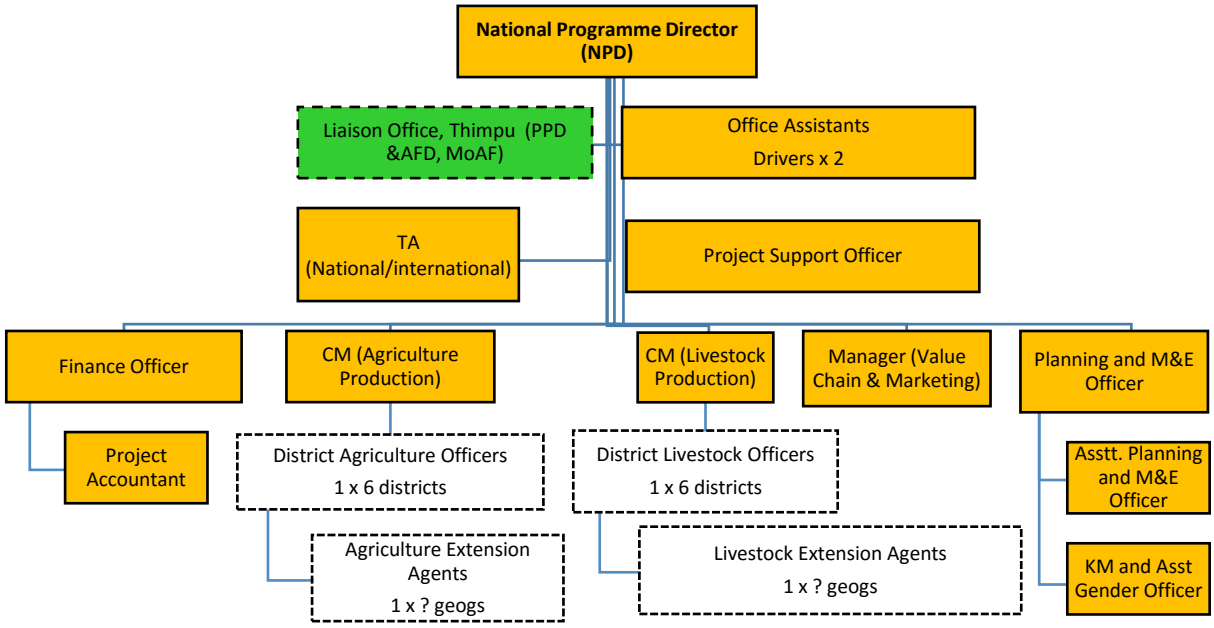
**Focal Officer at PPD will:**

- Liaise with the IFAD team and with agencies both within and outside the Ministry on matters relating to CARLEP
- Coordinate supervision mission and arrange appointments/meetings with the officials both within and outside the ministry
- Put up policy related issues emanating from the programme to the Ministry and likewise advice the OPM on any policy matters having bearing on the programme
- Support and advice M&E and Gender Officer and the Assistant KM, Gender and M&E Officer on preparation, compilation and development of AWPB, consolidated annual progress report, RIMS, AOS outcome reports, Knowledge Products, etc.
- Any other tasks as may be requested by NPD or assigned by PSC.

**Focal Accounts Officer at AFD will:**

- Facilitate smooth fund flow by following up with the DPA;
- Ensure proper furnishing of withdrawal applications;
- Follow up on other fund related issues;
- Also liaise with various other agencies of RGoB and other external agencies based in Thimphu as may be required;
- Provide support and advice to the OPM Finance Officer and the Accountant as may be required;
- Any other tasks as may be requested by PD or assigned by PSC

## Annex 5: Programme Organisation Charts



## Annex 6: AWPB for the first Programme Year

## Annex 7: An 18-month Procurement Plan

## Annex 8: Sample Chart of Accounts

**MINISTRY OF AGRICULTURE & FORESTS**
**COMMERCIAL AGRICULTURE & RESILIENT LIVELIHOOD ENHANCEMENT PROGRAMME**
**Financing Agreement No.**
**RECEIPT AND PAYMENT STATEMENT FOR THE PERIOD FROM ..... TO .....**

| PARTICULAR | RECEIPT | | PARTICULAR | PAYMENT | |
|---|---|---|---|---|---|
| | For the Period | Cumulative | | For the Period | Cumulative |
| | Ngultrum | Ngultrum | | Ngultrum | Ngultrum |
| **1. OPENING BALANCE** | | | **1. EXPENDITURE** | | |
| Cash | | | **a) IFAD Loan** | | |
| Bank | | | Current | | |
| | | | Capital | | |
| **2. Fund Released by DPA** | | | **b) IFAD Grant** | | |
| a) IFAD Loan | | | Current | | |
| b) IFAD Grant | | | Capital | | |
| c) ASAP Grant | | | **c) ASAP Grant** | | |
| d) RGOB | | | Current | | |
| | | | Capital | | |
| | | | **d) RGOB** | | |
| | | | Current | | |
| | | | Capital | | |
| **Total Releases** | | | **TOTAL EXPENDITURE** | **0.00** | **0.00** |
| | | | | | |
| | | | **2. ADVANCES** | | |
| **Advance Received** | | | a) IFAD Loan | | |
| a) IFAD Loan | | | b) IFAD Grant | | |
| b) IFAD Grant | | | c) ASAP Grant | | |
| c) ASAP Grant | | | d) RGOB | | |
| d) RGoB | | | **3. Fund surrendered** | | |
| | | | a) IFAD Loan | | |
| | | | b) IFAD Grant | | |
| | | | c) ASAP Grant | | |
| | | | d) RGOB | | |
| | | | **4. CLOSING BALANCE** | | |
| | | | **a) Cash** | | |
| | | | | | |
| | | | **b) Bank** | | |
| | | | a) IFAD Loan | | |
| | | | b) IFAD Grant | | |
| | | | c) ASAP Grant | | |
| | | | d) RGOB | | |
| **Total** | **0.00** | **0.00** | **Total** | **#REF!** | **#REF!** |

**MINISTRY OF AGRICULTURE & FORESTS**
**COMMERCIAL AGRICULTURE & RESILIENT LIVELIHOODS ENHANCEMENT PROGRAMME**
**Statement of Expenditure (SOE)**

| Implementing Agencies | RGOB | | | IFAD Loan | | | IFAD Grant | | | ASAP Grant | | | Total Expenditure | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Cur. | Cap. | Total | Cur. | Cap. | Total | Cur. | Cap. | Total | Cur. | Cap. | Total | Cur. Total | Cap. Total |
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| TOTAL | - | - | - | - | - | - | | | | - | - | - | - | - |

**MINISTRY OF AGRICULTURE & FORESTS**
**COMMERCIAL AGRICULTURE & RESILIENT LIVELIHOODS ENHANCEMENT PROGRAMME**
**Fund Release Reconcilation for CARLEP From ..... To .....**

| Sl. No. | Release No. | Date | RGOB | | IFAD LOAN | | IFAD GRANT | | ASAP GRANT | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Current | Capital | Current | Capital | Current | Capital | Current | Capital |
| 1 | | | | | | | | | | |
| 2 | | | | | | | | | | |
| 3 | | | | | | | | | | |
| 4 | | | | | | | | | | |
| 5 | | | | | | | | | | |
| 6 | | | | | | | | | | |
| 7 | | | | | | | | | | |
| 8 | | | | | | | | | | |
| 9 | | | | | | | | | | |
| | | | | | | | | | | |
| | Total Release | | - | - | - | - | - | - | - | - |

**MINISTRY OF AGRICULTURE & FORESTS**
**COMMERCIAL AGRICULTURE & RESILEINT LIVELIHOOD ENHANCEMENT PROGRAMME**
***List of all Non-Expendable Items Procured by***

| Sl. No. | Office Equipments | Total Qty | Unit Price (Nu.) | Total Price (Nu.) | Remarks |
|---|---|---|---|---|---|
| | | | | | |
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## Annex 9: Designated Account reconciliation statement

**COMMERCIAL AGRICULTURE & RESILIENT LIVELIHOODS ENHANCEMENT PROGRAMME**

**Reconciliation of overall Receipt and Expenditure statement for the period ..... to ..... for IFAD GRANT**

**Amount in Ngultrum**

| Name of the Implementing Agency | Opening Balance | Fund received | Other Receipts | Advance | Total Fund | Expenditure | Closing Balance | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Cash | Bank | Cash Surrendered | Others | Advance | Total |
| | | | | | 0.00 | | | - | | | | 0.00 |
| | | | | | 0.00 | | | - | | | | 0.00 |
| | | | | | 0.00 | | | - | | | | 0.00 |
| | | | | | 0.00 | | | - | | | | 0.00 |
| | | | | | 0.00 | | | - | | | | 0.00 |
| | | | | | 0.00 | | | - | | | | 0.00 |
| | | | | | 0.00 | | | - | | | | 0.00 |
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| | | | | | | | | | | | | |
| **TOTAL** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## Annex 10: Checklist for Withdrawal Application

### *FORM 105 - CHECKLIST FOR WITHDRAWAL APPLICATION*

IFAD Financing No. L-I-824-BT WA No. Reporting period [from ……to ……]

| | |
|---|---|
| **FORM 100 - APPLICATION FOR WITHDRAWAL**<br>1. Sequential numbering of withdrawal application | Yes or No |
| 2. Withdrawal application amount tallies with sequentially numbered summary sheets | Yes |
| 3. Categories/subcategories charged according to schedule 2 of financing agreement | Yes |
| 4. Percentage of financing applicable for each category or subcategory | Yes |
| 5. Availability of funds in categories and the overall financing amount | Yes |
| 6. Currency of payment | Yes |
| 7. Completeness and accuracy of banking instructions | Yes |
| 8. Complete name and address of correspondent bank | Yes |
| 9. WA is signed by Authorized Representative | Yes |
| **STATEMENT OF EXPENDITURE**<br>1. Eligibility of expenditures claimed<br>(a) Within SOE financial ceiling | Yes |
| (b) Expenditures under specific category [-----] eligibility | Yes |
| 2. Form 102 signed by designated Programme Accountant, Programme Director, Authorized Representative | Yes |
| 3. Form 102 supported by signed Form 101 (for items reported in 2, but over the financial ceiling) | Yes |
| **DESIGNATED ACCOUNT – REPLENISHMENT REQUESTS**<br>1. Amount within ceiling figure agreed as a reasonable limit [-- US$ or --]; or per AWP/B period | Yes |
| 2. Amount at least equal to 20 per cent of the agreed limit; or per AWP/B programmeed requirements | Yes |
| 3. Amount agreed sufficient to cover a specific reporting period (revolving fund option) | Yes |
| 4. Exchange rate used | Yes |
| 5. Completeness of designated account banking and account details | Yes |
| 6. Enclosed designated account reconciliation and bank statements | Yes |
| **SUPPORTING DOCUMENTATION (attached when/if required)**<br>1. Copy of contract | Yes |
| 2. Copy of invoice, certified by Programme Director | Yes |
| 3. Copy of bank guarantee and performance guarantee (for advance payment) | No |
| 4. Copy of delivery receipt | No |
| 5. Copy of evidence of payment | Yes |
| 6. Completed Form 101 | Yes |
| 7. Completed Form 102 (A) | Yes |
| **PROCUREMENT**<br>1. Copy of 'no objection(s)' provided by IFAD (attached)<br>2. Copy of Contract Payment Monitoring Form(s) (attached) | No |
| **COMPLIANCE WITH CONDITION(S) FOR DISBURSEMENT**<br>1. In accordance with terms in section E of the Financing Agreement<br>2. In accordance with terms in the Letter to the Borrower/Recipient | Yes |

| | |
|---|---|
| **EXPENDITURE INCURRED/COMMITTED BEFORE PROGRAMME COMPLETION DATE**<br>1. Expenditure verified as eligible:<br>(a) contract signed before programme completion date<br>(b) goods delivered before programme completion date<br>(c) services completed and/or rendered before programme completion date | Yes |

**Remarks:**

**Prepared by: Programme Accounts Officer**
**Dated:**

**Certified by: Programme Director**
**Dated:**

## Annex 11: Sample financial statement

**COMMERCIAL AGRICULTURE & RESILIENT LIVELIHOODS ENHANCEMENT PROGRAMME**

**Overall Statement of Expenditure (SOE)**

| Implementing Agency | RGOB | | | IFAD Loan | | | IFAD Grant | | | ASAP Grant | | | Total Expenditure | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Current | Capital | Total | Current | Capital | Total | Current | Capital | Total | Current | Capital | Total | Current Total | Capital Total |
| | | | - | | | - | | | | | | - | - | - |
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| | | | | | | | | | | | | | | |
| TOTAL | - | - | - | - | - | - | | | | - | - | - | - | - |

## Annex 12: Sample Fixed Asset register

**( Name of Office)**
**FIXED ASSETS REGISTER**

**Description:**
**Specification:**
**Identification Number:**

**Base Cost** Nu……
Nu…
**Other expenses** ..
Nu…
**Total cost of acquisition** ..
**Cost Sheet Ref. No./**
**Vr.Ref.No……..**
**Date of commissioning……**

**Location**
1
2
3 ……

**Manufacturer/Contrators Name and Address……..**

**CATEGORY:**

| Financial year | Cost of Acquisition Nu. | Addition | | DISPOSED/TRANSFERRED | | | | Depreciation | Net Book Value Nu. | Initials of Property Officer | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ref. No. | Cost Nu. | Date of Disposal Transfer | Disposed/ transferred to | Ref. No. | Amount Nu. | | | | |
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## Annex 13: Sample form for Record of Contracts

**RECORD OF CONTRACTS**

**IFAD Financing No. ……** **Date: ……**
**Programme Title**
**……**

**Monthly Reporting Period……..**

**(Month/Year)** **Page No. ……..of ……**

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|---|---|---|---|---|---|---|---|---|---|---|
| Contract Serial No. | % of Financing | Type of Procurement | Date of Contract | Name & Address of Contractor/ Supplier | Description of Works, Goods, Consulting/ Other Services | Country of Origin | Performance, Contract Duration & Delivery Period | Contract Amount (in currency of the contract) | Category No. per Schedule 2 of IFAD Financing Agreement | Remarks & Date of IFAD 'No Objection' |
| | | | | | | | | | | |

**Certified by: ……** **Submitted by: ……**

**Programme Accountant** **Programme Director**

## Annex 14: Sample form for tracking contracts

**(Contract Number: as per contract register)**

Description of Contract:
Procurement File No.: Comp.: Contract Officer:
Date(s) of 'No Objection':
Name and Address of Supplier: Bank Details:

e-mail:
Telephone:

**Contract Summary**
**(ENTER CURRENCY)**

| Document | Contract Reference | No. | Amount | Dates (Start/End) |
|---|---|---|---|---|
| Original Contract | | | | |
| Amendment (AM-1) | | | | |
| Amendment (AM-2) | | | | |
| Amendment (AM-23) | | | | |
| **Total Amount** | | | **0** | |

**Bank Securities or Bonds (--Currency)**

| Document | Name of Financial Institution | Date | Amount | Expiry Date | Extension |
|---|---|---|---|---|---|
| Advance Payment | | | | | |
| Performance Bond | | | | | |
| Other | | | | | |

**Monitoring of Payments**
**(ENTER CURRENCY)**

| Payment Schedule | | Progress Certificate | | Payments Issued | | | | Balance Due on Contract | |
|---|---|---|---|---|---|---|---|---|---|
| Milestone | Expected Amount | No. | Date | Invoice No. | Payment Date | Amount Paid | Cheque or WA No. | | |
| | | | | | | | | | |
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| **Total Amount** | | | | | | **0** | | | |
| **Notes:** | | | | | | | | | |

## Annex 15: Staff and farmers groups/community training programme/ Calendar

| Training Topic | Proposed Year | | | | | Key responsibility |
|---|---|---|---|---|---|---|
| | 2015/ 2016 | 2016/ 2017 | 2017/ 2018 | 2018/ 2019 | 2019/ 2020 | |
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## Annex 16: Indicators for output, outcome and impact monitoring

## Annex 17: RIMS Indicators

### RIMS Indicators for CARLEP

| Sub Component | First Level Results / Indicators | Unit | Second Level Results/ Indicators | Rating[11] |
|---|---|---|---|---|
| Natural Resources (land and water) | People trained in infrastructure management (irrigation, roads) | Male | Likelihood of sustainability of groups managing infrastructure formed/strengthened | |
| | | Female | | |
| | Groups managing infrastructure formed/strengthened | Number | | |
| | People in groups managing infrastructure formed/strengthened | Male | | |
| | | Female | | |
| | Groups managing infrastructure with women in leadership position | Number | | |
| | Land under irrigation schemes constructed/rehabilitated | Ha | Effectiveness of productive infrastructure - Irrigation schemes | |
| | Rainwater harvesting system constructed/rehabilitated | Number | Likelihood of sustainability of productive infrastructure - Irrigation schemes | |
| | People trained in sustainable land management practices(SLM) | Male | Likelihood of sustainability of NRM groups formed and/ or strengthened | |
| | | Female | | |
| | Land under improved management practices (land development, etc..) | Ha | | |
| Agriculture Technology and Production | Gewog Staff as service providers trained | Male | Effectiveness: Improved performance of service providers | |
| | | Female | | |
| | People trained in crop production and technologies | Male | Effectiveness: Improved agricultural and livestock production | |
| | | Female | | |
| | People trained in livestock production and technologies | Male | | |
| | | Female | | |
| | People accessing advisory services facilitated by programme | Male | | |
| | | Female | | |
| | Households receiving animal health services | Number | | |
| | Crop/ livestock production groups formed/ strengthened | Number | | |
| | People in crop/ livestock production groups formed/ strengthened | Male | | |
| | | Female | | |
| | Crop/livestock production groups with women in leadership position | Number | | |
| Rural Financial Services /BOIC Fund | Saving and credit groups formed/strengthened | Number | Likelihood of sustainability of the credit/ savings groups formed/ strengthened | |
| | People in saving and credit groups formed/strengthened | Female | | |
| | Saving and credit groups with women in leadership position | Number | | |
| | Farmers/groups receiving production support fund | Number | | |
| | Farmers availing agricultural credit from financial institutions (BDBL) | Male | | |
| | | Female | | |
| | Farmers receiving social inclusion fund | Male | Sustainability: Improved performance of the financial institutions | |
| | | Female | | |
| Markets | People trained in post-production, processing and marketing | Male | Effectiveness: Producers benefiting from improved market access | |
| | | Female | | |

[11] Rating is from 1-6, 1 being Highly Unsatisfactory (for Effectiveness) or Very Weak (for Sustainability) and 6 being Highly Satisfactory (for Effectiveness) or Very Strong (for Sustainability).

| | | | | |
|---|---|---|---|---|
| | Storage facilities constructed/rehabilitated | Number | Likelihood of sustainability of market, storage, processing facilities<br>Likelihood of sustainability of the marketing groups formed and/ or strengthened. | |
| | Marketing groups formed/strengthened | Number | | |
| | People in marketing groups formed/strengthened | Male | | |
| | People in marketing groups formed/strengthened | Female | | |
| | Marketing groups with women in leadership position | Number | | |
| | Processing facilities constructed/rehabilitated | Number | | |
| | Marketing facilities constructed/rehabilitated | Number | | |
| Enterprise Development & Employment | People trained in income generating activities | Male | Effectiveness: creation of employment opportunities<br>Likelihood of sustainability of enterprises | |
| | | Female | | |
| | People receiving vocational training (CAHW, CAIT, RDTC trained etc…) | Male | | |
| | | Female | | |
| | People trained in business and entrepreneurship skills (bookkeeping, business plan development, marketing skills etc..) | Male | | |
| | | Female | | |
| Policy and community programming | Government officials and staff trained | Male | Effectiveness: promotion of pro-poor policies and institutions | |
| | Government officials and staff trained | Female | | |

## Annex 18: Template for AWPB

**PART I**

**Country:**

**Programme Title:**

**Programme Number:** *Loan Number:*

*Grant Number:*

**Financial year:**

**Planning period:**

**Year of implementation:**

**Total programme budget (*in USD):***

**Total expenditures to date (*in USD):***

**Date of loan effectiveness:**

**Date of programme start:**

**Programme duration:**

**Date of programme closing:**

**Date of latest Logframe revision:**

**Date of RIMS benchmark survey**:

**Date of RIMS mid-term survey**:

**Date of RIMS completion survey**:

**Date of Mid-Term Review:**

**Date of Completion Review:**

**A. Background**

**Government policies:**

**Implementation arrangements:**

**Target Group:**

**Production factors/local economic context:**

**A. Achievements to date and proposed implementation focus for upcoming year**

**Table 1 - Summary of main achievements to date**

| Component | % of achievement to date (estimation) | Focus for new AWPB period? (Yes/No) |
|---|---|---|
| Component 1: Market-led Agricultural Production | | |
| Component 2: Value Chain Development & Marketing | | |

| | | |
|---|---|---|
| Component 3: Institutional Support & Policy Development | | |
| Component 4: Programme Management, Coordination and M&E | | |

**Changes in objectives:**

**Changes in implementation strategy:**

**C. Costs and financing**

**Costs:**

**Financing:**
**Procurement Plan:**

**Procurement Process**

**A. Expected benefits and target group outreach**

**Table 2 – Estimated outreach by Target Group "category"**

**B. Implementation support needs**

| Capacity gap | Capacity gap & mitigation measures | | Implementation Support requirement | | |
|---|---|---|---|---|---|
| | Staff/person in need of capacity building | Proposed capacity building measures | Implementation support needed from | In which specific area is it needed? | When is it needed? |
| | | | | | |

**PART II**

**Table of Contents**

1. Summary of AWPB 2016-17
2. Detail AWPB 2016-17 (By Components)
3. Procurement Plan for Goods 2016-17
4. Procurement Plan for Works 2016-17
5. Procurement Plan for Services 2016-17

**Summary of Annual Work Plan and Budget (AWPB)**
**Financial year: July 2016 - June 2017)**
**Commercial Agriculture & Livelihood Enhancement Programme, MoAF**

| Sl. No. | Components/Sub-components/Activities | AWPB 2016-2017 | | Funding Source for AWPB 2016-17 | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Quantity | Budget (Nu.mil) | % Funding | IFAD Loan | IFAD Grant | ASAP Grant | RGoB | FCBL | Beneficiary |
| | | | | | | | | | | |
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**Detail Annual Workplan & Budget**
**Financial Year: July 2016-June 2017**
**Commercial Agriculture & Resilient Livelihoods Enhancement Programme, MoAF**

| Sl. No. | Components /Sub-components/ Activities | Indicators | Unit | Total Prog. Target | | AWPB 2016-2017 | | Funding Source for AWPB 2016-17 | | | | | | | Timeframe | | | | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Quantity | Budget (Nu.mil) | Quantity | Budget (Nu.mil) | % Funding | IFAD Loan | IFAD Grant | ASAP Grant | RGoB | FCBL | Beneficiary | Q1 | Q2 | Q3 | Q4 | |
| | | | | | | | | | | | | | | | | | | | |
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**PROCUREMENT PLAN**

**Procurement Plan for Goods**

**Procurement Plan for Works**

**Procurement Plan for Services**

## Annex 19: Template for Annual Progress Report

**Bhutan**
[*Insert Name of Programme] – [Insert loan/grant#]*
**Annual Programme Progress Report**[12]
*[Insert Reference period –i.e. July 2015 to June 2016]*

*[Insert pictures (s) showing some activities of the programme undertaken during the reporting period]*

***Prepared by***: [name of the M&E Officer]

***Date***: [insert date of submission of the report]

***Outline of Progress Report:***

Table of content
Currency equivalent, weights & measures
Abbreviations & definitions
Map of the country/programme areas

A. Programme Background
B. Changes in Programme Implementation context and design
C. Progress and Performance, by Components[13]
    - C.1.1. Activities and Outputs: main achievements
    - C.1.2. Progress towards Component Outcome (s)
    - C.1.3. Convergence and partnership
    - C.1.4. Grant activities
    - C.1.5. Constraints/bottlenecks affecting Component Progress and Actions Taken
D. Progress towards programme purpose and goal
E. Programme Sustainability
F. Programme Management
    - F.1. Programme Steering & Coordination Management
    - F.2. Human Resource Management
    - F.3. Financial Management
    - F.4. Procurement
    - F.5. Monitoring & Evaluation, communication & knowledge management
    - F.6. Gender
G. Follow-up of last mission recommendations
H. Summary of Lessons Learned
I. Conclusions and Recommendations for follow-up

**Annexes**

1. Physical progress measured against AWPB
2. Financial progress
3. List of staff
4. List of Programme Partners
5. Highlights of most significant innovations/case studies of successful interventions.
6. Photo gallery

……..

[12] Semi-annual or Half-yearly progress report may use the same format; but in practice project may prefer to limit to reporting only the AWPB performance (physical and financial) to guide the project management and inform IFAD.
[13] Progress data should be both that of current year's and cumulative.

**MAIN REPORT**

## A. Programme Background

***[****Provide a concise description of the basic background information and data regarding the programme. In particular:*

- *Programme goal and specific objectives*
- *Programme components/sub-components*
- *Target group and targeted area*
- *Main implementing partners*
- *Implementation strategy*
- *Main implementing issues addressed by the programme*
- *Implementing period and status of implementation (pre or post –Mid-Term)*
- *Total Programme Costs*

*This same text can be used later indifferent progress reports unless major changes occur in programme design –in that case this section should be revised]*

## B. Changes in Programme Implementation context and design

[*Highlight changes and major events occurred in the programme implementation context during the period under review (i.e., changes in external factors, political stability….). Mitigating measures identified to address these events and changes should be reported. The section should also summarized changes occurred in programme design, and their justification. If no change occurred, just write that on major changes need to be reported]*

## C. Progress and Performance, by Components

*[The objective of this section is to provide a **summary** description of the overall programme performance. It should provide **concise and to the point information** on main achievements, shortcomings, issues faced and corrective action taken in terms of programme performance and progress towards desired results. In particular, for each component, the reader should gain understanding of:*

- *Strong aspects and achievements against objectives;*
- *Main shortcomings, if any;*
- *Major implementation issues and /or risk that affect programme implementation; and*
- *Key actions to be undertaken]*

### C.1.1 Activities and Outputs: main achievements

*[Provide a brief overview of the main activities undertaken during the period under review. As details on physical progress measured against annual targets will be provided in Annex-1, there is no need to repeat all data in this section. Instead, highlight the following: Main areas of interventions for which physical achievements matched planned targets. E.g., "training in crop production completed as for planned figures"; " construction/ rehabilitation of irrigation schemes was completed as planned"…).]*
*[Areas of interventions for what outputs achieved did not match planned target. Example: " the number of SHGs formed in target areas was 20% below expectations". Explanations of deviations from planned targets should be provided]*

*[Summary tables and graphs /figures can be added, in order to illustrate the information above]*

*[Summarize the main problems affecting implementation progress in the Component under review. Any action taken during the period under review to face these issues should also be mentioned]*

**C.1.2 Progress towards Component Outcome (s)**

According to the programme log frame, the expected outcome(s) of component (x) is (are):
[*This section will become increasingly relevant as programme advances in its lifecycle. Programmes in the first of second year of implementation will not be expected to report significantly on progress towards outcomes, as it would be too early for substantial reporting. Yet, all programmes are invited to report any relevant information, reflection, or consideration regarding progress towards component objectives as described in programme Log Frames and design documents. Programme approaching or past Mid-Term will be expected to increasingly focus on outcomes and provide updated information on progress towards desired objectives for each component, on unintended results, on factors that might jeopardize the achievements of component objectives, and on action s to be taken for improvement.]*

*The information and data included in this section should contribute to responding to the performance questions related to the components outcome. It should provide the evidence based on which the component performance is assessed.]*

*[Also describe how the information was collected via annual participatory M & E exercises, annual surveys, feedback collected from partners and programme beneficiaries, or other tools such as case studies or qualitative assessments. If during the period under review the programme has undertaken a mid-term review, the main findings of the exercise should be summarized in this section, if of relevance for the component described. Detailed information on outcome indicators will also be provided in Annex1.]*
*[Summarize the main problems affecting achievement of objectives in the Component under review. Any action taken during the period under review to face these issues should also be mentioned]*

**C.1.3 Convergence and partnership**
*[Describe convergence achieved with other programmes/programmes/schemes of government and various other agencies/departments the programme has worked with over the reporting period including technical partnership, etc.]*

**C. 1.4 Grant activities**
*[Report here the IFAD grant programme activities such as work plan and progress including outputs and outcomes with grant programmes such as work with ICRISAT, etc.]*

**C.1.5 Constraints/bottlenecks affecting Component Progress and Actions Taken**

**D. Progress towards programme purpose and goal**
*[Provide information on progress towards programme overall purpose and contribution towards programme goal (i.e: " poverty reduction in targeted areas". This section will be particularly relevant for programmes that have passed mid-term. For example, if the programme has undertaken a mid-term impact assessment or survey, findings can be compared with available baseline data to assess progress. PME and other qualitative tools can also provide relevant information,; relevant secondary data (such as, for example, unemployment rates in targeted areas, school enrolment rates, mother and child health data)can be used]*

**E. Programme Sustainability**
*[Provide information and share consideration on the likelihood of sustainability of programme impact and benefits on targeted groups, on factors which might affect sustainability, and on corrective actions taken to mitigate the risks.Any action taken or results achieved during the period under review to implement programme exit strategy should be described in this section.]*

## F. Programme Management

### F.1. **Programme Steering and Coordination Management**

[*Provide summary information on Programme Steering Committee meetings organised and key decisions taken on programme management at the PMO level and coordination meetings at the District/MPA levels; may also provide names of PSC members]*

### F.2. **Human Resource Management**

[ *Highlight any important events or changes occurred in the area of human resource. This can include staff recruitment turnover, and retention, staff training, new incentive systems established. Any assessment of staff performance under taken should be mentioned and briefly summarized here.]*

### F.3. **Financial Management**

[*Provide summary information on financial progress. Detail data of financial performance will be provided in annex. This section therefore provide a short overview of disbursement of costs and financing for the period under review. It should highlight any divergence of expenses versus budgets and reasons for deviations. If useful financial summary tables should be used to complement Annex 2]*

### F.4. **Procurement**

*[Review progress of procurement carried out during the reporting period. Deviations from the initial procurement plan should be highlighted and explained. Also summarize key procurement made on behalf of the programme and their status at the end of the reporting period. This will include all procurement of goods works and consulting and other services undertaken by the programme since programme start up] Summary table can be used to synthesized information. ]*

### F.5. **M&E, Communications, and Knowledge Management**

*[Summarize main activities undertaken for programme M&E. In particular surveys participatory M&E activities case studies or qualitative assessments undertaken during the period under review should be briefly described. Include a list of documentation produced during the reporting period and a short description of any knowledge sharing event organized or attended by programme staff. Any other effort to share and exchange information and lessons learned should be highlighted. Relevant materials produced can be attached to the report*. *Provide information on how the programme has followed up with the recommendations of the last supervision mission].*

### F.6. **Gender :***Brief outline of the gender strategy of the programme; gender mainstreaming activities, outputs and outcomes, issues associated with gender policy, output and outcome based gender issues; gender impacts (intended and unintended); gender issues addressed in the current budget and its progress; and capacity building related to empowerment of women and gender mainstreaming in the programme.*

## G. Summary of Lessons Learned

*High light the main lessons learned and their implication in progress implementation.*

## H. Conclusions and Recommendations for follow-up

*[Highlight recommendations and corrective actions to take during the next reporting period. Specify how, who and when for each action.]*

## Annex 20: Template for Annual Outcome Survey Report

### Outline for Annual Outcome Survey Report[14]

Table of Contents
List of Tables
List of Figures
Abbreviations
Executive Summary
*(may also contain a comparative summary figures of programme and non-programme villages in a table form)*

**PART I: INTRODUCTION**

1.1 An introduction of the programme
1.1.1 Socio-economic features of the programme areas and people
1.1.2 Programme targets, components and activities
1.1.3 Key objectives and outcomes with impacted results
1.2 Introduction of the Annual Outcome Survey
1.2.1 Rationale of the AOS
1.2.2 Key thematic contents in the AOS
1.3 Methodology of the AOS
1.3.1 Sampling method
1.3.2 Survey implementation
1.3.3 Data analysis

**PART II: RESULTS OF THE ANNUAL OUTCOME SURVEY**

2.1 Description of the households in the survey (both from programme and non-programme areas)

2.2 Survey evaluation on the results and impacts of the programme activities
- 2.2.1 Participation in programme activities
- 2.2.2 Livelihoods and income sources
- 2.2.3 Food and nutritional security
- 2.2.4 Access to health and health status of family
- 2.2.5 Agricultural production and irrigation
- 2.2.6 Livestock and fisheries
- 2.2.7 Access to markets
- 2.2.8 Access to rural financial services
- 2.2.9 Enterprise development and employment
- 2.2.10 Access to natural resources
- 2.2.11 Women empowerment

**PART III: CONCLUSION**

1.1 Contribution of the programme to general development goal of the Eastern Region / Country / 11th Five Year Plan Results
1.2 Extent of poor people benefiting from the programme
1.3 Extent of women benefiting from the programme
1.4 Critical gaps identified and how the programme intends to address in the coming year

[14] A few relevant photographs (with appropriate captions) enhances the overall quality and content of the Survey Report.

## Annex 21: Gender and social inclusion strategy

**1. Introduction** (0.5 or 3 short paragraphs page)

**General**: This section may include general gender situations in Bhutan and programme areas; government policies in addressing gender issues and gender mainstreaming; emerging scenario on women empowerment; etc.

**Context**: The context section should include a very short summary description of your programme, its size, implementing partners, objectives, and components. You might also like to include a description of the main achievements of the programme in terms of reaching its objectives as well as the main challenges in achieving the objectives. Reference could be made to the Bhutan Gender Equality Diagnostics study for selected sectors (that includes a chapter on Agriculture and rural livelihoods), the Bhutan gender Policy Note, IFAD Policy on Gender and Women's Empowerment and the GM strategy for MAGIP.

**Rationale**: The rationale should be an explanation of why your programme needs to address gender, and why you expect having a Gender and social inclusion strategy will help achieve programme objectives. Objectives should be clearly highlighted. They could include the conviction that investment in women will pay off in terms of improved programme performance (deeper and more sustainable impacts), etc., as well as the requirements of the Government and that of IFAD.

**2. Vision or Goal** (30-40 words or less!)

This should be a statement of the ideal situation that you want to achieve as a result of gender *mainstreaming at one level beyond above or beyond your control. It should align directly with the achievement of your programme goal. What will the programme deliver from a gender perspective.*

**3. Concepts**

*This section can briefly outline some key gender and social inclusion concepts*

**4. Gender Mainstreaming within programme activities** (3-5 pages)

*This section will detail out all the requirements to establish a more gender responsive programme delivery mechanism. Each sub component will be elaborated here and will have a check list to help field level implementers to ensure that their implementation is gender responsive. It should look at capacity building/trainings for community people, the quality of the reports that need to be generated, the knowledge products developed etc. Matrix outlining the strategies and action plans for gender and social inclusion would be useful.*

**4. Gender mainstreaming at the organizational level** ( 3 pages)

*This section should detail what are the requirements to establish gender responsive systems within the organization that will have an impact at the field level. It will look at programme staff gender sensitization, selection of implementing partners, targeting performance, Human Resource service rules, etc.*

**5. Implementation** (2 pages)

*This section should detail roles and responsibilities. It should also provide a time frame for the implementation of the strategy.*

**6. Costs and financing** (2 pages)

*This section should include an estimate of how much you expect it to cost to implement your strategy within the specific time frame, and how you will cover those costs. It should indicate whether costs will be covered through programme financing, in-kind contributions, extra-budgetary resources, or other.*

**7. Risk Management** ( 0.5 page )

*This section should outline what the possible risks are that might impede the successful implementation of your programme gender strategy, for example frequent turnover of staff. It should also say what will be done to mitigate or minimise those risks, such as investment in long term staff development and promotion from within.*

**8. Results Framework** (1 page)

*A results framework is a good tool for communicating the essence of your strategy and monitoring. The results framework can be developed using the following suggested format.*

| Objective | Strategy | Activities | Required inputs | Expected output | Indicators | Assumptions | Time | Responsibility |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

## Annex 22: Knowledge Management strategy

### KNOWLEDGE MANAGEMENT STRATEGY OUTLINE[15]

1. **Introduction** (0.5 pages)

***a. Context***

*The context section should include a very short summary description of your programme, its size, implementing partners, objectives, components, at what point it is in the programme life. You might also like to include a description of the main achievements of the programme to date in terms of reaching its objectives as well as the main challenges the programme is facing at present. The resources available are the Asia and Pacific Region KM Strategy and the IFAD KM Strategy*
*http://www.ifad.org/pub/policy/km/e.pdf*

***b. Rationale***

*The rationale should be an explanation of why your programme needs to manage knowledge, and why you expect having a KM strategy will help achieve programme objectives. Reasons will vary according to the stage in the programme life cycle and the impetus behind the strategy. They could be IFAD requirements, government requirements, a conviction that investment in KM will pay off in terms of performance, a need to capture certain kinds of knowledge for policy makers, a desire to offer something to partners, an interest in identifying innovations for up scaling, etc.*

2. **Lessons Learned** (1 page)

*This section may contain any experiences in your programme or ongoing programme or in your country programme related to knowledge management. These may be experiences in either learning or sharing. It could even describe lessons learned as the result of the absence of learning or sharing. The strategy that follows should be one that can clearly be seen to have taken in to account those lessons and responded to them in some way.*

3. **Vision or Goal** (30 words or less!)

*This should be a statement of the ideal situation that you want to achieve at one level beyond above or beyond your control. It should align directly with the achievement of your programme goal. An example of a possible KM Strategy goal is "Development of value chains to reduce poverty reduction in ILRP programme results in a clear understanding within ministry of agriculture of how to invest in the development of value chains in other provinces "or "All fisheries agency staff working in Outer Reef islands can find out what they need to know to assist the poorest fisherfolk."*

4. **Expected Outcomes** (0.5 pages)

*This section should describe what you can realistically hope to achieve with the successful implementation of the strategy in terms of change in people's behaviour and attitudes, or change in physical, social or economic conditions. An example of an expected outcome that describes behavioural change might be, "local government looks to the programme as a means of learning how to improve services to its farming households." Or, "programme implementation delays related to incomplete knowledge of procurement and disbursement procedures are eliminated".*

5. **Activities and Outputs** (2.0 pages)

***a. Knowledge Management Culture***

[15] Adopted from JTELP and OTELP KM Strategy

*Here you should describe what activities your programme will undertake to create a culture of knowledge management. Outline the key measures that your programme will take to induce behaviour that leads to learning, sharing and helping others to learn. In doing this you should describe how your programme will provide incentives to staff, partners and stakeholders to behave pro-actively with respect to learning and sharing. Typically this section may cover recognition, terms of reference, training, and performance evaluation.*

***b. Knowledge Management Processes***

*This section should describe activities that your programme will implement to manage knowledge in connection with normal business processes in programme implementation. The output associated with each activity should also be described. This section might also include description of activities related to other processes you introduce specifically to manage knowledge. For examples, of activities and outputs see part…*

***c. Knowledge Management Infrastructure***

*This section should describe the means you will use to capture, store, share and use knowledge. Mostly it should refer to physical infrastructure. The section with this title in the IFAD knowledge management strategy describes information technology, like the internet and the office intranet. It also refers to information management procedures related to their use.*

***d. Partnerships for Knowledge Management***

*This section should describe the partnerships that your programme will build and rely on in its KM activities. It should highlight those partners whom you will work with towards your expected KM outcomes, and those whom you will be able to learn from or share with.*

***e. KM products dissemination and communication***

*This section will describe how the programme intends to disseminate the various knowledge products and undertake communication based on different target audiences.*

***f. Staff capacity building***

*This section will describe various capacity building programme needs and activities to be undertaken.*

6. **Implementation** (1 page)

***a. Implementation steps and arrangements***

*This section should detail roles and responsibilities. It should also provide a time frame for the implementation of the strategy. In other words, you should specify who will do each activity described above, and by when.*

***b. Costs& Financing (0.5 pages)***

*This section should include an estimate of how much you expect it to cost to implement your strategy within the specific time frame, and how you will cover those costs. It should indicate whether costs will be covered through programme financing, in-kind contributions, extra-budgetary resources, or other.*

**7. Risk Management ( 0.5 pages )**

*This section should outline what the possible risks are that might impede the successful implementation of your programme KM strategy, for example frequent turnover of staff. It should also say what will be done to mitigate or minimise those risks, such as investment in long term staff development and promotion from within.*

**8. Logical framework or Results Framework (1.0 page)**

*A results framework or a logical framework is a good tool for communicating the essence of your strategy and monitoring*

## Annex 23: Key M&E formats

### Physical Progress Measured against AWPB including RIMS indicators

| Sl. No. | Components/ Sub-components/ Activities | Indicators | Unit | Total Prog. Target (Appraisal) | | AWPB 2016-17 | | Progress achievement | | Cumulative Achievement | | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Quantity | Budget (Nu.mil) | Target | Budget (Nu.mil) | Physical | Financial (Nu. mil) | Physical | Financial (Nu. Mil) | |
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## Annex 24: Key compliance chart with dates for submission

| Key activities | July | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Annual Progress Performance Review | | | | | | | | | | | | |
| AWPB preparation and submission | | | | | | | | | | | | |
| Annual Progress Report submission | | | | | | | | | | | | |
| Half-yearly Progress Report | | | | | | | | | | | | |
| Annual RIMS Report submission | | | | | | | | | | | | |
| Annual Outcome Survey Report submission | | | | | | | | | | | | |
| Quarterly Results Report Preparation | | | | | | | | | | | | |
| Quarterly Review Meetings at PMO | | | | | | | | | | | | |
| PSC / Coordination meeting | | | | | | | | | | | | |
| Half yearly review meeting at Dzongkhag | | | | | | | | | | | | |
| Data Collection for physical and financial progress | | | | | | | | | | | | |

## Annex 25: List of NPSC, RPIC, important contact numbers/address, etc.

### List of National Programme Steering Committee (NPSC)

| Sl. No. | Name & Designation | Responsibility | Contact No. | E-mail ID |
|---|---|---|---|---|
| 1 | Dasho Secretary, MoAF | Chairman | | |
| 2 | Director General, DoA, MoAF | Member | | |
| 3 | Director General, DoL, MoAF | Member | | |
| 4 | Director, DAMC, MoAF | Member | | |
| 5 | CEO, FCBL | Member | | |
| 6 | Representative from DPA, MoF | Member | | |
| 7 | Representative from GNHC | Member | | |
| 8 | Chief, PPD, MoAF | Member | | |
| 9 | Programme Director, CARLEP | Member Secretary | | |

### List of Regional Programme Implementation Committee (RPIC)

| Sl. No. | Name & Designation | Responsibility | Contact No. | E-mail ID |
|---|---|---|---|---|
| 1 | Dzongdag, Lhuentse | | | |
| 2 | Dzongdag, Mongar | | | |
| 3 | Dzongdag, Pema Gatshel | | | |
| 4 | Dzongdag, Samdrup Jongkhar | | | |
| 5 | Dzongdag, Trashigang | | | |
| 6 | Dzongdag, Trashi Yangtse | | | |
| 7 | PD, RDC Wengkhar | | | |
| 8 | PD, RLDC Kanglung | | | |
| 9 | Regional Marketing Coordinator, RAMCO | | | |
| 10 | DAO, Lhuentse | | | |
| 11 | DAO, Mongar | | | |
| 12 | DAO, Pema Gatshel | | | |
| 13 | DAO, Samdrup Jongkhar | | | |
| 14 | DAO, Trashigang | | | |
| 15 | DAO, Trashi Yangtse | | | |
| 16 | DLO, Lhuentse | | | |
| 17 | DLO, Mongar | | | |
| 18 | DLO, Pema Gatshel | | | |
| 19 | DLO, Samdrup Jongkhar | | | |
| 20 | DLO, Trashigang | | | |
| 21 | DLO, Trashi Yangtse | | | |
| 22 | DPO, Lhuentse | | | |
| 23 | DPO, Mongar | | | |
| 24 | DPO, Pema Gatshel | | | |
| 25 | DPO, Samdrup Jongkhar | | | |
| 26 | DPO, Trashigang | | | |
| 27 | DPO, Trashi Yangtse | | | |
| 28 | AO, Lhuentse | | | |
| 29 | AO, Mongar | | | |
| 30 | AO, Pema Gatshel | | | |
| 31 | AO, Samdrup Jongkhar | | | |
| 32 | AO, Trashigang | | | |
| 33 | AO, Trashi Yangtse | | | |
| 34 | 2 Gups | | | |
| 35 | Accounts Officer, CARLEP | | | |
| 36 | Accountant, CARLEP | | | |
| 37 | Component Manager (Agriculture) | | | |
| 38 | Component Manager (Livestock) | | | |

| | | | | |
|---|---|---|---|---|
| 39 | Component Manager (Marketing) | | | |
| 40 | Component Manager (Value Chain) | | | |
| 41 | M&E and Gender Officer | | | |
| 42 | Asstt. KM, Gender & M&E Officer | | | |
| 43 | PD, CARLEP | | | |

## Annex 25: Detailed Cost Tables

# Annex 1.1: Market-led Agricultural Production

| | | Quantities | | | | | | | | Unit Cost (US$ '000) | Base Cost (US$ '000) | | | | | | | | Totals including Contingencies (US$ '000) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Unit | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Total | | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Total | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Total |
| **I. Investment Costs** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **A. Output 1.1: Increased Production Resilience, Diversification and Innovation** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **1. Climate Smart Agriculture Production and Management** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Upgrading of existing farmer groups /a | lps | - | 1 | 1 | - | - | 1 | - | - | 3 | 5 | - | 5.0 | 5.0 | - | - | 5.0 | - | - | 15.0 | - | 6.0 | 6.0 | - | - | 6.0 | - | - | 18.0 |
| Training of extension agents | lps | - | 1 | - | - | - | 1 | - | - | 2 | 12 | - | 12.0 | - | - | - | 12.0 | - | - | 24.0 | - | 14.4 | - | - | - | 14.4 | - | - | 28.8 |
| Production inputs for farm resilience and diversification | lps | - | 1 | 1 | 1 | - | - | - | - | 3 | 20 | - | 20.0 | 20.0 | 20.0 | - | - | - | - | 60.0 | - | 30.6 | 33.0 | 35.5 | - | - | - | - | 99.1 |
| Production support fund | lps | | | | | | | | | | | - | 100.0 | 100.0 | 50.0 | - | - | - | - | 250.0 | - | 109.1 | 109.1 | 54.5 | - | - | - | - | 272.7 |
| **Subtotal** | | | | | | | | | | | | - | 137.0 | 125.0 | 70.0 | - | 17.0 | - | - | 349.0 | - | 160.1 | 148.1 | 90.1 | - | 20.4 | - | - | 418.7 |
| **2. Innovation through permaculture and biogas** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **a. Phase 1** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Farm level rainwater harvesting infrastructure | unit | - | 12 | - | - | - | - | - | - | 12 | 0.2 | - | 2.4 | - | - | - | - | - | - | 2.4 | - | 3.4 | - | - | - | - | - | - | 3.4 |
| Seed and seedlings | unit | - | 12 | - | - | - | - | - | - | 12 | 0.2 | - | 2.4 | - | - | - | - | - | - | 2.4 | - | 3.7 | - | - | - | - | - | - | 3.7 |
| Tools for permaculture | unit | - | 12 | - | - | - | - | - | - | 12 | 0.1 | - | 1.2 | - | - | - | - | - | - | 1.2 | - | 1.7 | - | - | - | - | - | - | 1.7 |
| Nursery set up | unit | - | 1 | - | - | - | - | - | - | 1 | 1 | - | 1.0 | - | - | - | - | - | - | 1.0 | - | 1.5 | - | - | - | - | - | - | 1.5 |
| Training course on permaculture | session | - | 1 | - | - | - | - | - | - | 1 | 26 | - | 26.0 | - | - | - | - | - | - | 26.0 | - | 34.2 | - | - | - | - | - | - | 34.2 |
| Permaculture materials & translation | unit | - | 1 | - | - | - | - | - | - | 1 | 4 | - | 4.0 | - | - | - | - | - | - | 4.0 | - | 4.8 | - | - | - | - | - | - | 4.8 |
| Biogas digester | unit | - | 12 | - | - | - | - | - | - | 12 | 0.5 | - | 6.0 | - | - | - | - | - | - | 6.0 | - | 9.2 | - | - | - | - | - | - | 9.2 |
| TA biogas | unit | - | 1 | - | - | - | - | - | - | 1 | 6 | - | 6.0 | - | - | - | - | - | - | 6.0 | - | 7.9 | - | - | - | - | - | - | 7.9 |
| **Subtotal** | | | | | | | | | | | | - | 49.0 | - | - | - | - | - | - | 49.0 | - | 66.4 | - | - | - | - | - | - | 66.4 |
| **b. Phase 2** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Farm level rainwater harvesting infrastructure | unit | - | - | - | - | 125 | 125 | 125 | 125 | 500 | 0.2 | - | - | - | - | 25.0 | 25.0 | 25.0 | 25.0 | 100.0 | - | - | - | - | 44.9 | 48.5 | 52.4 | 56.6 | 202.3 |
| Seed and seedlings | unit | - | - | - | - | 125 | 125 | 125 | 125 | 500 | 0.2 | - | - | - | - | 25.0 | 25.0 | 25.0 | 25.0 | 100.0 | - | - | - | - | 47.9 | 51.6 | 55.6 | 60.0 | 215.1 |
| Tools for permaculture | unit | - | - | - | - | 125 | 125 | 125 | 125 | 500 | 0.1 | - | - | - | - | 12.5 | 12.5 | 12.5 | 12.5 | 50.0 | - | - | - | - | 21.9 | 23.7 | 25.5 | 27.5 | 98.6 |
| Nursery set up | unit | - | - | - | - | 10 | - | - | - | 10 | 1 | - | - | - | - | 10.0 | - | - | - | 10.0 | - | - | - | - | 19.2 | - | - | - | 19.2 |
| Biogas digester | unit | - | - | - | - | 200 | 200 | 200 | 200 | 800 | 0.2 | - | - | - | - | 40.0 | 40.0 | 40.0 | 40.0 | 160.0 | - | - | - | - | 76.6 | 82.6 | 89.0 | 95.9 | 344.1 |
| Refresher training course on permaculture | unit | - | - | - | - | 1 | - | 1 | - | 2 | 8.5 | - | - | - | - | 8.5 | - | 8.5 | - | 17.0 | - | - | - | - | 14.2 | - | 16.7 | - | 30.9 |
| Permaculture materials & translation | lps | | | | | | | | | | | - | - | - | - | 10.0 | - | - | - | 10.0 | - | - | - | - | 12.0 | - | - | - | 12.0 |
| **Subtotal** | | | | | | | | | | | | - | - | - | - | 131.0 | 102.5 | 111.0 | 102.5 | 447.0 | - | - | - | - | 236.7 | 206.3 | 239.2 | 240.0 | 922.1 |
| **Subtotal** | | | | | | | | | | | | - | 49.0 | - | - | 131.0 | 102.5 | 111.0 | 102.5 | 496.0 | - | 66.4 | - | - | 236.7 | 206.3 | 239.2 | 240.0 | 988.5 |
| **3. Innovation through ICTs** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hand-held tablets, softw are and soil test kits | unit | - | 100 | - | - | - | - | - | - | 100 | 0.3 | - | 30.0 | - | - | - | - | - | - | 30.0 | - | 42.1 | - | - | - | - | - | - | 42.1 |
| Training on tablet-based soil monitoring technology | lps | - | 2 | 1 | 1 | - | - | - | - | 4 | 7 | - | 14.0 | 7.0 | 7.0 | - | - | - | - | 28.0 | - | 16.8 | 8.4 | 8.4 | - | - | - | - | 33.6 |
| **Subtotal** | | | | | | | | | | | | - | 44.0 | 7.0 | 7.0 | - | - | - | - | 58.0 | - | 58.9 | 8.4 | 8.4 | - | - | - | - | 75.7 |
| **4. Increased outreach of extension services** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **a. Strengthening and expansion of the lead farmer model** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Training of trainers (ToT) /b | event | 1 | - | 1 | - | 4 | 4 | 4 | - | 14 | 5.45 | 5.5 | - | 5.5 | - | 21.8 | 21.8 | 21.8 | - | 76.3 | 6.6 | - | 6.6 | - | 26.2 | 26.2 | 26.2 | - | 91.6 |
| Training of lead farmers /c | lps | 1 | 1 | 1 | 1 | 10 | 10 | 10 | - | 34 | 4 | 4.0 | 4.0 | 4.0 | 4.0 | 40.0 | 40.0 | 40.0 | - | 136.0 | 4.8 | 4.8 | 4.8 | 4.8 | 48.0 | 48.0 | 48.0 | - | 163.2 |
| Development of training material and field manuals | lps | 1 | - | - | - | 1 | - | - | - | 2 | 4 | 4.0 | - | - | - | 4.0 | - | - | - | 8.0 | 4.8 | - | - | - | 6.7 | - | - | - | 11.6 |
| Farmer-to-farmer trainings | lps | 1 | 1 | 1 | 1 | - | - | - | - | 4 | 16.8 | 16.8 | 16.8 | 16.8 | - | - | - | - | - | 67.2 | 20.2 | 20.2 | 20.2 | 20.2 | - | - | - | - | 80.6 |
| Lead model scaling-up training | lps | - | - | - | - | 1 | 1 | 1 | - | 3 | 4 | - | - | - | - | 4.0 | 4.0 | 4.0 | - | 12.0 | - | - | - | - | 4.8 | 4.8 | 4.8 | - | 14.4 |
| Farmer field festivals | lps | - | 1 | - | - | - | - | - | - | 2 | 13.6 | - | 13.6 | - | 13.6 | - | - | - | - | 27.2 | - | 16.3 | - | - | - | - | - | - | 32.6 |
| Workshops (planning, review, evaluation) | event | 1 | 1 | 1 | 1 | - | - | - | - | 4 | 2.7 | 2.7 | 2.7 | 2.7 | - | - | - | - | - | 10.8 | 3.3 | 3.6 | 3.8 | 4.2 | - | - | - | - | 14.9 |
| Documentation and systematization | lps | - | - | 1 | 1 | - | - | 1 | - | 3 | 7 | - | - | 7.0 | 7.0 | - | - | 7.0 | - | 21.0 | - | - | 10.0 | 10.8 | - | - | 13.7 | - | 34.5 |
| **Subtotal** | | | | | | | | | | | | 33.0 | 37.1 | 36.0 | 44.1 | 69.8 | 65.8 | 72.8 | - | 358.5 | 39.6 | 44.8 | 45.3 | 86.3 | 79.0 | 92.7 | - | 443.4 |
| **b. Demonstration inputs and equipment for lead farmers** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Production inputs | lps | 1 | 1 | 1 | 1 | - | - | - | - | 4 | 9.875 | 9.9 | 9.9 | 9.9 | 9.9 | - | - | - | - | 39.5 | 14.0 | 15.1 | 16.3 | 17.5 | - | - | - | - | 63.0 |
| Production inputs (PBAS2) | lps | - | - | - | - | 10 | 10 | 10 | - | 30 | 6.397 | - | - | - | - | 64.0 | 64.0 | 64.0 | - | 191.9 | - | - | - | - | 122.5 | 132.0 | 142.3 | - | 396.9 |
| Poly-tunnels | unit | - | 5 | 10 | 20 | - | - | - | - | 35 | 0.7 | - | 3.5 | 7.0 | 14.0 | - | - | - | - | 24.5 | - | 4.9 | 10.6 | 22.8 | - | - | - | - | 38.3 |
| **Subtotal** | | | | | | | | | | | | 9.9 | 13.4 | 16.9 | 23.9 | 64.0 | 64.0 | 64.0 | - | 255.9 | 14.0 | 20.0 | 26.9 | 40.4 | 122.5 | 132.0 | 142.3 | - | 498.1 |
| **Subtotal** | | | | | | | | | | | | 42.8 | 50.5 | 52.8 | 68.0 | 133.8 | 129.8 | 136.8 | - | 614.4 | 53.7 | 64.9 | 72.2 | 126.8 | 208.2 | 211.0 | 235.0 | - | 941.5 |
| **5. Resilient and water use efficient irrigation development** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **a. Training on climate resilie nt irrigation** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| District engineers and extension agents (design and construction) | lps | - | 1 | 1 | - | - | - | - | - | 1 | 11.8 | - | 11.8 | - | - | - | - | - | - | 11.8 | - | 14.2 | - | - | - | - | - | - | 14.2 |
| Water Users Associations (O&M) | lps | - | 1 | 1 | - | - | - | - | - | 3 | 1.3 | - | 1.3 | 1.3 | 1.3 | - | - | - | - | 3.9 | - | 1.6 | 1.6 | 1.6 | - | - | - | - | 4.7 |
| Preparation of manual for upgrading irr. engineering norms /c | lps | - | 1 | 1 | - | - | - | - | - | 1 | 20 | - | 20.0 | - | - | - | - | - | - | 20.0 | - | 24.0 | - | - | - | - | - | - | 24.0 |
| **Subtotal** | | | | | | | | | | | | - | 33.1 | 1.3 | 1.3 | - | - | - | - | 35.7 | - | 39.7 | 1.6 | 1.6 | - | - | - | - | 42.8 |
| **b. Irrigation Infrastructure** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Feasibility studies /e | lps | | | | | | | | | | | 13.2 | 12.6 | - | - | - | - | - | - | 25.8 | 17.4 | 17.9 | - | - | - | - | - | - | 35.4 |
| Renovation of irrigation infrastructure | acre | - | 284 | 284 | 284 | - | - | - | - | 852 | 0.764 | - | 217.0 | 217.0 | 217.0 | - | - | - | - | 650.9 | - | 309.1 | 333.8 | 360.6 | - | - | - | - | 1,003.5 |
| Renovation of irrigation infrastructure (PBAS2) | acre | - | - | - | - | 250 | 100 | - | - | 350 | 0.764 | - | - | - | - | 191.0 | 76.4 | - | - | 267.4 | - | - | - | - | 342.9 | 148.0 | - | - | 491.0 |
| Pilot irrigation schemes | acre | - | 25 | 75 | 85 | - | - | - | - | 185 | 3.262 | - | 81.6 | 244.7 | 277.3 | - | - | - | - | 603.5 | - | 116.2 | 376.4 | 460.8 | - | - | - | - | 953.4 |
| Pilot irrigation schemes (PBAS2) | acre | - | - | - | - | 100 | 50 | - | - | 150 | 3.338 | - | - | - | - | 333.8 | 166.9 | - | - | 500.7 | - | - | - | - | 599.2 | 323.6 | - | - | 922.8 |
| Quality control and supervision /f | lps | | | | | | | | | | | - | 6.1 | - | - | - | - | - | - | 6.1 | - | 8.7 | - | - | - | - | - | - | 8.7 |
| **Subtotal** | | | | | | | | | | | | 13.2 | 317.2 | 461.6 | 494.3 | 524.8 | 243.3 | - | - | 2,054.4 | 17.4 | 451.9 | 710.3 | 821.4 | 942.0 | 471.8 | - | - | 3,414.8 |
| **Subtotal** | | | | | | | | | | | | 13.2 | 350.3 | 462.9 | 495.6 | 524.8 | 243.3 | - | - | 2,090.1 | 17.4 | 491.6 | 711.8 | 822.9 | 942.0 | 471.8 | - | - | 3,457.6 |
| **6. Strengthening of local institutions on smallholders' climate resilience** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Development of business models and sustainability plan for service and O&M | lps | - | - | 1 | - | - | - | - | - | 1 | 2.5 | - | - | 2.5 | - | - | - | - | - | 2.5 | - | - | 3.6 | - | - | - | - | - | 3.6 |
| Upgrading of farm roads to climate resilient standards | lps | - | - | - | 1 | - | - | - | - | 1 | 50 | - | - | - | 50.0 | - | - | - | - | 50.0 | - | - | - | 63.1 | - | - | - | - | 63.1 |
| Upgrading of farm roads to climate resilient standards (PBAS2) | lps | - | - | - | 1 | - | 1 | - | - | 1 | 50 | - | - | - | - | 50.0 | - | - | - | 50.0 | - | - | - | - | 89.8 | - | - | - | 89.8 |
| Capacity development of existing farmer groups, WUGs and RUG | lps | - | 1 | 1 | 1 | - | - | - | - | 3 | 2.5 | - | 2.5 | 2.5 | 2.5 | - | - | - | - | 7.5 | - | 3.0 | 3.0 | 3.0 | - | - | - | - | 9.0 |
| Updating of O&M models for irrigation and farm roads | lps | - | - | - | 1 | - | - | - | - | 1 | 6 | - | - | - | 6.0 | - | - | - | - | 6.0 | - | - | - | 9.3 | - | - | - | - | 9.3 |
| **Subtotal** | | | | | | | | | | | | - | 2.5 | 5.0 | 58.5 | 50.0 | - | - | - | 116.0 | - | 3.0 | 6.6 | 95.4 | 89.8 | - | - | - | 194.7 |
| **7. Technical assistance (C1)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| National TA | pers-month | 3 | 3 | 3 | 3 | 3 | 3 | - | - | 18 | 2.5 | 7.5 | 7.5 | 7.5 | 7.5 | 7.5 | 7.5 | - | - | 45.0 | 9.1 | 9.9 | 10.7 | 11.6 | 12.5 | 13.6 | - | - | 67.4 |
| **Subtotal** | | | | | | | | | | | | 63.5 | 640.8 | 660.3 | 706.5 | 847.1 | 500.1 | 247.8 | 102.5 | 3,768.5 | 80.2 | 864.8 | 957.7 | 1,125.0 | 1,489.1 | 923.1 | 474.2 | 240.0 | 6,144.0 |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **B. Output 1.2: Vegetable Production Intensified and Expanded** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1. Development of training and extension material | lps | 1 | 1 | - | 1 | - | - | - | - | 3 | 20 | 20.0 | 20.0 | - | 20.0 | - | - | - | - | 60.0 | 24.3 | 26.3 | - | 30.9 | - | - | - | - | 81.5 |
| **2. Capacity development of vegetable production groups** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| a. Awareness and mobilization | event | 50 | - | - | - | - | - | - | - | 50 | 2 | 100.0 | - | - | - | - | - | - | - | 100.0 | 120.0 | - | - | - | - | - | - | - | 120.0 |
| **b. Training on production techniques and post-harvest management** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Training on vegetable production techniques /g | event | 10 | 20 | 40 | 40 | 40 | 40 | 10 | - | 200 | 1.3 | 13.0 | 26.0 | 52.0 | 52.0 | 52.0 | 52.0 | 13.0 | - | 260.0 | 15.6 | 31.2 | 62.4 | 62.4 | 62.4 | 62.4 | 15.6 | - | 312.0 |
| Retraining on vegetable production techniques | event | - | - | 50 | 100 | 150 | 150 | 100 | 50 | 600 | 1.2 | - | - | 60.0 | 120.0 | 180.0 | 180.0 | 120.0 | 60.0 | 720.0 | - | - | 72.0 | 144.0 | 216.0 | 216.0 | 144.0 | 72.0 | 864.0 |
| Training on post-harvest management | event | 10 | 20 | 40 | 40 | 40 | 40 | 10 | - | 200 | 1.287 | 12.9 | 25.7 | 51.5 | 51.5 | 51.5 | 51.5 | 12.9 | - | 257.4 | 15.4 | 30.9 | 61.8 | 61.8 | 61.8 | 61.8 | 15.4 | - | 308.8 |
| Retraining on post-harvest management | event | - | - | 50 | 100 | 150 | 150 | 100 | 50 | 600 | 0.65 | - | - | 32.5 | 65.0 | 97.5 | 97.5 | 65.0 | 32.5 | 390.0 | - | - | 39.0 | 78.0 | 117.0 | 117.0 | 78.0 | 39.0 | 468.0 |
| Exchange visits for farmers | visits | - | 2 | 2 | 2 | 2 | 2 | 2 | - | 12 | 8.3 | - | 16.6 | 16.6 | 16.6 | 16.6 | 16.6 | 16.6 | - | 99.6 | - | 19.9 | 19.9 | 19.9 | 19.9 | 19.9 | 19.9 | - | 119.5 |
| **Subtotal** | | | | | | | | | | | | 25.9 | 68.3 | 212.6 | 305.1 | 397.6 | 397.6 | 227.5 | 92.5 | 1,727.0 | 31.0 | 92.0 | 255.1 | 366.1 | 477.1 | 477.1 | 273.0 | 111.0 | 2,072.4 |
| **Subtotal** | | | | | | | | | | | | 25.9 | 68.3 | 212.6 | 305.1 | 397.6 | 397.6 | 227.5 | 92.5 | 1,727.0 | 31.0 | 92.0 | 255.1 | 366.1 | 477.1 | 477.1 | 273.0 | 111.0 | 2,072.4 |
| **3. Vegetable seed research and production** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Developing packages of practice (extension material) | lps | 1 | - | - | 1 | - | - | - | - | 2 | 8 | 8.0 | - | - | 8.0 | - | - | - | - | 16.0 | 9.7 | - | - | 12.3 | - | - | - | - | 22.1 |
| Training and certification of vegetable seed growers /h | pers | - | 30 | - | 35 | - | - | - | - | 65 | 0.12 | - | 3.6 | - | 4.2 | - | - | - | - | 7.8 | - | 4.3 | - | 5.0 | - | - | - | - | 9.4 |
| Equipment and input support vegetable seed growers | set | - | 30 | - | 35 | - | - | - | - | 65 | 0.672 | - | 20.2 | - | 23.5 | - | - | - | - | 43.7 | - | 30.9 | - | 41.8 | - | - | - | - | 72.7 |
| Retraining of vegetable seed growers | pers | - | - | 65 | - | 65 | - | 65 | - | 195 | 0.076 | - | - | 4.9 | - | 4.9 | - | 4.9 | - | 14.8 | - | - | 5.9 | - | 5.9 | - | 5.9 | - | 17.8 |
| Seed processing units vegetable seed farms NBC | unit | - | 1 | - | - | - | - | - | - | 1 | 55 | - | 55.0 | - | - | - | - | - | - | 55.0 | - | 77.2 | - | - | - | - | - | - | 77.2 |
| Glasshouse construction vegetable seed farms NBC | unit | - | 2 | - | - | - | - | - | - | 2 | 6 | - | 12.0 | - | - | - | - | - | - | 12.0 | - | 17.1 | - | - | - | - | - | - | 17.1 |
| **Subtotal** | | | | | | | | | | | | 8.0 | 90.8 | 4.9 | 35.7 | 4.9 | - | 4.9 | - | 149.3 | 9.7 | 129.4 | 5.9 | 59.2 | 5.9 | - | 5.9 | - | 216.1 |
| **4. Provision of vegetable production inputs** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Provision of resilient vegetable seeds | lps | 1 | 1 | 1 | 1 | - | - | - | - | 4 | 25 | 25.0 | 25.0 | 25.0 | 25.0 | - | - | - | - | 100.0 | 35.5 | 36.3 | 41.2 | 44.4 | - | - | - | - | 159.4 |
| Provision of resilient vegetable seeds (PBAS2) | lps | - | - | - | 1 | - | - | - | - | 1 | 25 | - | - | - | - | 25.0 | - | - | - | 25.0 | - | - | - | - | 47.9 | - | - | - | 47.9 |
| Water efficient irrigation /i | lps | - | 200 | 300 | 400 | - | - | - | - | 900 | 0.3 | - | 60.0 | 90.0 | 120.0 | - | - | - | - | 270.0 | - | 84.2 | 136.1 | 195.5 | - | - | - | - | 415.7 |
| Water efficient irrigation (PBAS2) | lps | - | - | - | - | 400 | 300 | 300 | - | 1,000 | 0.3 | - | - | - | - | 120.0 | 90.0 | 90.0 | - | 300.0 | - | - | - | - | 210.7 | 170.3 | 183.5 | - | 564.5 |
| Small post-harvest equipments | lps | - | 70 | 100 | 100 | - | - | - | - | 270 | 2 | - | 140.0 | 200.0 | 200.0 | - | - | - | - | 540.0 | - | 196.4 | 302.3 | 325.8 | - | - | - | - | 824.5 |
| Small post-harvest equipments (PBAS2) | lps | - | - | - | - | 100 | 100 | 80 | - | 280 | 2.013 | - | - | - | - | 201.3 | 201.3 | 161.0 | - | 563.6 | - | - | - | - | 353.4 | 380.9 | 328.4 | - | 1,062.7 |
| **Subtotal** | | | | | | | | | | | | 25.0 | 225.0 | 315.0 | 345.0 | 346.3 | 291.3 | 251.0 | - | 1,798.6 | 35.5 | 316.9 | 479.6 | 565.7 | 611.9 | 551.1 | 512.0 | - | 3,074.7 |
| **Subtotal** | | | | | | | | | | | | 178.9 | 404.1 | 532.5 | 705.8 | 748.8 | 688.9 | 483.4 | 92.5 | 3,834.9 | 220.6 | 856.6 | 740.6 | 1,021.8 | 1,094.9 | 1,028.2 | 790.9 | 111.0 | 5,564.7 |
| **C. Output 1.3: Dairy Production Intensified and Expanded** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1. Development of training and extension material | lps | 1 | 1 | - | 1 | - | - | - | - | 3 | 20 | 20.0 | 20.0 | - | 20.0 | - | - | - | - | 60.0 | 24.3 | 26.3 | - | 30.9 | - | - | - | - | 81.5 |
| **2. Capacity development of dairy production groups** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| a. Awareness and mobilization | event | 50 | - | - | - | - | - | - | - | 50 | 3 | 150.0 | - | - | - | - | - | - | - | 150.0 | 180.0 | - | - | - | - | - | - | - | 180.0 |
| **b. Training on good dairy management practices** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Training on livestock husbandry | event | 9 | 15 | 36 | 36 | 36 | 15 | 3 | - | 150 | 1 | 9.0 | 15.0 | 36.0 | 36.0 | 36.0 | 15.0 | 3.0 | - | 150.0 | 10.8 | 18.0 | 43.2 | 43.2 | 43.2 | 18.0 | 3.6 | - | 180.0 |
| Retraining on livestock husbandry | event | - | - | 20 | 50 | 90 | 100 | 100 | 60 | 420 | 0.4 | - | - | 8.0 | 20.0 | 36.0 | 40.0 | 40.0 | 24.0 | 168.0 | - | - | 9.6 | 24.0 | 43.2 | 48.0 | 48.0 | 28.8 | 201.6 |
| Training on clean milk production | event | 9 | 15 | 36 | 36 | 36 | 15 | 3 | - | 150 | 0.6 | 5.4 | 9.0 | 21.6 | 21.6 | 21.6 | 9.0 | 1.8 | - | 90.0 | 6.5 | 10.8 | 25.9 | 25.9 | 25.9 | 10.8 | 2.2 | - | 108.0 |
| Retraining on clean milk production | event | - | - | 20 | 50 | 90 | 100 | 100 | 60 | 420 | 0.4 | - | - | 8.0 | 20.0 | 36.0 | 40.0 | 40.0 | 24.0 | 168.0 | - | - | 9.6 | 24.0 | 43.2 | 48.0 | 48.0 | 28.8 | 201.6 |
| Training on farm record keeping | event | 9 | 15 | 36 | 36 | 36 | 15 | 3 | - | 150 | 0.8 | 7.2 | 12.0 | 28.8 | 28.8 | 28.8 | 12.0 | 2.4 | - | 120.0 | 8.6 | 14.4 | 34.6 | 34.6 | 34.6 | 14.4 | 2.9 | - | 144.0 |
| Retraining on farm record keeping | group | - | - | 20 | 50 | 90 | 100 | 100 | 60 | 420 | 0.4 | - | - | 8.0 | 20.0 | 36.0 | 40.0 | 40.0 | 24.0 | 168.0 | - | - | 9.6 | 24.0 | 43.2 | 48.0 | 48.0 | 28.8 | 201.6 |
| **Subtotal** | | | | | | | | | | | | 21.6 | 36.0 | 110.4 | 146.4 | 194.4 | 156.0 | 127.2 | 72.0 | 864.0 | 25.9 | 43.2 | 132.5 | 175.7 | 233.3 | 187.2 | 152.6 | 86.4 | 1,036.8 |
| **Subtotal** | | | | | | | | | | | | 171.6 | 36.0 | 110.4 | 146.4 | 194.4 | 156.0 | 127.2 | 72.0 | 1,014.0 | 208.9 | 43.2 | 132.5 | 175.7 | 233.3 | 187.2 | 152.6 | 86.4 | 1,216.8 |
| **3. Improved service outreach through CAHWs and lead farmers** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **a. CAHW model** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CAHW model development and packaging | lps | - | 1 | - | 1 | - | - | - | - | 2 | 15 | - | 15.0 | - | 15.0 | - | - | - | - | 30.0 | - | 19.7 | - | 23.2 | - | - | - | - | 42.9 |
| Training of trainers (ToT) | event | - | - | 1 | 1 | - | - | - | - | 2 | 10 | - | - | 10.0 | 10.0 | - | - | - | - | 20.0 | - | - | 12.0 | 12.0 | - | - | - | - | 24.0 |
| Training of CAHWs | lps | - | - | 20 | 20 | 20 | - | - | - | 60 | 0.417 | - | - | 8.3 | 8.3 | 8.3 | - | - | - | 25.0 | - | - | 10.0 | 10.0 | 10.0 | - | - | - | 30.0 |
| Retraining of CAHWs | lps | - | - | - | 20 | 20 | 20 | 20 | - | 80 | 0.417 | - | - | - | 8.3 | 8.3 | 8.3 | 8.3 | - | 33.4 | - | - | - | 10.0 | 10.0 | 10.0 | 10.0 | - | 40.0 |
| Kits for AI practioners | lps | - | - | 15 | 15 | - | - | - | - | 30 | 0.167 | - | - | 2.5 | 2.5 | - | - | - | - | 5.0 | - | - | 3.8 | 4.1 | - | - | - | - | 7.9 |
| Kits for AI practioners (PBAS2) | lps | - | - | - | - | 15 | - | - | - | 15 | 0.167 | - | - | - | - | 2.5 | - | - | - | 2.5 | - | - | - | - | 4.4 | - | - | - | 4.4 |
| Transport facilities for CAHWs /j | unit | - | - | 15 | 15 | - | - | - | - | 30 | 2 | - | - | 30.0 | 30.0 | - | - | - | - | 60.0 | - | - | 45.4 | 45.9 | - | - | - | - | 91.4 |
| Transport facilities for CAHWs (PBAS2) | unit | - | - | - | - | 15 | - | - | - | 15 | 2 | - | - | - | - | 30.0 | - | - | - | 30.0 | - | - | - | - | 52.7 | - | - | - | 52.7 |
| Stipend for CAHWs /k | pers-year | - | - | 45 | 45 | - | - | - | - | 90 | 0.5 | - | - | 22.5 | 22.5 | - | - | - | - | 45.0 | - | - | 37.1 | 40.0 | - | - | - | - | 77.1 |
| Stipend for CAHWs | pers-year | - | - | - | - | 45 | - | - | - | 45 | 0.5 | - | - | - | - | 22.5 | - | - | - | 22.5 | - | - | - | - | 43.1 | - | - | - | 43.1 |
| **Subtotal** | | | | | | | | | | | | - | 15.0 | 73.3 | 96.7 | 71.7 | 8.3 | 8.3 | - | 273.4 | - | 19.7 | 108.2 | 148.1 | 120.2 | 10.0 | 10.0 | - | 416.3 |
| **4. Support to fodder and feed production** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Perennial fodder in fallow and marginal land /l | lps | - | 77 | 116 | 116 | 154 | 154 | 116 | - | 733 | 0.11 | - | 8.5 | 12.8 | 12.8 | 16.9 | 16.9 | 12.8 | - | 80.6 | - | 13.0 | 21.0 | 22.7 | 32.4 | 35.0 | 28.4 | - | 152.5 |
| Winter fodder crop demonstration and seed supply | group | 5 | 20 | 20 | 20 | 20 | - | - | - | 85 | 0.25 | 1.3 | 5.0 | 5.0 | 5.0 | 5.0 | - | - | - | 21.3 | 1.8 | 7.7 | 8.2 | 8.9 | 9.6 | - | - | - | 36.1 |
| Training of feed producers | event | - | 2 | 2 | 3 | 3 | 3 | 2 | - | 15 | 0.25 | - | 0.5 | 0.5 | 0.8 | 0.8 | 0.8 | 0.5 | - | 3.8 | - | 0.6 | 0.6 | 0.9 | 0.9 | 0.9 | 0.6 | - | 4.5 |
| Chopping machine (for dairy groups) /m | unit | - | 6 | 15 | 36 | - | - | - | - | 57 | 2 | - | 12.0 | 30.0 | 72.0 | - | - | - | - | 114.0 | - | 16.8 | 45.4 | 117.3 | - | - | - | - | 179.5 |
| Chopping machine (for dairy groups) (PBAS2) | unit | - | - | - | - | 36 | 36 | 15 | 3 | 90 | 2 | - | - | - | - | 72.0 | 72.0 | 30.0 | 6.0 | 180.0 | - | - | - | - | 126.4 | 136.2 | 61.2 | 13.2 | 337.0 |
| Training on use of crop residues and feed fodder /n | event | - | 6 | 15 | 36 | 36 | 36 | 15 | 3 | 147 | 0.8 | - | 4.8 | 12.0 | 28.8 | 28.8 | 28.8 | 12.0 | 2.4 | 117.6 | - | 5.8 | 14.4 | 34.6 | 34.6 | 34.6 | 14.4 | 2.9 | 141.1 |
| **Subtotal** | | | | | | | | | | | | 1.3 | 30.8 | 60.3 | 119.3 | 123.5 | 116.5 | 55.3 | 8.4 | 517.2 | 1.8 | 43.6 | 89.6 | 184.3 | 203.9 | 206.6 | 104.6 | 16.1 | 850.7 |
| **5. Provision of dairy production inputs** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Milk cans | lps | - | 1 | 1 | - | - | - | - | - | 2 | 8.5 | - | 8.5 | 8.5 | - | - | - | - | - | 17.0 | - | 11.9 | 12.8 | - | - | - | - | - | 24.8 |
| Cross-breed cattle /o | head | - | 200 | 400 | 400 | - | - | - | - | 1,000 | 0.483 | - | 96.6 | 193.2 | 193.2 | 40.0 | - | - | - | 483.0 | - | 147.9 | 318.6 | 343.3 | - | - | - | - | 809.8 |
| Cross-breed cattle PBAS2 | head | - | - | - | - | 500 | 500 | - | - | 1,000 | 0.483 | - | - | - | - | 241.5 | 241.5 | - | - | 483.0 | - | - | - | - | 462.5 | 498.5 | - | - | 960.9 |
| Shed construction | unit | - | 200 | 400 | 400 | - | - | - | - | 1,000 | 0.125 | - | 25.0 | 50.0 | 50.0 | - | - | - | - | 125.0 | - | 35.6 | 76.9 | 83.1 | - | - | - | - | 195.6 |
| Shed construction PBAS2 | unit | - | - | - | - | 500 | 500 | - | - | 1,000 | 0.125 | - | - | - | - | 62.5 | 62.5 | - | - | 125.0 | - | - | - | - | 112.2 | 121.2 | - | - | 233.4 |
| Equipment dairy production groups /p | set | - | 6 | 15 | 36 | - | - | - | - | 57 | 2 | - | 12.0 | 30.0 | 72.0 | - | - | - | - | 114.0 | - | 16.8 | 45.4 | 117.3 | - | - | - | - | 179.5 |
| Equipment dairy production groups PBAS2 | set | - | - | - | - | 36 | 36 | 15 | 3 | 90 | 2 | - | - | - | - | 72.0 | 72.0 | 30.0 | 6.0 | 180.0 | - | - | - | - | 126.4 | 136.2 | 61.2 | 13.2 | 337.0 |
| Refrigerators for schools | unit | - | 20 | 35 | 40 | - | - | - | - | 95 | 1 | - | 20.0 | 35.0 | 40.0 | - | - | - | - | 95.0 | - | 28.1 | 52.9 | 65.2 | - | - | - | - | 146.1 |
| Refrigerators for schools (PBAS2) | unit | - | - | - | - | 50 | 30 | 25 | - | 105 | 1 | - | - | - | - | 50.0 | 30.0 | 25.0 | - | 105.0 | - | - | - | - | 87.8 | 56.8 | 51.0 | - | 195.5 |
| **Subtotal** | | | | | | | | | | | | - | 162.1 | 316.7 | 355.2 | 426.0 | 406.0 | 55.0 | 6.0 | 1,727.0 | - | 240.3 | 506.6 | 608.8 | 788.8 | 812.6 | 112.2 | 13.2 |

## Annex 1.2: Value Chain Development and Marketing

| | | Quantities | | | | | | | | | Unit Cost (US$ '000) | Base Cost (US$ '000) | | | | | | | | | Totals Including Contingencies (US$ '000) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Unit | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Total | | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Total | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Total |
| **I. Investment Costs** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **A. Output 2.1: Resilient Vegetable and Dairy Value Chains developed** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **1. Strengthening of FCBL for value chain development** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Design of organizational strategy, business plan and capacity development plan | lps | 1 | - | - | - | - | - | - | - | 1 | 50 | 50.0 | - | - | - | - | - | - | - | 50.0 | 60.8 | - | - | - | - | - | - | - | 60.8 |
| Capacity development activities | lps | 0.5 | 1 | 1 | 1 | - | - | - | - | 3.5 | 25 | 12.5 | 25.0 | 25.0 | 25.0 | - | - | - | - | 87.5 | 15.0 | 30.0 | 30.0 | 30.0 | - | - | - | - | 105.0 |
| Capacity development activities PBAS2 | lps | - | - | - | - | 1 | 1 | 1 | - | 3 | 25 | - | - | - | - | 25.0 | 25.0 | 25.0 | - | 75.0 | - | - | - | - | 30.0 | 30.0 | 30.0 | - | 90.0 |
| **Subtotal** | | | | | | | | | | | | 62.5 | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 | - | 212.5 | 75.8 | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 | - | 255.8 |
| 2. Vegetable value-chain design and business plan | lps | 1 | 1 | - | - | 1 | - | - | - | 3 | 30 | 30.0 | 30.0 | - | - | 30.0 | - | - | - | 90.0 | 36.5 | 39.5 | - | - | 50.1 | - | - | - | 126.1 |
| 3. Dairy value-chain design and business plan | lps | 1 | 1 | - | - | 1 | - | - | - | 3 | 30 | 30.0 | 30.0 | - | - | 30.0 | - | - | - | 90.0 | 36.5 | 39.5 | - | - | 50.1 | - | - | - | 126.1 |
| **4. Value chain development, strengthening and expansion** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Multistakeholders facilitation process | lps | 1 | 1 | 1 | 1 | - | - | - | - | 4 | 35 | 35.0 | 35.0 | 35.0 | 35.0 | - | - | - | - | 140.0 | 42.6 | 46.1 | 49.9 | 54.0 | - | - | - | - | 192.6 |
| Multistakeholders facilitation process (PBAS2) | lps | - | - | - | - | 1 | 1 | 1 | - | 3 | 35 | - | - | - | - | 35.0 | 35.0 | 35.0 | - | 105.0 | - | - | - | - | 58.5 | 63.4 | 68.6 | - | 190.5 |
| **Subtotal** | | | | | | | | | | | | 35.0 | 35.0 | 35.0 | 35.0 | 35.0 | 35.0 | 35.0 | - | 245.0 | 42.6 | 46.1 | 49.9 | 54.0 | 58.5 | 63.4 | 68.6 | - | 383.0 |
| **5. Technical assistance (C2)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| National/External TA | lps | 12 | 12 | 12 | 12 | 12 | 12 | - | - | 72 | 7,5 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | - | - | 540.0 | 109.4 | 118.5 | 128.3 | 138.9 | 150.4 | 162.9 | - | - | 808.5 |
| **Subtotal** | | | | | | | | | | | | 247.5 | 210.0 | 150.0 | 150.0 | 210.0 | 150.0 | 60.0 | - | 1,177.5 | 300.7 | 273.6 | 208.2 | 223.0 | 339.2 | 256.3 | 98.6 | - | 1,699.6 |
| **B. Output 2.2: Agricultural Commercialization and Enterprise Development strengthened** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **1. Support to agriculture enterprise development** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **a. Support to marketing groups** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Awareness on marketing groups | event | - | 10 | 5 | 5 | - | - | - | - | 20 | 2,6 | - | 26.0 | 13.0 | 13.0 | - | - | - | - | 52.0 | - | 31.2 | 15.6 | 15.6 | - | - | - | - | 62.4 |
| Strengthening of existing marketing and cooperative capacity development packages | lps | - | 1 | - | - | - | - | - | - | 1 | 10 | - | 10.0 | - | - | - | - | - | - | 10.0 | - | 13.2 | - | - | - | - | - | - | 13.2 |
| Development of training material for dairy processing /a | lps | - | 1 | 1 | - | - | - | - | - | 2 | 10 | - | 10.0 | 10.0 | - | - | - | - | - | 20.0 | - | 13.2 | 14.3 | - | - | - | - | - | 27.4 |
| Identification of marketing groups | lps | - | - | - | - | - | - | - | - | - | | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| **Subtotal** | | | | | | | | | | | | - | 46.0 | 23.0 | 13.0 | - | - | - | - | 82.0 | - | 57.5 | 29.9 | 15.6 | - | - | - | - | 103.0 |
| **b. Training of marketing groups** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Formation of vegetable marketing groups | event | - | 40 | 40 | 50 | - | - | - | - | 130 | 0,5 | - | 20.0 | 20.0 | 25.0 | - | - | - | - | 65.0 | - | 24.0 | 24.0 | 30.0 | - | - | - | - | 78.0 |
| Formation of vegetable marketing groups PBAS2 | event | - | - | - | - | 60 | 40 | - | - | 100 | 0,5 | - | - | - | - | 30.0 | 20.0 | - | - | 50.0 | - | - | - | - | 36.0 | 24.0 | - | - | 60.0 |
| Formation of dairy marketing groups | event | - | 20 | 30 | 40 | - | - | - | - | 90 | 0,5 | - | 10.0 | 15.0 | 20.0 | - | - | - | - | 45.0 | - | 12.0 | 18.0 | 24.0 | - | - | - | - | 54.0 |
| Formation of dairy marketing groups PBAS2 | event | - | - | - | - | 30 | 30 | - | - | 60 | 0,5 | - | - | - | - | 15.0 | 15.0 | - | - | 30.0 | - | - | - | - | 18.0 | 18.0 | - | - | 36.0 |
| Training in marketing & value-chain | event | - | 70 | 80 | 100 | 110 | 90 | - | - | 450 | 1,55 | - | 108.5 | 124.0 | 155.0 | 170.5 | 139.5 | - | - | 697.5 | - | 130.2 | 148.8 | 186.0 | 204.6 | 167.4 | - | - | 837.0 |
| Training in packaging & handling | event | - | 70 | 80 | 100 | 100 | 65 | - | - | 415 | 1,55 | - | 108.5 | 124.0 | 155.0 | 155.0 | 100.8 | - | - | 643.3 | - | 130.2 | 148.8 | 186.0 | 186.0 | 120.9 | - | - | 771.9 |
| Training in packaging & handling PBAS2 | event | - | - | - | - | - | 35 | - | - | 35 | 1,545 | - | - | - | - | - | 54.1 | - | - | 54.1 | - | - | - | - | - | 64.9 | - | - | 64.9 |
| Social inclusion fund | lps | | | | | | | | | | | - | 50.0 | - | - | - | - | - | - | 50.0 | - | 54.5 | - | - | - | - | - | - | 54.5 |
| **Subtotal** | | | | | | | | | | | | - | 297.0 | 283.0 | 355.0 | 370.5 | 329.3 | - | - | 1,634.8 | - | 350.9 | 339.6 | 426.0 | 444.6 | 395.2 | - | - | 1,956.3 |
| **c. Support to entrepreneurs** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Development of training packages for agriculture entrepreneurs | lps | - | 1 | 1 | - | - | - | - | - | 2 | 10 | - | 10.0 | 10.0 | - | - | - | - | - | 20.0 | - | 13.2 | 14.3 | - | - | - | - | - | 27.4 |
| Entrepreneur identification and engagement process | lps | - | 1 | - | - | - | - | - | - | 1 | 10 | - | 10.0 | - | - | - | - | - | - | 10.0 | - | 13.2 | - | - | - | - | - | - | 13.2 |
| **Subtotal** | | | | | | | | | | | | - | 20.0 | 10.0 | - | - | - | - | - | 30.0 | - | 26.3 | 14.3 | - | - | - | - | - | 40.6 |
| d. Other trainings to groups, cooperatives and entrepreneurs | lps | - | - | 1 | 1 | 1 | - | - | - | 3 | 15 | - | - | 15.0 | 15.0 | 15.0 | - | - | - | 45.0 | - | - | 18.0 | 18.0 | 18.0 | - | - | - | 54.0 |
| **Subtotal** | | | | | | | | | | | | - | 363.0 | 331.0 | 383.0 | 385.5 | 329.3 | - | - | 1,791.8 | - | 434.8 | 401.7 | 459.6 | 462.6 | 395.2 | - | - | 2,153.9 |
| **2. Multi-stakeholder platforms and network development** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| a. Multi-stakeholder platforms and network development | lps | - | 1 | 1 | 1 | - | - | - | - | 3 | 8 | - | 8.0 | 8.0 | 8.0 | - | - | - | - | 24.0 | - | 10.5 | 11.4 | 12.3 | - | - | - | - | 34.3 |
| b. Multi-stakeholder platforms and network development (PBAS2) | lps | - | - | - | - | 1 | 1 | 1 | - | 3 | 8 | - | - | - | - | 8.0 | 8.0 | 8.0 | - | 24.0 | - | - | - | - | 13.4 | 14.5 | 15.7 | - | 43.5 |
| **Subtotal** | | | | | | | | | | | | - | 8.0 | 8.0 | 8.0 | 8.0 | 8.0 | 8.0 | - | 48.0 | - | 10.5 | 11.4 | 12.3 | 13.4 | 14.5 | 15.7 | - | 77.8 |
| **Subtotal** | | | | | | | | | | | | - | 371.0 | 339.0 | 391.0 | 393.5 | 337.3 | 8.0 | - | 1,839.8 | - | 445.3 | 413.1 | 471.9 | 476.0 | 409.7 | 15.7 | - | 2,231.7 |
| **C. Output 2.3: Community-driven Market Infrastructure developed** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **1. Planning and design** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Business plan-based planning of market infrastructure /b | lps | - | 1 | 1 | 1 | - | - | - | - | 3 | 30 | - | 30.0 | 30.0 | 30.0 | - | - | - | - | 90.0 | - | 39.5 | 42.8 | 46.3 | - | - | - | - | 128.6 |
| Business plan-based planning of market infrastructure (PBAS2) | lps | - | - | - | - | 1 | 1 | 1 | - | 3 | 30 | - | - | - | - | 30.0 | 30.0 | 30.0 | - | 90.0 | - | - | - | - | 50.1 | 54.3 | 58.8 | - | 163.3 |
| Development of business plans for 3 windows shops | lps | - | 1 | 1 | - | - | - | - | - | 2 | 10 | - | 10.0 | 10.0 | - | - | - | - | - | 20.0 | - | 13.2 | 14.3 | - | - | - | - | - | 27.4 |
| **Subtotal** | | | | | | | | | | | | - | 40.0 | 40.0 | 30.0 | 30.0 | 30.0 | 30.0 | - | 200.0 | - | 52.7 | 57.0 | 46.3 | 50.1 | 54.3 | 58.8 | - | 319.3 |
| **2. Vegetable value-chain post-harvest and market infrastructure and equipment** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Value-chain equipments /c | lps | - | 1 | 1 | 1 | - | - | - | - | 3 | 40 | - | 40.0 | 40.0 | 40.0 | - | - | - | - | 120.0 | - | 56.1 | 60.5 | 65.2 | - | - | - | - | 181.7 |
| Value-chain equipments (PBAS2) /d | lps | - | - | - | - | 1 | 1 | 1 | - | 3 | 40 | - | - | - | - | 40.0 | 40.0 | 40.0 | - | 120.0 | - | - | - | - | 70.2 | 75.7 | 81.6 | - | 227.5 |
| Value-chain infrastructure /e | lps | - | 1 | 1 | 1 | - | - | - | - | 3 | 40 | - | 40.0 | 40.0 | 40.0 | - | - | - | - | 120.0 | - | 57.0 | 61.5 | 66.5 | - | - | - | - | 185.0 |
| Value-chain infrastructure (PBAS2) /f | lps | - | - | - | - | 1.5 | 2 | 2 | - | 5.5 | 40 | - | - | - | - | 60.0 | 80.0 | 80.0 | - | 220.0 | - | - | - | - | 107.7 | 155.1 | 167.6 | - | 430.5 |
| **Subtotal** | | | | | | | | | | | | - | 80.0 | 80.0 | 80.0 | 100.0 | 120.0 | 120.0 | - | 580.0 | - | 113.1 | 122.0 | 131.6 | 177.9 | 230.8 | 249.2 | - | 1,024.7 |
| **3. Dairy value-chain post-harvest and market infrastructure and equipment** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Construction of milk collection sheds | unit | - | 10 | 30 | 30 | 20 | - | - | - | 90 | 1,8 | - | 18.0 | 54.0 | 54.0 | 36.0 | - | - | - | 162.0 | - | 25.6 | 83.1 | 89.7 | 64.6 | - | - | - | 263.1 |
| Equipment of milk collection sheds | unit | - | 10 | 30 | 30 | 20 | - | - | - | 90 | 0,065 | - | 0.7 | 2.0 | 2.0 | 1.3 | - | - | - | 5.9 | - | 0.9 | 2.9 | 3.2 | 2.3 | - | - | - | 9.3 |
| Construction of milk collection centers with chilling facilities | unit | - | 8 | 8 | 8 | - | - | - | - | 24 | 12 | - | 96.0 | 96.0 | 96.0 | - | - | - | - | 288.0 | - | 136.8 | 147.7 | 159.5 | - | - | - | - | 444.0 |
| Milk chillers | unit | - | 8 | 8 | 8 | - | - | - | - | 24 | 7,5 | - | 60.0 | 60.0 | 60.0 | - | - | - | - | 180.0 | - | 84.2 | 90.7 | 97.7 | - | - | - | - | 272.6 |
| Milk quality test equipment | unit | - | 8 | 8 | 8 | - | - | - | - | 24 | 0,145 | - | 1.2 | 1.2 | 1.2 | - | - | - | - | 3.5 | - | 1.6 | 1.8 | 1.9 | - | - | - | - | 5.3 |
| Milk analyzer | unit | - | 8 | 8 | 8 | - | - | - | - | 24 | 0,82 | - | 6.6 | 6.6 | 6.6 | - | - | - | - | 19.7 | - | 9.2 | 9.9 | 10.7 | - | - | - | - | 29.8 |
| Milk processing unit /g | unit | - | - | 2 | - | - | - | - | - | 2 | 36 | - | - | 72.0 | - | - | - | - | - | 72.0 | - | - | 110.8 | - | - | - | - | - | 110.8 |
| Milk processing unit (PBAS2) | unit | - | - | - | - | 2 | - | - | - | 2 | 36 | - | - | - | - | 72.0 | - | - | - | 72.0 | - | - | - | - | 129.2 | - | - | - | 129.2 |
| Milk processing equipment /h | unit | - | - | 2 | - | - | - | - | - | 2 | 55 | - | - | 110.0 | - | - | - | - | - | 110.0 | - | - | 166.3 | - | - | - | - | - | 166.3 |
| Milk processing equipment (PBAS2) | unit | - | - | - | - | 2 | - | - | - | 2 | 55 | - | - | - | - | 110.0 | - | - | - | 110.0 | - | - | - | - | 193.1 | - | - | - | 193.1 |
| Milk chilling van | unit | - | 2 | - | 2 | - | - | - | - | 4 | 22 | - | 44.0 | - | 44.0 | - | - | - | - | 88.0 | - | 61.7 | - | 71.7 | - | - | - | - | 133.4 |
| Milk chilling van (PBAS2) | unit | - | - | - | - | 2 | 2 | - | - | 4 | 22 | - | - | - | - | 44.0 | 44.0 | - | - | 88.0 | - | - | - | - | 77.2 | 83.2 | - | - | 160.5 |
| **Subtotal** | | | | | | | | | | | | - | 226.4 | 401.7 | 263.7 | 263.3 | 44.0 | - | - | 1,199.0 | - | 320.1 | 613.2 | 434.4 | 466.5 | 83.2 | - | - | 1,917.4 |
| **Subtotal** | | | | | | | | | | | | - | 346.4 | 521.7 | 373.7 | 393.3 | 194.0 | 150.0 | - | 1,979.0 | - | 485.8 | 792.2 | 612.4 | 694.6 | 368.4 | 308.0 | - | 3,261.3 |
| **Total Investment Costs** | | | | | | | | | | | | 247.5 | 927.4 | 1,010.7 | 914.7 | 996.8 | 681.3 | 218.0 | - | 4,996.3 | 300.7 | 1,204.7 | 1,413.5 | 1,307.3 | 1,509.8 | 1,084.3 | 422.3 | - | 7,192.7 |

## Annex 1.3 Institutional Support and Policy Development

| | | Quantities | | | | | | | | | Unit Cost (US$ '000) | Base Cost (US$ '000) | | | | | | | | | Totals Including Contingencies (US$ '000) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Unit | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Total | | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Total | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Total |
| **I. Investment Costs** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **A. Output 3.1: Strengthened value chain and marketing knowledge and communication** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **1. Strengthening of the DAMC market information system** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Strengthening of the DAMC market information system | lps | - | 1 | - | 1 | - | - | - | - | 2 | 15 | - | 15.0 | - | 15.0 | - | - | - | - | 30.0 | - | 19.7 | - | 23.2 | - | - | - | - | 42.9 |
| Equipment related to Market Information System upgrade | lps | - | - | 1 | 1 | - | - | - | - | 2 | 20 | - | - | 20.0 | 20.0 | - | - | - | - | 40.0 | - | - | - | 30.2 | 32.6 | - | - | - | 62.8 |
| Equipment related to market info system upgrade (PBAS2) | lps | - | - | - | - | 1 | 1 | - | - | 2 | 20 | - | - | - | - | - | 20.0 | 20.0 | - | 40.0 | - | - | - | - | - | 35.1 | 37.8 | - | 72.9 |
| **Subtotal** | | | | | | | | | | | | - | 15.0 | 20.0 | 35.0 | 20.0 | 20.0 | - | - | 110.0 | - | 19.7 | 30.2 | 55.7 | 35.1 | 37.8 | - | - | 178.7 |
| 2. Curriculum development of RNR Training and Education Institutes | lps | - | - | 1 | 1 | - | - | - | - | 2 | 15 | - | - | 15.0 | 15.0 | - | - | - | - | 30.0 | - | - | 21.4 | 23.2 | - | - | - | - | 44.5 |
| **Subtotal** | | | | | | | | | | | | - | 15.0 | 35.0 | 50.0 | 20.0 | 20.0 | - | - | 140.0 | - | 19.7 | 51.6 | 78.9 | 35.1 | 37.8 | - | - | 223.2 |
| **B. Output 3.2: Climate change resilience and value chain development lessons mainstreamed in agricultural policies and sector strategies** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1. Participatory policy development and monitoring approach | lps | - | - | 1 | - | - | 1 | - | - | 2 | 10 | - | - | 10.0 | - | - | 10.0 | - | - | 20.0 | - | - | 14.3 | - | - | 18.1 | - | - | 32.4 |
| 2. Mainstreaming climate resilience and value chain development lessons in agricultural policies | lps | - | - | 1 | 1 | - | 1 | - | - | 3 | 5 | - | - | 5.0 | 5.0 | - | 5.0 | - | - | 15.0 | - | - | 7.1 | 7.7 | - | 9.1 | - | - | 23.9 |
| 3. Development of a regulatory framework for PPP | lps | - | 1.5 | 1 | - | - | - | - | - | 2.5 | 10 | - | 15.0 | 10.0 | - | - | - | - | - | 25.0 | - | 19.7 | 14.3 | - | - | - | - | - | 34.0 |
| **4. Technical assistance (C3)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| National/International TA | pers-month | 2 | 2 | 2 | 2 | - | - | - | - | 8 | 12,5 | 25.0 | 25.0 | 25.0 | 25.0 | - | - | - | - | 100.0 | 30.4 | 32.9 | 35.6 | 38.6 | - | - | - | - | 137.5 |
| Support budget RNR training and education institutes | lps | - | 1 | 1 | 1 | - | - | - | - | 3 | 5 | - | 5.0 | 5.0 | 5.0 | - | - | - | - | 15.0 | - | 6.6 | 7.1 | 7.7 | - | - | - | - | 21.4 |
| Support budget climate resilience mainstreaming | lps | - | - | 1 | 1 | 1 | 1 | - | - | 4 | 5 | - | - | 5.0 | 5.0 | 5.0 | 5.0 | - | - | 20.0 | - | - | 7.1 | 7.7 | 8.4 | 9.1 | - | - | 32.3 |
| Support budget PPP regulatory framework | lps | - | 1 | 1 | 1 | - | - | - | - | 3 | 5 | - | 5.0 | 5.0 | 5.0 | - | - | - | - | 15.0 | - | 6.6 | 7.1 | 7.7 | - | - | - | - | 21.4 |
| **Subtotal** | | | | | | | | | | | | 25.0 | 35.0 | 40.0 | 40.0 | 5.0 | 5.0 | - | - | 150.0 | 30.4 | 46.1 | 57.0 | 61.7 | 8.4 | 9.1 | - | - | 212.7 |
| **Total Investment Costs** | | | | | | | | | | | | 25.0 | 65.0 | 100.0 | 95.0 | 25.0 | 40.0 | - | - | 350.0 | 30.4 | 85.6 | 144.3 | 148.4 | 43.5 | 74.0 | - | - | 526.1 |
| **II. Recurrent Costs** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Total** | | | | | | | | | | | | 25.0 | 65.0 | 100.0 | 95.0 | 25.0 | 40.0 | - | - | 350.0 | 30.4 | 85.6 | 144.3 | 148.4 | 43.5 | 74.0 | - | - | 526.1 |

## Annex 1.4 Programme Management, Coordination and M&E

| | | Quantities | | | | | | | | | Unit Cost (US$ '000) | Base Cost (US$ '000) | | | | | | | | | Totals Including Contingencies (US$ '000) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Unit | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Total | | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Total | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Total |
| **I. Investment Costs** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **A. Project Management Unit** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **1. Material and equipment** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vehicles | unit | 2 | - | - | - | - | - | - | - | 2 | 30 | 60.0 | - | - | - | - | - | - | - | 60.0 | 73.1 | - | - | - | - | - | - | - | 73.1 |
| Laptops | unit | 12 | - | - | - | - | - | - | - | 12 | 1 | 12.0 | - | - | - | - | - | - | - | 12.0 | 15.6 | - | - | - | - | - | - | - | 15.6 |
| Printer | unit | 5 | - | - | - | - | - | - | - | 5 | 0,6 | 3.0 | - | - | - | - | - | - | - | 3.0 | 3.9 | - | - | - | - | - | - | - | 3.9 |
| Scanner | unit | 2 | - | - | - | - | - | - | - | 2 | 0,6 | 1.2 | - | - | - | - | - | - | - | 1.2 | 1.6 | - | - | - | - | - | - | - | 1.6 |
| Photocopier heavy duty | unit | 2 | - | - | - | - | - | - | - | 2 | 2,3 | 4.6 | - | - | - | - | - | - | - | 4.6 | 6.0 | - | - | - | - | - | - | - | 6.0 |
| Office equipment | set | 5 | - | - | - | - | - | - | - | 5 | 1,7 | 8.5 | - | - | - | - | - | - | - | 8.5 | 11.1 | - | - | - | - | - | - | - | 11.1 |
| **Subtotal** | | | | | | | | | | | | 89.3 | - | - | - | - | - | - | - | 89.3 | 111.3 | - | - | - | - | - | - | - | 111.3 |
| **2. Capacity building** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Training on gender /a | lps | - | 1 | - | - | - | - | - | - | 1 | 2,5 | - | 2.5 | - | - | - | - | - | - | 2.5 | - | 3.0 | - | - | - | - | - | - | 3.0 |
| Training on knowledge management /b | lps | - | 1 | - | - | - | - | - | - | 1 | 2,5 | - | 2.5 | - | - | - | - | - | - | 2.5 | - | 3.0 | - | - | - | - | - | - | 3.0 |
| Training on monitoring and evaluation /c | lps | - | 1 | - | - | - | - | - | - | 1 | 2,5 | - | 2.5 | - | - | - | - | - | - | 2.5 | - | 3.0 | - | - | - | - | - | - | 3.0 |
| Training on financial management /d | lps | 3 | - | 3 | - | - | - | - | - | 6 | 2,5 | 7.5 | - | 7.5 | - | - | - | - | - | 15.0 | 9.0 | - | 9.0 | - | - | - | - | - | 18.0 |
| **Subtotal** | | | | | | | | | | | | 7.5 | 7.5 | 7.5 | - | - | - | - | - | 22.5 | 9.0 | 9.0 | 9.0 | - | - | - | - | - | 27.0 |
| **3. Coordination** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Coordination meetings with dzongkhags | meeting | 1 | 2 | 2 | 2 | - | - | - | - | 7 | 5 | 5.0 | 10.0 | 10.0 | 10.0 | - | - | - | - | 35.0 | 6.1 | 13.2 | 14.3 | 15.4 | - | - | - | - | 48.9 |
| Coordination meetings with dzongkhags PBAS 2 | meeting | - | - | - | - | 2 | 2 | 2 | 1 | 7 | 5 | - | - | - | - | 10.0 | 10.0 | 10.0 | 5.0 | 35.0 | - | - | - | - | 16.7 | 18.1 | 19.6 | 10.6 | 65.0 |
| **Subtotal** | | | | | | | | | | | | 5.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 5.0 | 70.0 | 6.1 | 13.2 | 14.3 | 15.4 | 16.7 | 18.1 | 19.6 | 10.6 | 114.0 |
| **Subtotal** | | | | | | | | | | | | 101.8 | 17.5 | 17.5 | 10.0 | 10.0 | 10.0 | 10.0 | 5.0 | 181.8 | 126.4 | 22.2 | 23.3 | 15.4 | 16.7 | 18.1 | 19.6 | 10.6 | 252.3 |
| **B. Food Corporation of Bhutan** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1. Material and equipment | lps | | | | | | | | | | | 54.0 | 60.0 | 66.0 | 73.0 | 80.0 | - | - | - | 333.0 | 70.3 | 84.2 | 99.8 | 118.9 | 140.4 | - | - | - | 513.6 |
| **C. Monitoring and evaluation** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Baseline and impact studies | study | - | - | - | 1 | - | - | - | - | 1 | 20 | - | - | - | 20.0 | - | - | - | - | 20.0 | - | - | - | 30.9 | - | - | - | - | 30.9 |
| Baseline and impact studies PBAS2 | study | - | - | - | - | - | - | - | 1 | 1 | 20 | - | - | - | - | - | - | - | 20.0 | 20.0 | - | - | - | - | - | - | - | 42.5 | 42.5 |
| Annual outcome surveys | study | - | 1 | 1 | 1 | - | - | - | - | 3 | 10 | - | 10.0 | 10.0 | 10.0 | - | - | - | - | 30.0 | - | 13.2 | 14.3 | 15.4 | - | - | - | - | 42.9 |
| Annual outcome surveys PBAS2 | study | - | - | - | - | 1 | 1 | 1 | - | 3 | 10 | - | - | - | - | 10.0 | 10.0 | 10.0 | - | 30.0 | - | - | - | - | 16.7 | 18.1 | 19.6 | - | 54.4 |
| Mid-term review | mission | - | - | - | 1 | - | - | - | - | 1 | 30 | - | - | - | 30.0 | - | - | - | - | 30.0 | - | - | - | 46.3 | - | - | - | - | 46.3 |
| Project completion report | report | - | - | - | - | - | - | - | 1 | 1 | 10 | - | - | - | - | - | - | - | 10.0 | 10.0 | - | - | - | - | - | - | - | 21.2 | 21.2 |
| **Subtotal** | | | | | | | | | | | | - | 10.0 | 10.0 | 60.0 | 10.0 | 10.0 | 10.0 | 30.0 | 140.0 | - | 13.2 | 14.3 | 92.6 | 16.7 | 18.1 | 19.6 | 63.7 | 238.2 |
| **D. Knowledge management** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Printing and publications | lps | 0.5 | 1 | 1 | 1 | 1 | 1 | 1 | 0.5 | 7 | 4 | 2.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 2.0 | 28.0 | 2.8 | 6.1 | 6.6 | 7.1 | 7.7 | 8.3 | 8.9 | 4.8 | 52.3 |
| Workshops and meetings | lps | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 4 | 8 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 32.0 | 4.9 | 5.3 | 5.7 | 6.2 | 6.7 | 7.2 | 7.8 | 8.5 | 52.3 |
| **Subtotal** | | | | | | | | | | | | 6.0 | 8.0 | 8.0 | 8.0 | 8.0 | 8.0 | 8.0 | 6.0 | 60.0 | 7.7 | 11.4 | 12.3 | 13.3 | 14.3 | 15.5 | 16.7 | 13.3 | 104.5 |
| **Total Investment Costs** | | | | | | | | | | | | 161.8 | 95.5 | 101.5 | 151.0 | 108.0 | 28.0 | 28.0 | 41.0 | 714.8 | 204.4 | 130.9 | 149.6 | 240.2 | 188.2 | 51.7 | 56.0 | 87.6 | 1,108.6 |
| **II. Recurrent Costs** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **A. Salaries and allowances** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **1. PMO Mongar** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| National project director | pers-month | 6 | 12 | 12 | 12 | 12 | 12 | 12 | 6 | 84 | 0,733 | 4.4 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 4.4 | 61.6 | 4.8 | 9.6 | 9.6 | 9.6 | 9.6 | 9.6 | 9.6 | 4.8 | 67.2 |
| Financial manager | pers-month | 6 | 12 | 12 | 12 | 12 | 12 | 12 | 6 | 84 | 0,733 | 4.4 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 4.4 | 61.6 | 4.8 | 9.6 | 9.6 | 9.6 | 9.6 | 9.6 | 9.6 | 4.8 | 67.2 |
| Accountant/Support Officer | pers-month | 6 | 12 | 12 | 12 | 12 | 12 | 12 | 6 | 84 | 0,386 | 2.3 | 4.6 | 4.6 | 4.6 | 4.6 | 4.6 | 4.6 | 2.3 | 32.4 | 2.5 | 5.1 | 5.1 | 5.1 | 5.1 | 5.1 | 5.1 | 2.5 | 35.4 |
| M&E and gender manager | pers-month | 6 | 12 | 12 | 12 | 12 | 12 | 12 | 6 | 84 | 0,505 | 3.0 | 6.1 | 6.1 | 6.1 | 6.1 | 6.1 | 6.1 | 3.0 | 42.4 | 3.3 | 6.6 | 6.6 | 6.6 | 6.6 | 6.6 | 6.6 | 3.3 | 46.3 |
| Assistant KM, Gender and M&E Officer /e | pers-month | 6 | 12 | 12 | 12 | 12 | 12 | 12 | 6 | 84 | 0,25 | 1.5 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 1.5 | 21.0 | 1.6 | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 | 1.6 | 22.9 |
| Agricultural production manager | pers-month | 6 | 12 | 12 | 12 | 12 | 12 | 12 | 6 | 84 | 0,646 | 3.9 | 7.8 | 7.8 | 7.8 | 7.8 | 7.8 | 7.8 | 3.9 | 54.3 | 4.2 | 8.5 | 8.5 | 8.5 | 8.5 | 8.5 | 8.5 | 4.2 | 59.2 |
| Livestock production manager | pers-month | 6 | 12 | 12 | 12 | 12 | 12 | 12 | 6 | 84 | 0,646 | 3.9 | 7.8 | 7.8 | 7.8 | 7.8 | 7.8 | 7.8 | 3.9 | 54.3 | 4.2 | 8.5 | 8.5 | 8.5 | 8.5 | 8.5 | 8.5 | 4.2 | 59.2 |
| Value-chain and marketing manager | pers-month | 6 | 12 | 12 | 12 | 12 | 12 | 12 | 6 | 84 | 0,646 | 3.9 | 7.8 | 7.8 | 7.8 | 7.8 | 7.8 | 7.8 | 3.9 | 54.3 | 4.2 | 8.5 | 8.5 | 8.5 | 8.5 | 8.5 | 8.5 | 4.2 | 59.2 |
| DY manager (VC&marketing - agriculture) RAMCO/DAMC | pers-month | 6 | 12 | 12 | 12 | 12 | 12 | 12 | 6 | 84 | 0,646 | 3.9 | 7.8 | 7.8 | 7.8 | 7.8 | 7.8 | 7.8 | 3.9 | 54.3 | 4.2 | 8.5 | 8.5 | 8.5 | 8.5 | 8.5 | 8.5 | 4.2 | 59.2 |
| DY manager (VC&marketing - livestock) RAMCO/DAMC | pers-month | 6 | 12 | 12 | 12 | 12 | 12 | 12 | 6 | 84 | 0,646 | 3.9 | 7.8 | 7.8 | 7.8 | 7.8 | 7.8 | 7.8 | 3.9 | 54.3 | 4.2 | 8.5 | 8.5 | 8.5 | 8.5 | 8.5 | 8.5 | 4.2 | 59.2 |
| Office assistants | pers-month | 12 | 24 | 24 | 24 | 24 | 24 | 24 | 12 | 168 | | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Drivers | pers-month | 12 | 24 | 24 | 24 | 24 | 24 | 24 | 12 | 168 | | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Cleaner | pers-month | 6 | 12 | 12 | 12 | 12 | 12 | 12 | 6 | 84 | | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Peon | pers-month | 6 | 12 | 12 | 12 | 12 | 12 | 12 | 6 | 84 | | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| **Subtotal** | | | | | | | | | | | | 35.0 | 70.0 | 70.0 | 70.0 | 70.0 | 70.0 | 70.0 | 35.0 | 490.3 | 38.2 | 76.4 | 76.4 | 76.4 | 76.4 | 76.4 | 76.4 | 38.2 | 534.9 |
| **2. Liaison office Thimphu** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| IFAD focal officer at PPD | pers-month | 6 | 12 | 12 | 12 | 12 | 12 | 12 | 6 | 84 | 0,646 | 3.9 | 7.8 | 7.8 | 7.8 | 7.8 | 7.8 | 7.8 | 3.9 | 54.3 | 4.2 | 8.5 | 8.5 | 8.5 | 8.5 | 8.5 | 8.5 | 4.2 | 59.2 |
| IFAD focal accountant at AFD | pers-month | 6 | 12 | 12 | 12 | 12 | 12 | 12 | 6 | 84 | 0,646 | 3.9 | 7.8 | 7.8 | 7.8 | 7.8 | 7.8 | 7.8 | 3.9 | 54.3 | 4.2 | 8.5 | 8.5 | 8.5 | 8.5 | 8.5 | 8.5 | 4.2 | 59.2 |
| **Subtotal** | | | | | | | | | | | | 7.8 | 15.5 | 15.5 | 15.5 | 15.5 | 15.5 | 15.5 | 7.8 | 108.5 | 8.5 | 16.9 | 16.9 | 16.9 | 16.9 | 16.9 | 16.9 | 8.5 | 118.4 |
| **Subtotal** | | | | | | | | | | | | 42.8 | 85.5 | 85.5 | 85.5 | 85.5 | 85.5 | 85.5 | 42.8 | 598.8 | 46.7 | 93.3 | 93.3 | 93.3 | 93.3 | 93.3 | 93.3 | 46.7 | 653.3 |
| **B. Operating costs** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **1. Project management unit** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vehicles O&M | vehicle | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 14 | 6,5 | 6.5 | 13.0 | 13.0 | 13.0 | 13.0 | 13.0 | 13.0 | 6.5 | 91.0 | 7.9 | 17.1 | 18.5 | 20.0 | 21.7 | 23.5 | 25.4 | 13.8 | 147.9 |
| Office O&M | lps | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 14 | 3,7 | 3.7 | 7.4 | 7.4 | 7.4 | 7.4 | 7.4 | 7.4 | 3.7 | 51.8 | 4.5 | 9.7 | 10.5 | 11.4 | 12.3 | 13.4 | 14.5 | 7.8 | 84.2 |
| Office supplies | lps | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 14 | 2,4 | 2.4 | 4.8 | 4.8 | 4.8 | 4.8 | 4.8 | 4.8 | 2.4 | 33.6 | 2.9 | 6.3 | 6.8 | 7.4 | 8.0 | 8.7 | 9.4 | 5.1 | 54.6 |
| Travels and meetings | lps | 0.51 | 0.51 | 0.51 | 0.51 | 0.51 | 0.51 | 0.5 | - | 3.56 | 7 | 3.6 | 3.6 | 3.6 | 3.6 | 3.6 | 3.6 | 3.5 | - | 24.9 | 4.3 | 4.7 | 5.1 | 5.5 | 6.0 | 6.4 | 6.8 | - | 38.9 |
| **Subtotal** | | | | | | | | | | | | 16.2 | 28.8 | 28.8 | 28.8 | 28.8 | 28.8 | 28.7 | 12.6 | 201.3 | 19.6 | 37.8 | 40.9 | 44.3 | 48.0 | 52.0 | 56.1 | 26.7 | 325.5 |
| **Total Recurrent Costs** | | | | | | | | | | | | 58.9 | 114.3 | 114.3 | 114.3 | 114.3 | 114.3 | 114.2 | 55.4 | 800.2 | 66.3 | 131.1 | 134.3 | 137.6 | 141.3 | 145.3 | 149.4 | 73.3 | 978.7 |
| **Total** | | | | | | | | | | | | 220.7 | 209.8 | 215.8 | 265.3 | 222.3 | 142.3 | 142.2 | 96.4 | 1,515.0 | 270.7 | 262.0 | 283.8 | 377.9 | 329.5 | 197.0 | 205.4 | 160.9 | 2,087.3 |

\a For the M&E and knowledge management assistant
\b For the M&E and knowledge management assistant
\c For the M&E officer
\d For the financial officer and the two accountants
\e Can also cover gender related aspects. Initial training in KM and gender required.