

Document: EB 2015/LOT/P.16
Date: 30 July 2015
Distribution: Public
Original: English

E



Investing in rural people

President's report

Proposed loan and grant to the
Kingdom of Bhutan for the
Commercial Agriculture and Resilient
Livelihoods Enhancement Programme

Note to Executive Board representatives

Focal points:

Technical questions:

Lakshmi Moola
Country Programme Manager
Tel.: +39 06 5459 2359
e-mail: l.moola@ifad.org

Dispatch of documentation:

Alessandra Zusi Bergés
Officer-in-Charge
Governing Bodies Office
Tel.: +39 06 5459 2092
e-mail: gb_office@ifad.org

For: Approval

Contents

Abbreviations and acronyms	ii
Map of the programme area	iii
Financing summary	iv
Recommendation for approval	1
I. Strategic context and rationale	1
A. Country and rural development and poverty context	1
B. Rationale and alignment with government priorities and results-based country strategic opportunities programme (RB-COSOP)	1
II. Programme description	2
A. Programme area and target group	2
B. Programme development objective	2
C. Components/outcomes	2
III. Programme implementation	3
A. Approach	3
B. Organizational framework	3
C. Planning, monitoring and evaluation, and learning and knowledge management	4
D. Financial management, procurement and governance	4
E. Supervision	5
IV. Programme costs, financing, and benefits	5
A. Programme costs	5
B. Programme financing	6
C. Summary benefit and economic analysis	8
D. Sustainability	8
E. Risk identification and mitigation	8
V. Corporate considerations	8
A. Compliance with IFAD policies	8
B. Alignment and harmonization	8
C. Innovations and scaling up	9
D. Policy engagement	9
VI. Legal instruments and authority	9
VII. Recommendation	9
Appendices	
I. Negotiated financing agreement	
II. Logical framework	

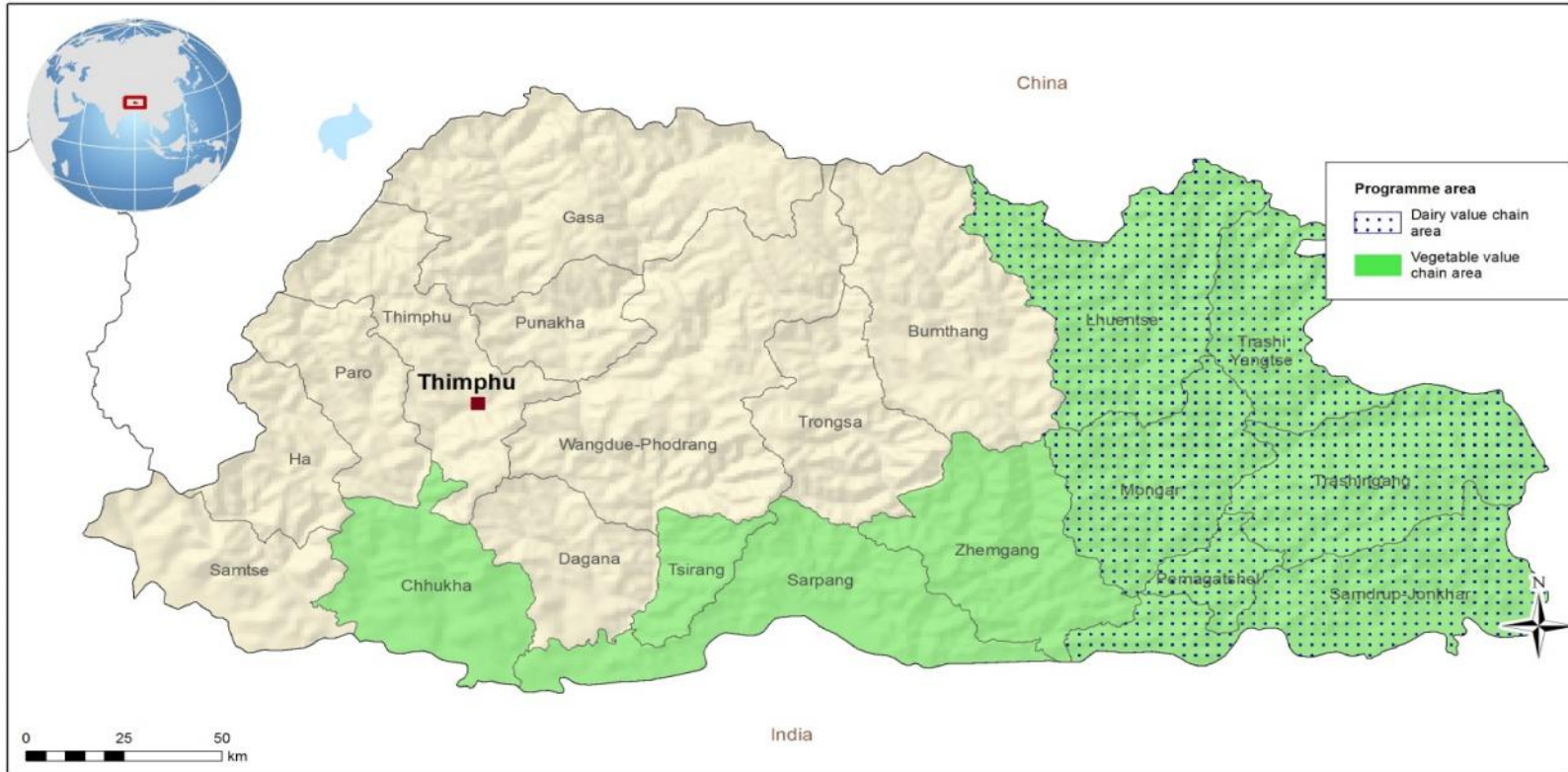
Abbreviations and acronyms

ASAP	Adaptation for Smallholder Agriculture Programme
FCBL	Food Corporation of Bhutan Ltd.
MoAF	Ministry of Agriculture and Forests
M&E	monitoring and evaluation
OPM	office of the programme management
PBAS	performance-based allocation system
PPP	public-private partnership
RNR	renewable natural resources

Kingdom of Bhutan

Commercial Agriculture and Resilient Livelihoods Programme

President's report



Map of the programme area



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

Map compiled by IFAD | 02-07-2015

Kingdom of Bhutan

Commercial Agriculture and Resilient Livelihoods Enhancement Programme

Financing summary

Initiating institution:	IFAD
Borrower:	Kingdom of Bhutan
Executing agency:	Ministry of Agriculture and Forests
Total programme cost:	US\$31.59 million
Amount of IFAD loan:	SDR 5.89 million (equivalent to approximately US\$8.27 million)
Amount of IFAD grant:	SDR 0.76 million (equivalent to approximately US\$1.06 million)
Amount of Adaptation for Smallholder Agriculture Programme (ASAP) grant:	SDR 3.58 million (equivalent to approximately US\$5.02 million)
Financing gap:¹	US\$6 million
Terms of IFAD loan:	Blend: Maturity period of 25 years, including a grace period of 5 years, with interest at a fixed rate of 1.25 per cent plus a service charge of 0.75 per cent per annum
Cofinancier:	Food Corporation of Bhutan Ltd. (FCBL)
Amount of cofinancing:	US\$4.81 million
Contribution of borrower:	US\$5.77 million
Contribution of beneficiaries:	US\$0.66 million
Appraising institution:	IFAD
Cooperating institution:	Directly supervised by IFAD

¹ Subject to country selection and applicable and available additional financing from the 2016-2018 or 2019-2021 performance-based allocation system (PBAS) allocation or cofinancing.

Recommendation for approval

The Executive Board is invited to approve the recommendation for the proposed financing to the Kingdom of Bhutan for the Commercial Agriculture and Resilient Livelihoods Enhancement Programme, as contained in paragraph 42.

Proposed loan and grant to the Kingdom of Bhutan for the Commercial Agriculture and Resilient Livelihoods Enhancement Programme

I. Strategic context and rationale

A. Country and rural development and poverty context

1. Located on the southern slopes of the Eastern Himalayas, Bhutan is mostly mountainous and heavily forested, with 70 per cent of its geographical area covered in forests, 10 per cent with shrubs and only 3 per cent cultivated. Elevations range from 160 to 7,000 metres above sea level, with 31 per cent of the agricultural land on steep slopes – greater than 50 degrees.
2. Bhutan's economy has experienced growth averaging 7 per cent per year, with GDP per capita increasing from US\$1,387 in 2006 to US\$2,363 in 2013, and poverty declining from 23 per cent in 2007 to 12 per cent in 2012. While approximately 62 per cent of the population depends on agriculture (mostly subsistence farming) for their livelihoods (95 per cent of the rural poor are employed in agriculture), the share of agriculture in real GDP declined by more than half, from 25 per cent in 2002 to 12 per cent in 2012. The share of spending on agriculture also declined from 22.5 per cent in 1982 to 9.8 per cent in 2013.
3. Poverty in Bhutan is a distinctly rural phenomenon. Poverty also varies by region, with the eastern parts of Bhutan significantly poorer than the rest of the country. Many villages are still isolated: those with limited roads and market access tend to have higher poverty rates. Lack of access to technology, business development services, fair markets and suitable financial products constrain rural enterprise.
4. The challenges affecting agricultural production include natural disasters, declining productivity, human-wildlife conflict, a shortage of farm labour, insufficient irrigation and limited post-harvest management.
5. In addition, climate change is projected to have a major impact on agricultural productivity as a result of changes in water availability, soil fertility and incidence of pests and disease. Considering that the nation's socio-economic well-being depends largely on agriculture, water resources and forests, the impacts of climate change have the potential to undermine development efforts.

B. Rationale and alignment with government priorities and results-based country strategic opportunities programme (RB-COSOP)

6. Bhutan's Government has accorded highest priority to agricultural development in its Eleventh Five Year Plan (2013-2018) in order to: (i) stimulate climate-resilient production; (ii) build value chain systems for vegetables and dairy, and a comprehensive marketing system to enhance the commercial viability of other agricultural products; and (iii) facilitate institutional linkages and policy dialogue towards the commercialization of agriculture.

7. The programme is therefore designed in alignment with the Eleventh Five Year Plan as a strategic value chain programme with focused product interventions, taking into consideration the Government's priorities and gaps left by previous projects.

II. Programme description

A. Programme area and target group

8. The programme will initially be implemented in the six poorest eastern districts of Lhuentse, Mongar, Pemagatshel, Samdrup Jongkhar, Trashigang and Trashiyangtse. Upon midterm review, it will be scaled up to include districts in central and south-western Bhutan.
9. The programme will follow an inclusive approach to reach all households living in target communities. It will involve 21,860 households in six districts in establishing sustainable agriculture production and an additional 7,115 households in building vegetable and dairy value chains. Within the target districts, the programme will work in areas that have been identified based upon: (i) demonstrated production potential in select commodities; (ii) relative accessibility to roads and marketing channels; and (iii) demonstrated interest and commitment of communities and farmers' organizations. Targeting will also focus on the inclusion of women and youth.

B. Programme development objective

10. The goal of the programme is to sustainably increase smallholder producers' incomes and reduce poverty through commercialization of production by programme households. The objective is increased returns to smallholder farmers through climate-resilient production of crops and livestock products in nationally organized value chains and marketing systems. The goal and objective are both in line with Bhutan's poverty strategy.

C. Components/outcomes

11. The programme's three main components are: (i) market-led sustainable agricultural production; (ii) value chain development and marketing; and (iii) institutional support and policy development. There will also be a management component.
12. Component 1: Market-led sustainable agricultural production. This component aims to bring about a sustainable increase in agricultural production by rural households and enhance the resilience of agricultural production systems to climate-induced shocks. It consists of three subcomponents:
 - (i) Increased production resilience and diversification in agriculture. This subcomponent will promote integrated agricultural production and management through: (a) strengthening existing farmers' groups and establishing new groups; (b) strengthening extension services, including the lead farmers outreach model, and increasing their reach; (c) supporting agricultural inputs, including seeds and seedlings; (d) developing efficient irrigation; (e) promoting agricultural system innovations; and (f) piloting an initiative on strengthening local institutions for increased climate resilience.
 - (ii) Intensification and expansion of vegetable production. In order to ensure an adequate volume of acceptable quality produce and planned and timely production, the programme aims to: (a) expand and intensify vegetable production by rural households; (b) strengthen existing vegetable producers' groups and promote new groups; (c) provide vegetable production inputs; and (d) promote vegetable seed research.
 - (iii) Intensification and expansion of dairy production. To ensure that an adequate volume of high-quality milk is produced by smallholder dairy farmers, the programme will: (a) strengthen existing smallholder dairy farmer

groups and establish new groups; (b) improve outreach services for livestock; (c) support fodder and feed production; (d) provide dairy production inputs; and (e) install bio-gas units.

13. Component 2: Value chain development and marketing. By building value chains and marketing systems for vegetable and dairy products, the programme will increase the incomes of smallholder farmers through their participation in commercial farm production through three subcomponents:
 - (i) Development of resilient vegetable and dairy value chains. The programme will support the design and implementation of vegetable and dairy value chains, increasing climate resilience and strengthening the capacity of the Food Corporation of Bhutan Ltd. (FCBL) for value chain development and business plan design and implementation.
 - (ii) Strengthening agricultural commercialization and enterprise development. Support will be provided for: (a) agriculture enterprise development; (b) facilitating access to finance, including a social inclusion fund and production support fund; and (c) development of multi-stakeholder platforms and networks.
 - (iii) Development of community-driven market infrastructure. The programme will support the creation of value chain infrastructure at the local level, with ownership and management by communities, farmers' groups, cooperatives and small-scale entrepreneurs. Support will include the design and construction of necessary infrastructure and equipment for vegetable and dairy value chains.
14. Component 3: Institutional support and policy development. This component aims to build an institutional and policy environment that fosters the collaboration necessary for climate-resilient, market-led production and value chain development in the renewable natural resources (RNR) sector for addressing structural development constraints. The subcomponents include:
 - (i) Strengthened value chain and marketing knowledge and communication. The programme will capture and document knowledge and best practices from programme implementation, especially related to climate resilience and value chain and market development by: (a) strengthening market information systems; and (b) developing a curriculum for RNR training institutes.
 - (ii) Mainstreaming climate change resilience and value chain lessons into agricultural policies and sector strategies. This subcomponent will involve: (a) participatory policy development and monitoring; (b) support to Bhutan's Ministry of Agriculture and Forests (MoAF) in mainstreaming agricultural policy; and (c) developing a regulatory framework that is conducive to private-sector development and public-private partnership (PPP).

III. Programme implementation

A. Approach

15. The programme will be implemented over seven years, from 2015-2022. It will adopt a flexible, non-prescriptive, process-oriented approach that enables stakeholders to determine the scope of activities aimed at agricultural and livestock diversification for climate-resilient livelihoods. Vegetable and dairy intensification activities will follow a more selective approach to value chain and marketing development.

B. Organizational framework

16. Programme implementation responsibility. MoAF will be the lead agency, with overall responsibility for the programme and specific responsibility for achieving

outcomes 1 and 3 (see the logical framework in appendix II). FCBL is the implementing partner responsible for achieving outcome 2. The national programme steering committee and regional programme implementation committee will advise the office of the programme management (OPM), which will be responsible for the delivery of results. A liaison office under the direction of the OPM will be established within the MoAF secretariat.

C. Planning, monitoring and evaluation, and learning and knowledge management

17. Planning, monitoring and evaluation. Programme activities will be reflected in the Government's planning and monitoring system. The OPM will establish a monitoring and evaluation (M&E) unit to ensure that all outputs, outcomes and impact indicators are included in the planning and monitoring system, and will design tools to capture critical field-level data not included in the planning and monitoring system. The annual workplan and budget will be the main planning tool, and will be used to review programme performance and progress.
18. Learning and knowledge management. A knowledge management strategy will be prepared to facilitate engagement in policy development related to resilient agriculture and dairy production, and marketing support. It will include strategies for strengthening market information systems and developing RNR training curricula. A strong knowledge-sharing and learning culture will be built through the use of participatory tools and knowledge from M&E, and the development of knowledge products.

D. Financial management, procurement and governance

19. Financial management. The financial management assessment for this programme concluded that the arrangements made by the MoAF are adequate. In view of the low fiduciary risk, the country's public financial management systems will be utilized provided they are consistent with IFAD guidelines and procedures. Qualified finance staff will be in place at the OPM and liaison office. Financial reporting will follow national accounting standards on cash-basis accounting in line with the International Public Sector Accounting Standards. The programme's financial accounts will be maintained with computerized accounting software and customized to generate financial reports.
20. Fund flow mechanism. IFAD will make funds available to the Government under the terms and conditions of the financing agreement. Programme funds will flow from IFAD via designated accounts established in the Royal Monetary Authority, or another commercial bank acceptable to IFAD. The designated accounts will be administered following imprest account arrangements. Advances from the IFAD loan must be segregated from other funds for the programme.
21. Internal controls and external audit. Internal controls will be established to ensure operational efficiency, reliability of reporting and compliance with IFAD's requirements. The Government's Royal Audit Authority has been mandated to audit all foreign-funded loan programmes following standards set by the International Organization of Supreme Audit Institutions. External auditing arrangements will be established by the Royal Audit Authority.
22. Start-up costs. Expenditures for programme start-up that are incurred after the entry into force of the financing agreement but before the satisfaction of the conditions precedent to withdrawal, shall not exceed an aggregate amount of SDR 25,000.
23. Procurement of goods, works and services. Procurement of goods, works and services financed by IFAD under components 1 and 3 will be carried out in accordance with the provisions of the Government's Procurement Rules and Regulations (revised June 2014). Under component 2, procurement will be carried

out according to FCBL Procurement Rules and Regulations, provided they are consistent with IFAD's Procurement Guidelines.

24. **Governance.** A national programme steering committee will provide policy direction to facilitate implementation and guide programme management. A regional programme implementation committee will steer design and implementation of the annual workplan and budget at the local, district and regional levels. The national programme steering committee will resolve all programme management issues and disputes concerning implementation; unresolved issues may be referred to the Minister of Agriculture and Forests. The governance framework will ensure that the programme includes: (i) mechanisms for regular internal audits at the OPM and implementing offices; (ii) annual independent audits; (iii) verification of fiduciary compliance during supervision; (iv) independent impact assessments; (v) efficient public financial management systems and efforts to ensure transparency by strengthening state oversight institutions; and (vi) community involvement in decision-making, planning, implementation and monitoring.

E. Supervision

25. The programme will be directly supervised by IFAD. A midterm review will be conducted halfway through the implementation period and will provide opportunities for programme realignment and scaling up based on the availability of funds.

IV. Programme costs, financing, and benefits

A. Programme costs

26. The total programme cost is estimated at US\$31.59 million over seven years, including contingencies. The total base costs equal US\$24.18 million and physical and price contingencies account for US\$1.86 million and US\$5.55 million respectively (8 per cent and 23 per cent respectively of total base costs). Investment costs are estimated at US\$26.18 million (83 per cent of the total cost) while recurrent costs are estimated at US\$5.41 million (17 per cent of the total cost).

Table 1
Indicative programme costs by component and financier
(Thousands of United States dollars)

<i>Component</i>	<i>Recipient</i>	<i>IFAD loan</i>	<i>Financing gap*</i>	<i>IFAD grant</i>	<i>ASAP grant</i>	<i>Beneficiaries</i>	<i>FCBL</i>	<i>Total</i>
	<i>Amount</i>	<i>Amount</i>	<i>Amount</i>	<i>Amount</i>	<i>Amount</i>	<i>Amount</i>	<i>Amount</i>	<i>Amount</i>
1. Market-led agricultural production	4 196.0	4 808.7	4 268.6	399.8	3 024.6	658.8	-	17 356.7
2. Value chain development and marketing	598.5	3 150.1	1 662.3	173.9	1 729.1	-	4 281.0	11 594.9
3. Institutional support and policy development	13.6	144.0	65.7	34.0	268.9	-	-	526.1
4. Programme management, coordination, M&E	965.7	170.6	-	452.9	-	-	521.5	2 110.7
Total programme cost	5 773.8	8 273.4	5 996.6	1 060.6	5 022.6	658.8	4 802.4	31 588.3

* Subject to country selection and applicable and available additional financing from the 2016-2018 or 2019-2021 performance-based allocation system (PBAS) allocations or cofinancing.

B. Programme financing

27. The programme will be financed by: (i) an IFAD loan of approximately US\$8.27 million (26.2 per cent of the total programme cost); (ii) an IFAD grant of approximately US\$1.06 million (3.4 per cent of the total cost); (iii) an ASAP grant of approximately US\$5.02 million (15.9 per cent of the total cost); (iv) a mainly in-kind beneficiary contribution estimated at US\$0.66 million (2.1 per cent of the total cost); (v) a contribution by the Government of approximately US\$5.77 million (18.3 per cent of the total cost); (vi) cofinancing from FCBL of US\$4.81 million, mainly through recurrent costs (15.2 per cent of the total cost); and (vii) a financing gap of approximately US\$6 million (19 per cent of the total cost) subject to country selection and applicable and available additional financing from the 2016-2018 or 2019-2021 PBAS allocations or cofinancing. The Government will finance taxes and duties, most of the recurrent costs, re-training (in line with the mandate of the MoAF) and dairy inputs.

Table 2^a**Indicative programme costs by expenditure category and financier**

(Thousands of United States dollars)

<i>Expenditure category</i>	<i>Recipient</i>		<i>IFAD loan</i>		<i>Financing gap^b</i>		<i>IFAD grant</i>		<i>ASAP grant</i>		<i>Beneficiaries</i>		<i>FCBL</i>		<i>Total</i>
	<i>Amount</i>	<i>%</i>	<i>Amount</i>	<i>%</i>	<i>Amount</i>	<i>%</i>	<i>Amount</i>	<i>%</i>	<i>Amount</i>	<i>%</i>	<i>Amount</i>	<i>%</i>	<i>Amount</i>	<i>%</i>	<i>Amount</i>
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
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
3. Vehicles	7.3	10.0	-	-	-	-	65.8	90.0	-	-	-	-	-	-	73.1
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
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
6. Workshops	0.0	-	192.6	34.1	190.5	33.8	166.2	29.5	14.9	2.6	-	-	-	-	564.1
7. 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
8. Fund	-	-	272.7	83.3	-	-	54.5	16.7	-	-	-	-	-	-	327.3
9. Operating costs	446.7	29.0	-	-	-	-	-	-	-	-	-	-	1 091.1	71.0	1 537.8
10. Salaries and allowances	571.2	14.8	-	-	-	-	46.3	1.2	-	-	-	-	3 249.0	84.0	3 866.5
Total programme costs	5 773.8	18.3	8 273.4	26.2	5 996.6	19.0	1 060.6	3.4	5 022.6	15.9	658.8	2.1	4 802.4	15.2	31 588.3

^a The final disbursement categories will be decided based on IFAD procedures and will include a maximum of five cost categories to maximize efficiency.^b Subject to country selection and applicable and available additional financing from the 2016-2018 or 2019-2021 PBAS allocations or cofinancing.

C. Summary benefit and economic analysis

28. All crop and farm models analysed are profitable, yielding positive net present value. Economic analysis of the programme based on financial models and using economic prices shows it to be profitable, with an estimated net present value of 404 million Bhutanese ngultrums or US\$7.3 million, and an internal rate of return of 16 per cent at a discount rate of 10 per cent.
29. The programme will directly benefit 28,975 households.
30. Immediate benefits include: (i) increased vegetable and dairy production; (ii) greater use of sustainable agricultural practices; (iii) increased access to extension and market information; (iv) sustainable extension services; (v) market access through consolidation of production; (vi) enterprise establishment; and (vii) greater employment opportunities. Indirect benefits include enhanced rural employment, strengthened climate resilience and improved household nutrition.

D. Sustainability

31. The programme incorporates many features designed to promote long-term sustainability. By selecting a limited number of value chains, production support is area-specific and tailored to value chain planning needs, allowing subsequent chains to be established. The programme will also build target communities' ownership through village-level planning and implementation, including investments in the development of operation and maintenance groups for assets. Links between production, marketing and enterprise development will be forged to promote the sharing of benefits between farmers and the private sector. Accountability and ownership by farmers will be built to allow for demand-driven services. Finally, the programme will strengthen grass-roots institutions and their support services.

E. Risk identification and mitigation

32. A major risk relates to the limited capacity of the implementing partner, FCBL, for value chain and enterprise development, and PPPs. This has been mitigated by the allocation of additional resources for strategy development, capacity development support and targeted technical assistance. Strengthening climate change resilience will be a challenge at the farm and community levels, and within value chains, where risks, interests and values are diverse; success depends upon joint action from an understanding of interdependent relationships. This risk has been mitigated by strengthening climate-smart agriculture and farm management practices through targeted technical assistance.

V. Corporate considerations

A. Compliance with IFAD policies

33. The programme conforms to IFAD's policies and strategies on targeting, gender, environmental and natural resource management, and knowledge and innovation. In terms of its environmental impact, the programme falls under Category B.

B. Alignment and harmonization

34. The programme is in line with the Government's Eleventh Five Year Plan (2013-2018) and will specifically contribute to expanding agriculture service outreach to remote and vulnerable populations, and increasing smallholders' resilience to climate change and shocks. The MoAF has developed a market-led agriculture development strategy to facilitate the transition from subsistence to commercial agriculture; the programme supports this strategy.
35. To enhance efficiency and reduce redundancies among government stakeholders, the programme will aim to achieve complementarities among partners. Synergies with the World Food Programme and the World Bank have already been identified.

C. Innovations and scaling up

36. The programme will support the following innovations: (i) the lead farmer model for agricultural development; (ii) animal health service models; (iii) an e-agriculture platform; (iv) permaculture approaches; and (v) linking smallholder market development to the Bhutan commodity exchange. Although none of these innovations is new, their integrated application in Bhutan through the proposed programme is innovative. In addition, efforts to strengthen local institutions' capacity for improved outreach and sustainability in collaboration with government service networks have not previously been undertaken in Bhutan in an integrated manner. Linking technical innovation with the development of new models is a significant innovation in Bhutan.
37. In its second phase, the programme will also include areas with high production and marketing potential for vegetable value chains in the south-central and south-western districts, adding 7,500 direct beneficiaries (1,500 households).

D. Policy engagement

38. The programme will facilitate government linkages and policy dialogue towards the commercialization of agriculture. This includes addressing RNR institutions and policy issues to build strong agricultural institutions and sound policies for improved and sustainable agricultural and marketing practices.

VI. Legal instruments and authority

39. A programme financing agreement between the Kingdom of Bhutan and IFAD will constitute the legal instrument for extending the proposed financing to the borrower/recipient. A copy of the negotiated financing agreement is attached as appendix I.
40. The Kingdom of Bhutan is empowered under its laws to receive financing from IFAD.
41. I am satisfied that the proposed financing will comply with the Agreement Establishing IFAD and the Policies and Criteria for IFAD Financing.

VII. Recommendation

42. I recommend that the Executive Board approve the proposed financing in terms of the following resolution:

RESOLVED: that the Fund shall provide a loan on blend terms to the Kingdom of Bhutan in an amount equivalent to five million eight hundred ninety thousand special drawing rights (SDR 5,890,000), and upon such terms and conditions as shall be substantially in accordance with the terms and conditions presented herein.

RESOLVED FURTHER: that the Fund shall provide a grant to the Kingdom of Bhutan in an amount equivalent to seven hundred sixty thousand special drawing rights (SDR 760,000) and upon such terms and conditions as shall be substantially in accordance with the terms and conditions presented herein.

RESOLVED FURTHER: that the Fund shall provide an ASAP grant to the Kingdom of Bhutan in an amount equivalent to three million five hundred eighty thousand special drawing rights (SDR 3,580,000) and upon such terms and conditions as shall be substantially in accordance with the terms and conditions presented herein.

Kanayo F. Nwanze
President

Negotiated financing agreement:

"Commercial Agriculture and Resilient Livelihoods Enhancement Programme (CARLEP)"

(Negotiations concluded on 14 July 2015)

IFAD Loan Number: _____

IFAD Grant Number: _____

ASAP Trust Grant Number: _____

Programme Title: Commercial Agriculture and Resilient Livelihoods Enhancement Programme (the "Programme")

The Kingdom of Bhutan (the "Borrower/Recipient")

and

The International Fund for Agricultural Development (the "Fund" or "IFAD")

and

The Adaptation for Smallholder Agriculture Programme Trust Fund (the "ASAP Trust")

(each a "Party" and collectively the "Parties")

Whereas the Executive Board of the Fund, at its 105th Session, approved the establishment of an Adaptation for Smallholder Agriculture Programme Trust Fund ("the ASAP Trust");

Whereas IFAD has agreed to extend a loan (the "IFAD Loan") and a grant (the "IFAD Grant") to the Borrower/Recipient for the purposes of financing the Programme, on the terms and conditions set forth in this Agreement;

Whereas, on the basis of the above and other considerations, the ASAP Trust has agreed to extend a grant (the "ASAP Trust Grant") to the Borrower/Recipient for the purposes of increasing the financing in respect of the Programme, on the terms and conditions set forth in this Agreement;

Whereas the commitment of the ASAP Trust Grant is subject to availability of funds in the ASAP Trust;

Now Therefore, the Parties hereby agree as follows:

Section A

1. The following documents collectively form this Agreement: this document, the Programme Description and Implementation Arrangements (Schedule 1) and the Allocation Table (Schedule 2).

2. The Fund's General Conditions for Agricultural Development Financing dated 29 April 2009, as may be amended from time to time (the "General Conditions") are annexed to this Agreement, and all provisions thereof shall apply to this Agreement. For the purposes of this Agreement the terms defined in the General Conditions shall have the meanings set forth therein.

3. The Fund shall provide the IFAD Loan and IFAD Grant and the ASAP Trust shall provide the ASAP Trust Grant to the Borrower/Recipient (collectively the "Financing"), which the Borrower/Recipient shall use to implement the Programme in accordance with the terms and conditions of this Agreement.

Section B

1. A. The amount of the IFAD Loan is five million eight hundred and ninety thousand Special Drawing Rights (SDR 5 890 000).

B. The amount of the IFAD Grant is seven hundred sixty thousand Special Drawing Rights (SDR 760 000).

C. The amount of the ASAP Trust Grant is three million five hundred and eighty thousand Special Drawing Rights (SDR 3 580 000).

2. The IFAD Loan is granted on blend terms as defined in paragraph 15(a)(iii) of the Policies and Criteria for IFAD Financing dated 14 February 2013.

3. The Loan Service Payment Currency shall be USD.

4. The first day of the applicable Fiscal Year shall be 1 July.

5. Payments of principal and service charge shall be payable on each 15 April and 15 October of each year in the Loan Service Payment Currency.

6. Designated Accounts.

(a) There shall be an IFAD Loan Designated Account, an IFAD Grant Designated Account and an ASAP Trust Grant Designated Account for the purposes of receiving the proceeds of the IFAD Loan, IFAD Grant and ASAP Trust Grant respectively and financing the Programme.

(b) Designated Accounts shall be opened in the central bank of the Borrower/Recipient (the Royal Monetary Authority of Bhutan), denominated in USD and on terms and conditions satisfactory to the Fund, including but not limited to appropriate protection against set off, seizure or attachment. The Designated Accounts shall be operated by the Department of Public Accounts (the "DPA") of the Ministry of Finance (the "MoF") of the Borrower/Recipient or any other competent department authorized by the MoF.

7. The Borrower/Recipient shall provide counterpart financing in an approximate amount of five million and seven hundred thousand US dollars (USD 5 700 000) to finance, inter alia, taxes associated with the Programme implementation and a part of recurrent costs and re-training expenditures, awareness on marketing groups, technical assistance on strengthening of existing marketing and cooperative capacity development packages, and provision of dairy production inputs such as for cross-breed cattle. The co-financing of the Food Corporation of Bhutan Ltd. (the "FCBL") shall be made in an amount of four million and eight hundred thousand US dollars (USD 4 800 000) mainly for the recurrent costs.

Section C

1. The Lead Programme Agency shall be the Ministry of Agriculture and Forests (the "MoAF") of the Borrower/Recipient.
2. The following is designated as an additional Programme Party: the FCBL.
3. The Programme Completion Date shall be the seventh anniversary of the date of entry into force of this Agreement.

Section D

The Financing will be administered and the Programme supervised by the Fund.

Section E

1. The following is designated as an additional ground for suspension of this Agreement:

Any competent authority has taken action without the prior consent of the Fund for institutional changes to the National Programme Steering Committee (the "NPSC") and/or the Office of Programme Management (the "OPM") as referred to in Schedule 1 hereto, including but not limited to modification of the membership composition, dissolution and merger, and the Fund has determined that any such event listed above is likely to have a material adverse effect on the Programme.

2. The following are designated as additional conditions precedent to withdrawal:
 - (a) The OPM shall have been duly established and staffed;
 - (b) The Fund's no-objection to the Programme Implementation Manual (the "PIM") as referred to in Schedule 1 hereto shall have been obtained;
 - (c) The Designated Accounts shall have been duly opened and authorized signatories therefor been received by the Fund; and
 - (d) The subsidiary agreement between the MoAF and the FCBL as referred to in Schedule 1 hereto shall have entered into force.
3. The following are the designated representatives and addresses to be used for any communication related to this Agreement:

For the Borrower/Recipient:

Director General
Department of Public Accounts
Ministry of Finance
Thimphu, Bhutan

For the Fund:

President
International Fund for Agricultural Development
Via Paolo di Dono, 44
00142 Rome, Italy

For the ASAP Trust:

President of the International Fund for Agricultural
Development in its capacity as Trustee of the
Adaptation for Smallholder Agriculture Programme
Trust Fund
International Fund for Agricultural Development
Via Paolo di Dono, 44
00142 Rome, Italy

This Agreement, dated _____, has been prepared in the English language in two (2) original copies, one (1) for the Fund and the ASAP Trust and one (1) for the Borrower/Recipient.

KINGDOM OF BHUTAN

[insert name and title]

INTERNATIONAL FUND FOR AGRICULTURAL DEVELOPMENT

Kanayo F. Nwanze
President

ADAPTATION FOR SMALLHOLDER AGRICULTURE PROGRAMME TRUST FUND

Kanayo F. Nwanze
President of the International Fund for Agricultural
Development in its capacity as Trustee of the
Adaptation for Smallholder Agriculture Programme
Trust Fund

Schedule 1

Programme Description and Implementation Arrangements

I. Programme Description

1. **Target Population.** The Programme shall work with approximately twenty-one thousand eight hundred and sixty (21 860) households in six (6) dzongkhags (Lhuentse, Mongar, Pemagatshel, Samdrup Jongkhar, Trashigang and Trashiyangtse (the “Programme Area”)) to build sustainable agriculture production and additional approximately seven thousand one hundred and fifteen (7 115) households to build the vegetable and dairy value chains. The target population shall also focus on inclusion of women and youth. Upon the recommendations of the Mid-term Review as defined below in paragraph 13, the Programme Area may be expanded to include central and west-southern districts.

2. **Goal.** The goal of the Programme is to sustainably increase smallholder producers’ incomes and reduce poverty through commercialization of production by Programme households.

3. **Objective.** The objective of the Programme is increased returns to smallholder farmers through climate resilient production of crops and livestock products in nationally organized value chains and marketing systems.

4. **Components.** The Programme consists of four (4) Components: (i) Market-led sustainable agricultural production; (ii) Value chain development and marketing; (iii) Institutional support and policy development; and (iv) Programme management.

4.1. Component 1: Market-led Sustainable Agricultural Production. The objective of the Component is to bring about sustainable increase in agricultural production by rural households and enhanced resilience of agricultural production systems to climate induced changes/shocks. It consists of three (3) sub-components:

- (i) Increased production resilience and diversification in agriculture. This sub-component shall promote integrated agriculture production and management through: (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.
- (ii) Intensification and expansion of vegetable production. To establish adequate volume of acceptable quality and planned and timely production, the Programme shall support the following activities: (a) expanding and intensifying vegetable production by rural households; (b) strengthening existing vegetable producers’ groups and promoting and capacitating new groups; (c) providing vegetable production inputs; and (d) vegetable seed research and production.
- (iii) Intensification and expansion of dairy production. To ensure adequate volumes and quality standards of milk are produced by smallholder dairy farmers, the Programme shall support: (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.

4.2. Component 2: Value Chain Development and Marketing. This Component aims to ensure that by instituting organized/structured value chain and marketing systems for vegetable and dairy products, the Programme contributes to increased incomes for smallholder farmers from participation in commercial farm production, through three (3) sub-components:

- (i) Development of resilient vegetable and dairy value chains. The Programme shall support the entire process of design and implementation of vegetable and dairy value chains, including issues of climate resilience, and development of FCBL capacity to effectively carry out the value chain development programme as well as its present responsibilities through (a) strengthening FCBL capacity for value chain development; and (b) value chain and business plan design and implementation.
- (ii) Strengthening agricultural commercialization and enterprise development. This sub-component shall provide support to: (a) agriculture enterprise development; (b) the facilitation of access to finance, including through a social inclusion fund and production support fund; and (c) the development of multi-stakeholder platforms and networks.
- (iii) Development of community driven market infrastructure. This sub-component shall support the creation of value chain infrastructure at the local community level, to be owned and managed by communities, farmers' groups/cooperatives or small entrepreneurs. Support shall include design, construction and supply of necessary infrastructure and equipment for the vegetable and dairy value chains.

4.3. Component 3: Institutional Support and Policy Development. This Component aims to build an institutional and policy environment that fosters collaboration and partnerships which are necessary for climate resilience, market-led production and value chain development in the renewable natural resources (the "RNR") sectors and for addressing the prevailing structural development constraints. The sub-components are:

- (i) Strengthened value chain and marketing knowledge and communication. This sub-component shall capture and document knowledge and good practice from Programme implementation, especially related to climate resilience, value chain and market development through: (a) strengthening market information systems; and (b) developing the curriculum of RNR training and education institutes.
- (ii) Mainstreaming climate change resilience and value chain lessons into agricultural policies and sector strategies. Activities under this sub-component shall be supported through: (a) a participatory policy development and monitoring approach; (b) support to MoAF in agricultural policy mainstreaming; and (c) the development of a conducive regulatory framework for private sector development and Public Private Partnership (the "PPP").

4.4. Component 4: Programme Management.

II. Implementation Arrangements

5. Lead Programme Agency. The MoAF of the Borrower/Recipient, in its capacity as Lead Programme Agency, shall take overall responsibility for the Programme. It shall provide policy guidance, required technical staff for implementation from its pool of civil servants and technical backstopping through its line departments and field agencies.

6. NPSC. The NPSC shall meet at least half-yearly (and/or quarterly as needed) and shall provide policy directives to facilitate implementation at the field level and give guidance to the Programme management. The NPSC shall also review and endorse the Annual Work Plans and Budgets (AWPBs) and serve as platform for discussion and resolution of issues. Secretary, MoAF shall chair the NPSC. Other NPSC members shall include, inter alia, Chief Executive Officer or nominee of the FCBL; Director General, Agriculture; Director General, Livestock; Director, Department of Agriculture Marketing and Cooperatives; Director, or nominee of Gross National Happiness Commission; Chief Planning Officer, MoAF; Director General, DPA of the MoF; and representatives from collaborating development partners and civil society organizations. The National Programme Director (the "NPD") of the Programme, as defined below, shall be the Member-Secretary of the NPSC.

7. Regional Programme Implementation Committee (the "RPIC"). The MoAF shall establish the RPIC for the Programme. The RPIC shall steer synchronization of the AWPBs and implementation at geog, dzongkhag and regional level to enable combining of some dzongkhag level activities and sharing experiences for possible replication in other areas. The RPIC shall be composed of the Dzongdas of the Programme dzongkhags, two nominated Gups representing geog level implementation, representatives from FCBL and Department of Agriculture Marketing and Cooperatives (the "DAMC")/Regional Agriculture Marketing and Cooperatives (the "RAMCO"), Regional Directors of various MoAF agencies and representatives from collaborating development agencies.

8. OPM and NPD. The overall responsibility for the day-to-day Programme implementation shall rest with the OPM under the leadership of the NPD. The OPM shall be located in the Programme Area. The OPM shall function as a separate unit under the direct administrative control of Secretary, MoAF for the Programme Implementation Period. A Liaison Office, under the direction of the OPM, shall be established in the MoAF Secretariat within the Policy and Planning Division at Thimphu. The OPM shall be led by the NPD, a senior officer from MoAF with service grade preferably close to or one step lower to Dzongdas. The full time Managers/Officers of the OPM, located at the OPM, shall be from different departments or agencies of the MoAF. The appointment and removal of the NPD and other senior professional staff (particularly the finance personnel) shall be made through transparent process and with prior concurrence of the Fund.

8.1. Main Responsibilities of the OPM. The responsibilities of the OPM shall include, inter alia: the Programme start-up and other IFAD requirements such as Annual Results and Impact Management System (RIMS) Report, baseline and impact surveys, Annual Outcome Surveys, AWPBs, Annual Progress Reports, Statements of Expenditure, Withdrawal Applications and Audit. The OPM shall take the overall responsibility for coordination of Programme planning, implementation, progress monitoring, knowledge generation, funds allocation and disbursements to implementing agencies and reporting results to Government of the Borrower/Recipient and the Fund, in addition to knowledge sharing and learning with key Programme partners.

9. Geog and Dzongkhag Administrations. The geog administrations are the grassroots level implementing entities. Field activities shall be planned, coordinated, implemented and supervised with full involvement of the Geog Tshogde, Gup, Geog Administrative Officer, geog Extension Agents and Tshogpas, with close support and dzongkhag level coordination guidance from District Officers, particularly District Agriculture Officers, District Livestock Officers and District Engineers. Geogs shall therefore take the lead in close coordination with dzongkhag sector staff in, inter alia, (a) identification of most suitable activities and sites (village or farmers groups) for Programme investment; (b) inputs/preparation for district level AWPBs; (c) management of inputs supply including supervision of implementation and progress of activities, technical backstopping and training of geog staff; (d) progress monitoring including data collection and data validation to feed into the OPM monitoring & evaluation systems; (e) working closely with

other district officers such as District Planning Officer, Finance Officer and other entities; and (f) contribution to the knowledge management functions of the Programme through documentation of good practices and capturing lessons learned.

10. The District Planning Officers (the "DPOs"). The DPOs shall assist sector staff in preparing dzongkhag level AWPBs and progress reports and will work closely with the relevant OPM unit in the operation and entry of data relating to Programme activities in the district level Planning and Monitoring System (the "PLaMS"). The District Finance Officers shall manage the Dzongkhag Programme Letter of Credit Accounts and prepare the required financial reports in close collaboration with the Geog Administrative Officer and submit to the OPM.

11. FCBL. The FCBL shall be the implementing partner for Component 2, responsible for achieving Programme results specifically under this Component, as well as for supporting the overall Programme results. The FCBL Value Chain and Marketing Manager shall be delegated the responsibility by the Chief Executive Officer (the "CEO") of FCBL to implement the Programme. The Value Chain and Marketing Manager, based at the OPM, shall coordinate with the FCBL CEO on Programme implementation and Component 2 management issues, while as part of the OPM team, shall also closely coordinate with and report administratively to the NPD. A subsidiary agreement shall be concluded between the MoAF and the FCBL in order for the latter to lead the overall value chain strategy development and market infrastructure planning and design, as well as engage in planning at geog and dzongkhag level to give advice on production targeting, quality and volumes and market infrastructure development.

12. PIM. The OPM shall prepare a draft PIM acceptable to the Fund and submit it for approval to the NPSC. When so approved, a copy of the PIM shall be provided by the OPM to the Fund. The PIM shall include detailed rules and procedures on, inter alia:

- (i) qualifications, terms of reference and detailed implementation responsibilities of Programme Parties including, *inter alia*, the recruitment of professional staff of the OPM, consultants and service providers;
- (ii) budgeting, expenditure approvals and overall accounting and reporting framework;
- (iii) financial controls, stringent asset management controls, thorough internal and external audit function, detailed mechanisms for reporting of fraud and corruption and related management actions as per the Fund's policies and rules;
- (iv) procurement; and
- (v) monitoring and evaluation.

The PIM may be amended from time to time only with the prior consent of the Fund.

13. Mid-Term Review (the "MTR"). An MTR shall be conducted, to assess the progress, achievements, constraints and emerging impact and likely sustainability of the Programme and make recommendations and necessary adjustments for the remaining period of disbursement. The MTR shall be carried out jointly by the Lead Programme Agency and the Fund.

Schedule 2

Allocation Table

1. Allocation of IFAD Loan, IFAD Grant and the ASAP Trust Grant Proceeds.

(a) The Table below sets forth the Categories of Eligible Expenditures to be financed by the IFAD Loan, the IFAD Grant and the ASAP Trust Grant and the allocation of the amounts of the IFAD Loan, the IFAD Grant and the ASAP Trust Grant to each Category and the percentages of expenditures for items to be financed in each Category:

Category	IFAD Loan Amount Allocated (SDR)	IFAD Grant Amount Allocated (SDR)	ASAP Trust Grant Amount Allocated (SDR)	Percentage
I. Works,	1,890,000.00		120,000.00	100% net of taxes and beneficiaries' contributions
II. Goods, Services and Inputs	2,000,000.00	210,000.00	400,000.00	100% net of taxes and other contributions
III. Training	1,230,000.00	370,000.00	2,700,000.00	100% net of taxes and Government contributions
IV. Grants and Subsidies	180,000.00	40,000.00	-	100% net of taxes
V. Operating costs		70,000.00		100% net of taxes and other contributions
Unallocated	590,000.00	70,000.00	360,000.00	
Total	5,890,000.00	760,000.00	3,580,000.00	

(b) The terms used in the Table above are defined as follows:

"Works" under Category I of the IFAD Loan shall mean eligible expenditures incurred related to works under Component 1 and Component 2 except for farm level water and rainwater harvesting infrastructure under Component 1, which shall be financed 100% of total costs net of taxes and beneficiaries' contributions by the Loan.

"Works" under Category I of the ASAP Trust Grant shall mean eligible expenditures incurred related to farm level water and rainwater harvesting infrastructure under Component 1, which shall be financed 100% of total costs net of taxes and beneficiaries' contributions by the ASAP Trust Grant.

"Goods, Services and Inputs" under Category II of the IFAD Loan shall mean eligible expenditures incurred related to:

- (i) cross-breed cattle under Component 1, up to 66% of which shall be financed by the IFAD Loan, and the remaining by the Borrower/Recipient and/or other entities;

- (ii) all other equipment, material except for cross breed cattle under Component 1 will be financed by the IFAD Loan 100% net of taxes and beneficiaries' contributions; and
- (iii) equipment, material under Component 2 and 3, which shall be financed 100% by the IFAD Loan net of taxes.

"Goods, Services and Inputs" under Category II of the IFAD Grant shall mean eligible expenditures incurred related to:

- (i) vehicles, equipment, good, services and inputs under Component 4, which shall be financed 100% net of taxes by the IFAD Grant; and
- (ii) motorcycles, hand-held tables, software and soil test kits under Component 1, which shall be financed 100% net of taxes by the IFAD Grant.

"Goods, Services and Inputs" under Category II of the ASAP Trust Grant shall mean eligible expenditures incurred related to seed and seedlings, tools for permaculture, nursery set up and biogas digester under Component 1, which shall be financed 100% net of taxes by the ASAP Trust Grant.

"Training" under Category III of the IFAD Loan shall mean eligible expenditures incurred related to:

- (i) training on farm record keeping under Component 1;
- (ii) all training, workshops and technical assistance services except for those financed by the ASAP Trust Grant, IFAD Grant and Government under Component 2;
- (iii) technical assistance on strengthening of DAMC market information system and curriculum development of RNR training and education under Component 3; and
- (iv) technical assistance on baseline impact studies and annual outcome surveys.

"Training" under Category III of the IFAD Grant shall mean eligible expenditures incurred related to:

- (i) training on tablet based soil monitoring technology and clean milk production, training to water users associations and consultancy service for updating of Operation and Maintenance (O&M) models for irrigations and farm roads and development of training and extension material under Component 1;
- (ii) formation of dairy marketing groups, development of training packages for agriculture and identification entrepreneurs, and development to business plans for three (3) window shops under Component 2;
- (iii) consultancy services related to development of a regulatory framework for PPP under Component 3; and
- (iv) training, workshops and consultancy services except for baseline impact studies and annual outcome survey under Component 4.

"Training" under Category III of the ASAP Trust Grant shall mean eligible expenditures incurred related to:

- (i) all training, consultancy services and workshops except for those financed by the IFAD Loan, IFAD Grant and Government under Component 1; and
- (ii) national/external technical assistance, training on formation of vegetable marketing groups, cooperatives and entrepreneurs, and marketing and value chain under Component 2.

"Grants and Subsidies" under Category IV of the IFAD Loan shall mean eligible expenditures incurred related to production support fund under Component 2, which shall be financed 100% net of the taxes from the IFAD Loan.

“Grants and Subsidies” under Category IV of the IFAD Grant shall mean eligible expenditures incurred related to social inclusion fund under Component 2, which shall be financed 100% from the IFAD Grant.

“Operating Costs” under Category V of the IFAD Grant shall mean eligible expenditures incurred related to salaries and allowance for a Monitoring and Evaluation (M&E) officer, an accountant and a support officer at the OPM under Component 4, which shall be financed 100% of the total cost net of taxes by the IFAD Grant.

2. Start-up Costs. In accordance with Section 4.02 of the General Conditions, withdrawals from the IFAD Grant in respect of expenditures for start-up costs of the Programme (including, inter alia, installation of accounting software for FCBL and training) incurred after the entry into force of the Financing Agreement and before the satisfaction of the conditions precedent to withdrawal shall not exceed an aggregate amount of twenty-five thousand Special Drawing Rights (SDR 25 000).

Logical framework

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.	<ul style="list-style-type: none"> ▪ 5 000 direct beneficiary HH in vegetable and dairy value chains report at least 25% increase in HH asset and income, as compared to baseline (disaggregated by HHs-head gender) ▪ 15% reduction in the prevalence of child malnutrition, as compared to baseline 	<ul style="list-style-type: none"> ▪ IFAD's Results and Impact Management System (RIMS) and baseline surveys ▪ Programme M&E 	No major socio-economic slow down, or natural disasters Increasing support for collaboration between different Agencies, civil society and private sector to develop value chains Continued MoAF support for innovative approaches Agricultural approaches and technologies primarily remain profitable Programme investments are realized as designed
Development Objective: Increased returns to smallholder farmers through climate resilient production of crops and livestock in nationally organized value chains and marketing systems.	<ul style="list-style-type: none"> ▪ 30% increase in production of vegetables and dairy products ▪ 20,000 HH in vulnerable areas with increased water availability for agriculture production 	<ul style="list-style-type: none"> ▪ Baseline survey ▪ Sector studies ▪ Technical agencies' reports and studies ▪ Research and academic studies ▪ Programme M&E 	
Component 1: Market-led sustainable agricultural production			
Outcome 1: Community-based Resilient Agricultural Production has sustainably increased	<ul style="list-style-type: none"> ▪ 6 000 HH adopt sustainable agricultural practices ▪ Of which 4 500 direct beneficiary HH of the new vegetable groups, and 450 direct beneficiary HH of the new dairy groups have on average 15% increase in production 	<ul style="list-style-type: none"> ▪ Programme M&E reports ▪ Contracted studies ▪ RIMS and benchmark ▪ Scientific and conference papers 	Collaboration between Government Agencies/staff and non-state service providers is successful Royal Government of Bhutan (RGoB) complementary financing and supportive annual block grants (dzongkhags) is allocated and utilised
Output 1.1: Increased Production Resilience, Diversification and Innovation	<ul style="list-style-type: none"> ▪ 23 000 (of which 50% are women) smallholder HH supported in coping with the effects of climate change with sustainable land management practices 	<ul style="list-style-type: none"> ▪ Base line studies ▪ Programme progress report ▪ Line agencies' reports 	RGoB earmarked funding (including other donors) of agricultural inputs and capacity development of farmer groups is allocated and utilised as per programme design Capacity of Government Agencies/staff and non-state service providers is adequate to achieve results as per programme design.
Output 1.2: Vegetable Production Intensified and Expanded	<ul style="list-style-type: none"> ▪ 300 new vegetable farmer groups (4 500 HH) established and functional; minimum 60% female members 	<ul style="list-style-type: none"> ▪ Base line studies ▪ Programme progress report ▪ Line agencies' reports 	See above
Output 1.3: Dairy Production Intensified and Expanded	<ul style="list-style-type: none"> ▪ 150 Smallholder Dairy Farmer Groups (450 HH) established and functional, with minimum 50% female members 	<ul style="list-style-type: none"> ▪ Base line studies ▪ Programme progress report ▪ Line agencies' reports 	See above
Component 2: Value chain development and marketing			
Outcome 2: Increased smallholder income from Crop and Livestock Value Chains	<ul style="list-style-type: none"> ▪ 70% of the agricultural enterprises established have a positive outlook on their profitability and sustainability 	<ul style="list-style-type: none"> ▪ Programme M&E reports ▪ RIMS and benchmark ▪ Line agencies' reports 	As above under Component 1 Willingness for collaboration between Government Agencies/staff, FCBL and non-state actors, including small entrepreneurs and businesses, to develop and

Narrative Summary	Key Performance Indicators	Means of Verification	Assumptions
		<ul style="list-style-type: none"> ▪ Sector studies and reports ▪ Farmer satisfaction surveys 	manage value chains and market infrastructure
Output 2.1: Resilient Vegetable and Dairy Value Chains developed	<ul style="list-style-type: none"> ▪ 65 geogs have developed climate resilient vegetable and dairy production, marketing, and infrastructure management plans 	<ul style="list-style-type: none"> ▪ Programme progress report ▪ Sector reports and studies 	FCBL has adequate financial allocations to develop its own capacity next to programme support Geogs are willing to develop more holistic (value chain based) geog plans for dairy and vegetables to guide programme investments and strengthen local institutions for climate resilience
Output 2.2: Agricultural Commercialization and Enterprise Development strengthened	<ul style="list-style-type: none"> ▪ 115 marketing groups established or revitalized and functional within programme value chains ▪ 200 agriculture enterprises (including cooperatives) established and strengthened as part of value chain development 	<ul style="list-style-type: none"> ▪ Programme progress report ▪ Sector reports and studies 	As above 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	<ul style="list-style-type: none"> ▪ Vegetable and dairy value chain processing and marketing infrastructure designed and constructed in 10 dzongkhags 	<ul style="list-style-type: none"> ▪ Programme progress report ▪ 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	<ul style="list-style-type: none"> ▪ 70% of VC stakeholders report the use of market information in investment decision-making 60% of VC stakeholders report satisfaction with the policy and regulatory framework as providing a fair distribution of incentives, costs, benefits, and risks. 	<ul style="list-style-type: none"> ▪ Programme M&E reports ▪ Line agencies', Department of Agriculture Marketing and Cooperatives (DAMC), FCBL and Business Opportunity and Information Centre (BOiC) reports ▪ Sector studies and reports ▪ Programme survey 	MoAF will pro-actively implement the 11 th 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	<ul style="list-style-type: none"> ▪ Market Information System MoAF/DAMC providing relevant (real-time) information to farmers 	<ul style="list-style-type: none"> ▪ Programme M&E reports ▪ Line agencies', DAMC, FCBL and BOiC reports ▪ 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	<ul style="list-style-type: none"> ▪ Enhanced engineering norms for building climate resilient irrigation systems ▪ Vegetable and dairy development policies enhanced based on multi-stakeholder consultation processes and programme lessons (resilience, value chain and marketing) ▪ Regulatory framework for private sector development and PPP in agriculture sector developed 	<ul style="list-style-type: none"> ▪ Programme M&E reports ▪ Line agencies' reports ▪ Sector studies and reports ▪ Policy documents ▪ Regulatory framework document for private sector and PPP 	Dialogue and collaboration between Government Agencies/staff and external stakeholders is successful and generates meaningful lessons and insights for policy development.