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**President's report**

**Proposed loan**

**Kingdom of Bhutan**

**Inclusive Markets, Production, Agricultural  
Commercialization and Transformation (IMPACT)**

Project ID: 2000005226

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**FOR: APPROVAL**

**Action:** The Executive Board is invited to approve the recommendation contained in paragraph 71.

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### Project delivery team


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Map of the project 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 | 04-12-2025

## Financing summary

<b>Initiating institution:</b>	IFAD
<b>Borrower/recipient:</b>	Kingdom of Bhutan
<b>Executing agency:</b>	Ministry of Agriculture and Livestock
<b>Total project cost:</b>	US\$26.443 million
<b>Amount of IFAD loan A under the performance-based allocation system (PBAS):</b>	US\$7.964 million
<b>Terms of IFAD loan A:</b>	Super highly concessional (SHC)
<b>Amount of IFAD loan B (PBAS):</b>	US\$1.991 million
<b>Terms of IFAD loan B:</b>	Highly concessional (HC)
<b>Amount of cofinancing:</b>	US\$7.488 million
<b>Terms of cofinancing:</b>	Public finance, loans and in kind
<b>Contribution of borrower/recipient:</b>	US\$1.617 million
<b>Contribution of banks and financial institutions:</b>	US\$3.5 million
<b>Contribution of target groups/members:</b>	US\$2.371 million
<b>Financing gap:</b>	US\$9.0 million
<b>Amount of IFAD climate finance:</b>	US\$6.622 million (of which US\$0.8 million is a climate top up)

## I. Context

### A. National context and rationale for IFAD involvement

#### National context

1. The Kingdom of Bhutan has achieved significant national economic growth and a reduction in poverty of over 50 per cent since 2007. However, although its agriculture sector employs most of the population, it contributes only 19.2 per cent to GDP. The sector is severely constrained by the country's mountainous terrain, limited arable land, climate vulnerability, and labour shortages driven by rural-urban migration. These challenges have resulted in a growing reliance on food imports, which totalled over BTN 10 billion or US\$113 million in 2021, accounting for over 50 per cent of national food needs and exposing Bhutan to external market risks. In response, the country's Thirteenth Five-Year Plan (2024–2029) aims to transform the sector into a resilient, productive and commercially oriented system by promoting climate-smart organic farming, increasing commercialization and strengthening marketing systems, with the goal of boosting agriculture's contribution to GDP growth from 3 to 10 per cent and supporting the national objective of doubling the GDP to US\$5 billion by 2029.

#### Special aspects relating to IFAD's corporate mainstreaming priorities

2. In line with IFAD's mainstreaming commitments, the project has been validated as:
  - ☒ Including climate finance
  - ☒ Gender-transformative
  - ☒ Youth-sensitive
  - ☒ Including adaptive capacity

#### Rationale for IFAD involvement

3. The Inclusive Markets, Production, Agricultural Commercialization and Transformation (IMPACT) project supports the priorities of the Thirteenth Five-Year Plan, with a strong focus on transforming food systems through improved post-harvest management and value chain development. Its goal is to reduce poverty and strengthen the resilience of smallholder households by supporting a transition towards climate-resilient, inclusive and profitable food systems.
4. Building on the successes of the IFAD-funded Commercial Agriculture and Resilient Livelihoods Enhancement Programme (CARLEP), IMPACT will scale up climate-smart production, strengthen farmers' organizations and enhance market integration. By tackling key sectoral constraints – such as limited access to credit, aggregation, value addition and market connectivity – IMPACT seeks to boost sustainable productivity, increase farmers' incomes, and protect livelihoods from climate-related risks
5. With more than 20 years of experience in developing dairy and vegetable value chains in eastern Bhutan, IFAD is well placed to drive the project's goals. By focusing on women and youth entrepreneurship across the agri-food value chain, IMPACT tackles both rural development priorities and unemployment challenges. IFAD's expertise in business planning, financial education and business literacy, market engagement and organizational governance uniquely positions it to strengthen farmers' organizations, promote inclusive agribusiness and advance Bhutan's agricultural commercialization priorities.

### B. Lessons learned

6. **Public-private-partnership models.** CARLEP's successful collaboration with Koufuku International Limited (KIL) and Bhutan Agro Industries Limited (BAIL) demonstrates how structured public-private partnerships can create sustainable market systems. IMPACT will institutionalize such approaches, strengthening

linkages that provide farmers with increased income, assured markets, technical support and value addition opportunities.

7. **Strengthen aggregator-led market integration models.** The success of the Eastern Agricultural Marketing Cooperative (EAMC), the first of its kind in Bhutan, demonstrates the power of well-structured aggregation systems in transforming rural marketing. EAMC integrated backward linkages with over 2,000 farmers across six *dzongkhags* (districts) through establishment of a network of collection centres. EAMC provides inputs and cash to farmers in advance, as well as advisory services to respond to market demand.
8. **Enhance youth and women-focused enterprise support.** Matching grants and enterprise development support for educated youth, particularly in high-value sectors such as mushroom cultivation, have proved to be attractive to young entrepreneurs and can be readily scaled up. Additionally, women-centric agricultural development, exemplified by the Chechey Women's Dairy Group, demonstrates the transformative potential of prioritizing women's leadership.

## II. Project description

### A. Objectives, geographical area of intervention and target groups

9. The **goal of IMPACT** is to reduce poverty and improve the resilience of smallholder households. The **development objective** is to support smallholder farming in transitioning towards climate-resilient food systems that are inclusive and profitable. The project duration is six years.
10. IMPACT will strategically build upon CARLEP's foundation to advance Bhutan's economic transformation vision. It will be implemented across seven *dzongkhags* in Bhutan's eastern and central regions: Lhuentse, Mongar, Pema Gatshel, Samdrup Jongkhar, Trashigang, Trashy Yangtse and Bumthang. The project represents a critical evolution from CARLEP's production-focused interventions towards a comprehensive commercialization-driven approach that addresses key market integration gaps through strategic investments in capacity-building, market infrastructure, value addition capabilities and business development services.
11. IMPACT targets semi-commercial and commercial farmers who have moved out of poverty under CARLEP but remain vulnerable to falling back below the poverty line due to climatic and economic shocks. They require further consolidation and support to build climate-resilient production systems and enhanced market readiness.
12. IMPACT will directly benefit 15,500 smallholder households encompassing 68,200 household members, with a strong emphasis on inclusive participation, ensuring that 50 per cent of target group members are women (7,750) and 16 per cent are youth aged 18 to 35 years (2,480).

### B. Components, subcomponents, outputs and activities

13. The project is structured around two interconnected components: (i) inclusive agri-livestock value chain development; and (ii) market-oriented climate-resilient food systems.

#### **Component 1. Inclusive agri-livestock value chain development**

14. This component focuses on transforming Bhutan's agriculture sector by enhancing commercialization, investment opportunities and policy engagement. It will support farmer groups and agri-entrepreneurs in building stronger market linkages, accessing finance and improving their business competitiveness.

## **Subcomponent 1.1. Enhance commercialization and investment opportunities**

### **Output 1.1.1. Market linkages and investment facilitated**

15. **Strategic investment plans.** IMPACT will develop comprehensive strategic investment plans for seven priority commodities (dairy, vegetables, honey, maize, buckwheat, mushrooms and fruit-bearing annuals), identifying constraints and commercialization opportunities for domestic and export markets.
16. **Multistakeholder platforms.** The project will facilitate commodity-specific platforms bringing together producers, traders and stakeholders to broker business agreements, supported by 300 business-to-business and business-to-service events coordinated by the Department of Agricultural Marketing and Cooperatives (DAMC) and the Regional Agricultural Marketing and Cooperatives Offices (RAMCOs).
17. **Financial institution capacity.** IMPACT will enhance agricultural lending through partnerships with the Bhutan Development Bank Limited and microfinance institutions. Credit officers will be trained in cash flow-based lending and will work with the project's rural finance officer (RFO) to facilitate the provision of US\$3.5 million in loans to 2,420 borrowers (20 per cent of target group).

### **Output 1.1.2. Competitiveness and business development skills strengthened**

18. **Farmer group consolidation.** The project will consolidate existing small groups into 50 larger farmer groups and 15 cooperatives made up of a minimum of 15 members. Structured upgradation criteria will be used to assess organizational maturity for co-investment eligibility.
19. **Business development.** IMPACT will provide financial education and business literacy training to 930 groups through 300 trained facilitators. The RFO will assist 250 farmer groups – 3,490 women and 2,500 youth – in developing bankable business proposals for securing financing.

## **Subcomponent 1.2. Policy engagement for fostering commercialization**

### **Output 1.2.1. Policy dialogue around priority issues supported**

20. **Convening stakeholders for policy dialogue.** The IMPACT project will launch two key policy dialogues to catalyse private investment and enhance agricultural finance. These dialogues will focus on:
  - (i) Unlocking finance: addressing restrictive lending practices and promoting risk management tools to increase agricultural investment.
  - (ii) Promoting ownership: developing pathways for public-private-producer partnerships to attract ethical investment and supporting state-owned enterprises in transitioning into farmer-owned operations.
21. A flagship initiative will be the gradual transfer of shares from the successful KIL dairy plant to high-performing dairy cooperatives. The KIL plant now receives 4,000 litres daily from 90 farmer groups, up from 600 litres in 2014. This will transform farmers from mere suppliers into co-owners with board representation and strategic decision-making power, using the KIL case to model viable ownership structures for nationwide replication.

### **Output 1.2.2. Branding and certification promoted**

22. **Product certification and quality standards.** IMPACT will implement a three-pronged approach entailing: (i) development of rigorous Bhutan-specific quality standards; (ii) certification support for international standards (organic, fair trade, halal, geographic indication); and (iii) end-to-end traceability systems to meet premium market requirements and ensure transparency from production to consumption.

23. **Branding strategy and South-South Cooperation.** Leveraging Bhutan's unique selling points, namely its environment, traditions and Gross National Happiness Index, the project will develop strong brand identities. Concurrently, it will accelerate the adoption of organic farming through knowledge exchanges with the state of Sikkim in India, to learn from its successful transition in a comparable context.

## **Component 2. Market-oriented climate-resilient food systems**

24. This component aims to strengthen the resilience and profitability of Bhutan's agriculture sector by promoting sustainable market-driven production systems and investing in critical market infrastructure.

### **Subcomponent 2.1. Support commercial production systems**

#### **Output 2.1.1. Livestock productivity enhanced**

25. **Improved breeding programmes.** IMPACT will train community artificial insemination technicians (CAITs) and equip them with artificial insemination kits and cold chain facilities. Two community-owned centres with viable business plans will be established for breeding high milk producing heifers. Sex-sorted semen will be procured to reduce male calving and improve milk productivity.
26. **Milk production systems.** The project will establish partnerships with international institutions including India's National Dairy Development Board for knowledge exchange. Twenty young people will be trained on the operation and maintenance of dairy cold chain equipment and provided with start-up toolkits.
27. **Fodder production and animal health.** IMPACT will expand quality fodder cultivation on 5,000 acres serving 10,000 households, support silage-making technologies, and establish two total mixed ration production facilities. Animal health will be improved through integrated biosecurity measures with standard operating procedures, disinfectant stations, para-vet training of CAITs, and ICT mobile apps for disease surveillance. The project will work closely with regional livestock development centres and the Bhutan Food and Drug Authority.

#### **Output 2.1.2. Climate-resilient production practices introduced**

28. **Innovative mushroom production.** The project will support four youth groups with IoT-based (Internet of Things) smart farming systems for mushroom production and establishment of spawn production facilities. It will mobilize CARLEP lead farmers for technical assistance, and support research to identify a steady supply of growth substrate for high-value mushroom species cultivation.
29. **Advanced honey production.** Technical training will be provided on queen bee breeding techniques to improve hive productivity and disease resistance. IMPACT will distribute 500 bee-hive boxes to youth and women's groups, 20 hygienic honey extraction machines, 50 equipment sets and women-friendly honey box lifters. Certified honey collection centres will be established for 133 households to facilitate packaging for domestic and export markets. Bee forage will be expanded through reseeded nectar- and pollen- producing native species and crop varieties on 500 acres per cluster. Innovative drone technology will be used for broadcasting native seed mixtures (seed bombing) in remoter areas.
30. **Bio-inputs and soil amendments.** The project will support 10 small and medium-sized enterprises in producing commercial-scale bio-fertilizers, bio-pesticides, and organic soil amendments using agricultural by-products and forest herbs.

#### **Output 2.1.3. Sustainable land management fostered**

31. **Sustainable land management and irrigation.** Building on CARLEP's experience, IMPACT will invest in sustainable land management through support to 15 dryland



irrigation schemes covering 1,500 acres with efficient water delivery systems. These schemes will benefit 600 households for commercial vegetable, maize and buckwheat production.

32. **Fallow land reclamation.** The project will systematically reclaim the 68,841 acres of fallow land identified in eastern *dzongkhags*. Ten agricultural group enterprises involving women and youth will be supported to negotiate land leasing from landowners. These enterprises will be provided with comprehensive support including for land preparation, fencing, irrigation and semi-permanent shelters where needed.

## **Subcomponent 2.2. Invest in market-led infrastructure and services**

### **Output 2.2.1. Post-harvest and processing facilities supported**

33. **Milk collection and processing infrastructure.** IMPACT will upgrade 30 milk collection centres (MCCs) with automated milk analysers for quality-based pricing to incentivize farmers and support product diversification. Two strategically located MCCs will be converted into milk processing units capable of producing cheese and butter for larger facilities such as KIL. Three thousand dairy farmers will be supported with equipment such as chaff cutters, and 200 non-CARLEP farmers will receive improved cattle sheds.
34. **Vegetable aggregation and processing.** The project will support cooperatives in investing in seven vegetable aggregation centres in high-volume production areas, equipped with washing and cold storage facilities. This will contribute to improving the shelf-life and marketability of fresh vegetables and reduce post-harvest losses. These centres will be managed by farmer groups, cooperatives and traders/aggregators, supported by viable business plans. In addition, IMPACT will support the establishment of three small-scale processing units to enhance value addition<sup>1</sup> and improve market competitiveness of vegetables, mushrooms, honey and cereals with a focus on women and youth-led groups/cooperatives.

### **Output 2.2.2. Logistics and market access promoted**

35. **Transport solutions and digital coordination.** IMPACT will deploy five refrigerated and insulated vehicles to reduce delivery times and post-harvest losses. This initiative will promote route optimization and shared transport, supported by mobile logistics platforms developed with DAMC and the Building Resilient Commercial Smallholder Agriculture (BRECSA) project. These platforms will enable real-time booking and tracking to increase efficiency of vehicle use, lower costs and enhance service reliability.
36. **Marketing platform rollout.** The project will deploy BRECSA-developed physical and digital marketing platforms across the *dzongkhags* targeted by IMPACT. This will provide real-time market information, facilitate direct producer-consumer linkages, strengthen market access for farmers located in eastern Bhutan, and improve bargaining power and income through enhanced market connectivity.

## **C. Theory of change**

37. Building on CARLEP's foundation, IMPACT tackles Bhutan's critical agri-food challenges – from post-harvest losses and market fragmentation to climate vulnerability – through four synergistic pathways. These combine capacity-building and policy reform to strengthen value chains with direct investments in climate-resilient production and post-harvest infrastructure. A cross-cutting emphasis on empowering women and youth through entrepreneurship and leadership will integrate them into profitable markets. This integrated approach

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<sup>1</sup> Such as mushroom drying and packaging, honey filtration and bottling, vegetable curing, drying and pickling, and cereal milling and packaging.

aims to boost household incomes and enhance food security by fostering a more resilient, inclusive and market-oriented agriculture sector.

#### **D. Alignment, ownership and partnerships**

38. The IMPACT project focuses on Bhutan's national development priorities and IFAD's strategic goals of promoting climate-resilient agriculture, commercialization and financial inclusion. It directly supports the country's Thirteenth Five-Year-Plan and related strategies. The project is designed to work in synergy with ongoing initiatives from partners such as the World Bank, Food and Agriculture Organization of the United Nations and United Nations Development Programme, and will specifically complement the BRECSA project (jointly funded by IFAD and the Global Agriculture and Food Security Program (GAFSP), and implemented in partnership with the World Food Programme) in adjacent districts.

#### **E. Costs, benefits and financing**

39. The total project cost is estimated at US\$26.443 million, with contributions of US\$9.955 million from IFAD, US\$1.617 million from the Royal Government of Bhutan, US\$2.371 million from target group members, US\$3.5 million from banks and financial institutions. IFAD's financing for climate change adaptation activities amounts to US\$6,622,000, representing 83.7 per cent of the total IFAD13 PBAS allocation to Bhutan (US\$7,914,000). Considering the need for additional resources for full-fledged implementation of the project, a financing gap of US\$9.0 million is proposed. This financing gap may be sourced through subsequent IFAD resource cycles (under financing terms to be determined and subject to internal procedures and subsequent Executive Board approval) or by cofinancing identified prior to start-up or during implementation. The Royal Government of Bhutan has communicated its interest in accessing an additional IFAD highly concessionary loan under the Thirteenth Replenishment of IFAD's Resources (IFAD13) or IFAD14, or any other grant or concessionary financing source.

Table 1

**Project costs by component and financier**

(Thousands of United States dollars)

<i>Component</i>	<i>Government</i>		<i>IFAD loan A PBAS (SHC)</i>		<i>IFAD loan B PBAS (HC)</i>		<i>Target members/groups contribution</i>		<i>Banks and financial institutions</i>		<i>Financing gap</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>
1. Inclusive agri-livestock value chain development	65	2.5	998	38.9	250	9.7	-	0	-	0	1 251	48.8	2 564	9.7
2. Market-oriented climate-resilient food systems	850	3.9	6 213	28.6	1 553	7.2	2 371	10.9	3 500	16.1	7 201	33.2	21 689	82.0
3. Project management	701	32.0	753	34.4	188	8.6	-	0	-	0	548	25.0	2 190	8.3
<b>Total</b>	<b>1 617</b>	<b>6.1</b>	<b>7 964</b>	<b>30.1</b>	<b>1 991</b>	<b>7.5</b>	<b>2 371</b>	<b>9</b>	<b>3 500</b>	<b>13.2</b>	<b>9 000</b>	<b>34</b>	<b>26 443</b>	<b>100</b>

Table 2

**Project costs by expenditure category and financier**

(Thousands of United States dollars)

<i>Expenditure category</i>	<i>Government</i>		<i>IFAD loan A PBAS (SHC)</i>		<i>IFAD loan B PBAS (HC)</i>		<i>Target members/groups contribution</i>		<i>Banks and financial institutions</i>		<i>Financing gap</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>
1. Works	285	3.6	4 141	52.3	1 035	13.1	324	4.1	74	0.9	2 062	26.0	7 921	30.0
2. Goods, services and inputs	627	4.0	3 016	19.4	754	4.8	2 047	13.2	3 426	22.0	5 687	36.6	15 556	58.8
3. Training	45	2.1	686	31.8	171	8.0	-	-	-	-	1 251	58.1	2 153	8.1
4. Consultancies	4	5.0	55	76.0	14	19.0	-	-	-	-	-	-	72	0.3
5. Operating costs	656	88.6	68	9.1	17	2.3	-	-	-	-	-	-	741	2.8
<b>Total</b>	<b>1 617</b>	<b>6.1</b>	<b>7 964</b>	<b>30.1</b>	<b>1 991</b>	<b>7.5</b>	<b>2 371</b>	<b>9.0</b>	<b>3 500</b>	<b>13.2</b>	<b>9 000</b>	<b>34.0</b>	<b>26 443</b>	<b>100.0</b>

Table 3

**Project costs by component and project year**

(Thousands of United States dollars)

<i>Component</i>	<i>Totals including contingencies</i>						<i>Total</i>
	<i>2025/2026</i>	<i>2026/2027</i>	<i>2027/2028</i>	<i>2028/2029</i>	<i>2029/2030</i>	<i>2030/2031</i>	
1. Inclusive agri-livestock value chain development	136	222	205	1 512	244	245	2 564
2. Market-oriented climate-resilient food systems	382	3 569	3 773	10 474	2 308	1 183	21 689
3. Project management	398	220	237	807	256	272	2 190
<b>Total</b>	<b>916</b>	<b>4 012</b>	<b>4 215</b>	<b>12 793</b>	<b>2 807</b>	<b>1 700</b>	<b>26 443</b>
<b>Percentage</b>	<b>3%</b>	<b>15%</b>	<b>16%</b>	<b>48%</b>	<b>11%</b>	<b>6%</b>	<b>100%</b>

### **Financing and cofinancing strategy and plan**

40. Of the total project cost of US\$26.443 million, 37.6 per cent will be covered by the IFAD loan, 6.1 per cent by the Royal Government of Bhutan, 9.0 per cent by target group members, 13.2 per cent by banks and financial institutions, and 34 per cent in the form of a financing gap. The total project cost is allocated as follows: 30 per cent for works, 58.8 per cent for goods, services and inputs, 8.1 per cent for training, 0.3 per cent for consultancies and 2.8 per cent for operating costs. The project costs are expected to be distributed as follows: 3 per cent of total costs for year 1, 15 per cent for year 2, 16 per cent for year 3, 48 per cent for year 4, 11 per cent for year 5, and 6 per cent for year 6.
41. As an initial step to fill the financing gap, a grant proposal for GBP 250,000 for financial year 2025/2026 was approved by the United Kingdom's Foreign, Commonwealth and Development Office. This grant will be split between Nepal and Bhutan in consultation with the International Centre for Integrated Mountain Development, which is the project implementation partner.

### **Disbursement**

42. Designated accounts denominated in United States dollars for the IFAD super highly concessional and highly concessional loans will be opened by the Royal Monetary Authority (RMA) in the Bank of Bhutan Limited, to which funds will flow from IFAD. The funds will be disbursed in United States dollars. RMA will transfer the funds, based on project requirements, to the Department of Treasury and Accounts, which in turn will release funds to the project in accordance with the approved annual workplan and budget (AWPB).

### **Summary of benefits and economic analysis**

43. **Direct benefits.** The project will directly benefit 15,500 smallholder households with 68,200 household members. Fifty per cent of target group members will be women (7,750) and 16 per cent youth (2,480) aged 18 to 35 years. One person from each household will be a direct target group member. The project is being developed with a financing gap of US\$9 million. If the financing gap is filled, the project will serve an additional 9,000 smallholder farmers, bringing the total to 24,500 target group members.
44. **Indirect benefits.** An estimated 15,000 households are expected to receive indirect benefits through improved access to bio-inputs and agri-services, post-harvest enterprise development, market expansion, diversified and nutritious food availability, policy dialogue and overall ecosystem improvements.
45. **Economic analysis.** An economic analysis of the project was conducted using the financial models developed for enterprises, households and sub-sectors, with all values converted to economic prices to reflect real resource use and benefits. The cost-benefit analysis produced strong results, with an economic internal rate of return of 24.2 per cent. The net present value, calculated at a 9 per cent discount rate (the assumed opportunity cost of capital), is estimated at BTN 2,162.95 million (approximately US\$25.45 million), and the benefit-cost ratio stands at 2.04. These results indicate that the project's investments are economically sound, offering solid returns and justifying the allocation of resources.

### **Exit strategy and sustainability**

46. IMPACT's exit strategy will focus on upgrading the business maturity of farmer groups, establish commercially viable processing facilities, and promoting sustainable service models such as fee-based artificial insemination and bio-inputs. The project will embed successful approaches within national institutions and transfer assets – such as shares in KIL – to high-performing cooperatives.

### III. Risk management

#### A. Risks and mitigation measures

47. IMPACT's inherent risk is rated as moderate. Its residual risks can be considered as moderate to low when managed through mitigation measures. Critical risks relate to human resources, financial management and climate disruptions. Human resource challenges – such as recruiting for remote areas, high staff turnover, and limited institutional capacity – could delay activities and compromise quality. Low capacity of financial management staff, internal control weaknesses, absence of internal audit, inadequate accounting systems for the contributions of target group members, and procurement delays all pose threats to fund management and compliance.
48. The project is exposed to climate-related risks (extreme weather damaging infrastructure and production), market volatility (eroding profitability and participation), alongside financial constraints and social risks such as elite capture.
49. Targeted measures such as incentives for staff retention, specialized financial and procurement personnel, and climate-resilient technologies will be implemented. Institutional coordination will be strengthened through the project steering committee (PSC), while transparent selection of target group members will address social risks.

Table 4

**Overall risk summary**

<i>Risk areas</i>	<i>Inherent risk rating</i>	<i>Residual risk rating</i>
Country context	Moderate	Moderate
Sector strategies and policies	Moderate	Moderate
Environment and climate context	Moderate	Moderate
Project scope	Moderate	Moderate
Institutional capacity for implementation and sustainability	Moderate	Moderate
Financial management	Substantial	Substantial
Project procurement	Moderate	Moderate
Environment, social and climate impact	Moderate	Moderate
Stakeholders	Moderate	Moderate
<b>Overall</b>	<b>Moderate</b>	<b>Moderate</b>

#### B. Environment and social category

50. The IMPACT project is categorized as having **moderate** environmental and social risk, necessitating strong, proactive safeguards. The project will deliver positive outcomes by promoting climate-smart agriculture, strengthening local adaptation, and ensuring inclusive participation.

#### C. Climate risk classification

51. The climate risk category of the project is determined as **moderate**.

#### D. Debt sustainability

52. The current debt-to-GDP ratio of Bhutan is approximately 99.1 percent (2025). Bhutan's debt sustainability is currently assessed as moderate, with the overall risk of debt distress considered manageable due to the unique nature of its hydropower-related debt and strong mitigating factors.

## IV. Implementation

### A. Organizational framework

#### Project management and coordination

53. The project will retain CARLEP's proven implementation structure with the Ministry of Agriculture and Livestock (MoAL) as the lead partner agency, and its Policy and Planning Division (PPD) will assume the role of executing agency. The project management unit will report to the chief of the PPD. As is the case with CARLEP, the project management unit (PMU) will be co-located with the Agriculture Research and Development Centre (ARDC) in Wengkharr.
54. The PMU will be responsible for project oversight, planning, financial management, and coordination with implementing partners. Implementation will be carried out by the District Departments of Agriculture and Livestock in the target *dzongkhags*. The project will continue partnerships with key technical agencies such as the ARDC, the Regional Livestock Development Centre (RLDC), DAMC/RAMCO, Farm Machinery Corporation Limited, Natural Resources Development Corporation Limited and financial institutions. To mitigate the limited outreach capacity of district agriculture officers, the project will: (i) train *desuups*<sup>2</sup> to support outreach; and (ii) engage with lead farmers that CARLEP has invested in to support the mushroom and vegetable value chains.
55. The PSC will be established and chaired by the Secretary, MoAL. It will meet at least twice yearly. The main responsibilities of the PSC are: (i) oversight of project implementation; (ii) compliance of project activities with the Royal Government's policies and the terms and conditions of the financing agreement; (iii) approval of annual workplans and budgets and the consolidated procurement plan, (iv) coordination of project interventions with other development programmes and projects; and (v) policy and strategic guidance for improved implementation.

#### Financial management, procurement and governance

56. Designated accounts denominated in United States dollars will be set up in the RMA. The project will use Bhutan's electronic Public Expenditure Management System (e-PEMS) for real-time budget monitoring and will be audited by the Royal Audit Authority, which observes International Auditing Standards.
57. The PMU will manage procurement through transparent processes, regular monitoring and targeted mitigation measures from initial assessment.
58. The project will ensure strong governance by strictly following IFAD's anti-corruption guidelines and maintaining a transparent grievance redress mechanism. Oversight by the Royal Audit Authority, coupled with whistleblower protection and accessible complaint channels, will ensure accountability and mitigate financial management risks.

#### Target group engagement and feedback and grievance redress

59. IMPACT will employ a comprehensive inclusion strategy for targeting. This will be managed by the monitoring and evaluation unit in the PMU and by *desuups*, working closely with local authorities. The inclusion strategy has measures to ensure the participation of vulnerable groups, such as quotas for women and youth, convenient scheduling, accessible locations and separate focus groups to overcome local power dynamics.

#### Grievance redress

60. IMPACT will promote the use of the Royal Government of Bhutan's established online system, eKaaSel, to ensure target group members are aware of this platform

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<sup>2</sup> The direct translation of *desuups* is "guardians of peace". These are volunteer graduates with training in entrepreneurship, farming and natural disaster management. The project will train these young people to support outreach and ensure that they acquire skills that advance their professional development.

for service delivery complaints. In parallel, a dedicated project-level grievance redress mechanism will be established to handle complaints directly related to project activities, including those concerning social and environmental impacts.

## **B. Planning, monitoring and evaluation, learning, knowledge management and communications**

61. **Planning.** The PMU will issue a formal request and guidance for the preparation of the AWPB and procurement plan (PP). The *dzongkhags* will support local governments (*gewogs*) in gathering inputs to draft district-level plans, in collaboration with relevant sector heads, technical experts and agencies. The PMU will subsequently consolidate these submissions into a comprehensive project-wide AWPB and PP.
62. The finalized AWPB will list all implementing partners, activities and financial outlays – including government and target group member contributions – while the PP will provide details of procurement needs and modalities. This consolidated plan will be submitted for approval by the PSC before submission to IFAD for no objection.
63. **Monitoring and evaluation.** The PPD has overall responsibility for monitoring IMPACT's progress. The PMU will monitor implementation at the *dzongkhag* levels. The project will utilize an adapted, geo-referenced management information system aligned with both the national planning and monitoring system and IFAD's monitoring requirements.
64. **Learning, knowledge management and communications.** IMPACT will follow a systematic knowledge management approach to capture, analyse, and share lessons, best practices and evidence generated during implementation. This strategy will identify critical policy gaps in Bhutan, including the need for climate-resilient agriculture, inclusive market linkages for smallholders, and youth engagement models. Knowledge will be generated through rigorous impact analyses, thematic studies and documentation of adaptive management, which will directly inform Bhutan's broader rural development knowledge base. Knowledge will be disseminated through multiple channels, including policy briefs, a digital repository, learning events, and engagement with IFAD's global platforms and local media.

### **Innovation and scaling up**

65. The project will implement innovative models such as drone-based bee forage reseedling, drudgery-free mushroom cultivation, and a gradual transfer of KIL shares to dairy cooperatives. These approaches will be documented and embedded within MoAL to foster replication across Bhutan's agriculture sector.

## **C. Implementation plans**

### **Implementation readiness and start-up plans**

66. The implementation readiness strategy is designed to ensure a smooth and accelerated transition from design to effective execution. It involves proactive preparatory activities before official start-up, including recruiting key staff, developing essential operational documents such as the project implementation manual and first AWPB, and establishing coordination frameworks with stakeholders. Financing of US\$0.5 million for fast project start-up will be used to fund office set up and baseline studies to pre-empt delays.

### **Supervision, midterm review and completion plans**

67. Project's performance will be guided by an annual IFAD supervision mission, a joint midterm review for course correction, and annual outcome surveys. Thematic studies will provide targeted support, and a final impact evaluation will assess the fulfilment of objectives and generate lessons for scaling up initiatives.



## **V. Legal instruments and authority**

68. A 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.
69. The Kingdom of Bhutan is empowered under its laws to receive financing from IFAD.
70. I am satisfied that the proposed financing will comply with the Agreement Establishing IFAD and the Policies and Criteria for IFAD Financing.

## **VI. Recommendation**

71. 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 super highly concessional terms to the Kingdom of Bhutan in an amount of seven million nine hundred sixty-four thousand United States dollars (US\$7,964,000) 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 loan on highly concessional terms to the Kingdom of Bhutan in an amount of one million nine hundred ninety-one thousand United States dollars (US\$1,991,000) and upon such terms and conditions as shall be substantially in accordance with the terms and conditions presented herein.

Alvaro Lario  
President

## Negotiated financing agreement

### Inclusive Markets, Production, Agricultural Commercialization and Transformation (IMPACT)

(Negotiations concluded on 4 December 2025)

#### FINANCING AGREEMENT

Loan No: \_\_\_\_\_

Project name: Inclusive Markets, Production, Agricultural Commercialization and Transformation ("IMPACT" or "the Project")

The Kingdom of Bhutan (the "Borrower")

and

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

(each a "Party" and both of them collectively, the "Parties")

**WHEREAS** the Borrower has requested a loan from the Fund for the purpose of financing the Project described in Schedule 1 to this Agreement;

**WHEREAS**, the Fund has agreed to provide financing for the Project;

**NOW THEREFORE**, the Parties hereby agree as follows:

#### Section A

1. This Agreement comprises the following: the Main Document (The Preamble and Sections A-E), the Project Description and Implementation Arrangements (Schedule 1), the Allocation Table (Schedule 2), and the Special Covenants (Schedule 3).
2. The Fund's General Conditions for Agricultural Development Financing dated 29 April 2009, amended as of December 2022, and as may be amended hereafter from time to time (the "General Conditions") are annexed to this Agreement, and all provisions thereof shall apply to this Agreement. For purposes of this Agreement, the terms defined in the General Conditions shall have the meanings set forth therein, unless the Parties shall otherwise agree in this Agreement.
3. The Fund shall provide a Loan to the Borrower (the "Financing"), which the Borrower shall use to implement the Project in accordance with the terms and conditions of this Agreement.

#### Section B

1. The amount of the loan is nine million nine hundred fifty-five thousand United States dollars (USD 9,955,000), whose terms shall be divided into Loan A and Loan B.
  - a. **Loan A:** The amount of the Loan offered on super highly concessional terms is seven million nine hundred and sixty-four thousand United States dollars (USD 7,964,000).

- b. **Loan B:** The amount of the Loan offered on highly concessional terms is one million nine hundred and ninety-one thousand United States dollars (USD 1,991,000).
2. The Loans shall bear fixed service charges as determined by the Fund at the date of approval of the Loans by the Fund's Executive Board, payable semi-annually in the Loan Service Payment Currency. Loan A shall have a maturity period of Fifty (50) years, including a grace period of ten (10) years starting from the date of approval by the Executive Board. The amortization of the super highly concessional principal of loan is set at two and half per cent (2.5%) of the total principal withdrawn per annum from years eleven (11) to fifty (50). Loan B on highly concessional terms shall have a maturity period of forty (40) years, including a grace period of ten (10) years starting from the date of approval of the Loan by the Fund's Executive Board, and the amortization is set at two per cent (2%) of the total principal per annum for years eleven (11) to twenty (20), and four per cent (4%) of the total principal per annum for years twenty-one (21) to forty (40).
3. The Loan Service Payment Currency shall be in United States dollars (USD).
4. The first day of the applicable Fiscal Year shall be 1<sup>st</sup> of July.
5. Payments of principal and service charge shall be payable on each 15 April and 15 October.
6. There shall be (a) Designated Account(s) in USD, for the exclusive use of the Project opened in the Royal Monetary Authority (RMA) of Bhutan (the central Bank of Bhutan). The Borrower shall inform the Fund of the officials authorized to operate the Designated Account(s).
7. The Borrower shall provide counterpart financing for the Project in the amount of one million five hundred and eighty thousand United States dollars (USD 1,617,000).

### **Section C**

1. The Lead Project Agency shall be the Ministry of Agriculture and Livestock (MoAL).
2. Additional Project Parties are described in paragraph 10 of Schedule 1 Part 2.
3. A Mid-Term Review will be conducted as specified in Section 8.03 (b) and (c) of the General Conditions; however, the Parties may agree on a different date for the Mid-Term Review of the implementation of the Project.
4. The Project Completion Date shall be the sixth (6<sup>th</sup>) anniversary of the date of entry into force of this Agreement and the Financing Closing Date shall be 6 months later, or such other date as the Fund may designate by notice to the Borrower.
5. Procurement of goods, works and services financed by the Financing shall be carried out in accordance with the provisions of the Borrower's procurement regulations, to the extent such are consistent with the IFAD Procurement Guidelines.

### **Section D**

The Fund will administer the Loan and supervise the Project.

### **Section E**

1. The following are designated as additional grounds for suspension of disbursements:
  - a) The PIM and/or any provision thereof, has been waived, suspended, terminated, amended or modified without the prior agreement of the Fund and the Fund, after consultation with the Borrower, has determined that it has had, or is likely to have, a material adverse effect on the Project.
2. The following are designated as additional grounds for cancellation of disbursements:
  - (iii) In the event that the Borrower does not request a disbursement of the Financing for a period of at least 12 consecutive months without justification subsequent to the first eighteen (18) months from the entry into force of the Agreement.
3. The following are designated as additional (general/specific) conditions precedent to withdrawal:
  - a) IFAD no objection to the Project Implementation Manual (PIM) shall have been obtained.
  - b) Key Project staff has been appointed as per section I.7 Schedule 3 of this Agreement.
  - c) The first Annual Work Plan and Budgets (AWPB) shall have been submitted and received a no-objection from IFAD.
  - d) IFAD must receive, a duly completed authorised user(s) letter, from the designated representative or a sufficiently senior delegated official, designating the name(s) of official(s) authorised to approve withdrawal application(s) and quarterly interim financial reports (Q-IFR).
4. The following are the designated representatives and addresses to be used for any communication related to this Agreement:

For the Borrower:

Lyonpo Lekey Dorji  
 Finance Minister  
 Ministry of Finance  
 Kingdom of Bhutan  
 Tashichhodzong  
 Thimphu  
 Bhutan

For the Fund:

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

Copy to:  
 Roshan Cooke  
 Country Director, Nepal and Bhutan  
 Asia and the Pacific Division (APR)  
 C/O WFP Office Complex  
 Chakupat, Patan Dhoka Road  
 Lalitpur 10, Nepal

If applicable, The Parties accept the validity of any qualified electronic signature used for the signature of this Agreement and recognise the latter as equivalent to a hand-written signature.

This Agreement, [dated \_\_\_\_\_], has been prepared in the English language in two (2) original copies, one (1) for the Fund and one (1) for the Borrower.

KINGDOM OF BHUTAN

\_\_\_\_\_  
Lyonpo Lekey Dorji  
Minister for Finance

Date: \_\_\_\_\_

INTERNATIONAL FUND FOR  
AGRICULTURAL DEVELOPMENT

\_\_\_\_\_  
Alvaro Lario  
President

Date: \_\_\_\_\_

## Schedule 1

### *Project Description and Implementation Arrangements*

#### **I. Project Description**

1. *Target Population.* IMPACT will target semi-commercial and commercial farmers who have graduated from poverty under the Commercial Agriculture and Resilient Livelihoods Enhancement Programme ("CARLEP") between IFAD and the Kingdom of Bhutan, but remain vulnerable to falling back below the poverty line due to climatic and economic shocks. The Project will directly benefit 15,500 smallholder households, out of which 50% will be women, and 16% youth.

2. *Project area.* The Project will be implemented across 7 Dzongkhags (Districts) located in the eastern and central regions of Bhutan: Lhuentse, Mongar, Pemagatshel, Samdrup Jongkhar, Trashigang, Trashigang, and Bumthang.

3. *Goal.* The goal of the Project is to reduce poverty and improve resilience of smallholder households.

4. *Objectives.* The development objective of the Project is to transition smallholder farming towards climate-resilient food systems that are inclusive and profitable.

5. *Components.* The Project shall consist of the following Components:

#### **5.1 Component 1: Inclusive agri-livestock value chain development (USD 2.564 million, representing 9.7% of overall financing)**

This component focuses on transforming Kingdom of Bhutan's agriculture sector by enhancing commercialization, investment opportunities, and policy support. This component will support farmer groups and agri-entrepreneurs to build stronger market linkages, access to finance, and improve business competitiveness. The component is composed of the following sub-components:

##### *5.1.1 Sub-component 1.1: Enhance commercialization and investment opportunities*

##### **Output 1.1.1: Market linkages and investment facilitated**

The Project will formulate strategic investment plans for seven key commodities—dairy, vegetables, honey, maize, buckwheat, mushrooms, and fruit-bearing annuals—by identifying constraints and commercialization opportunities for domestic and export markets. Commodity-specific multi-stakeholder platforms will be established to connect producers, traders, and service providers, with 300 Business-to-Business and Business-to-Service events coordinated by Department of Agricultural Marketing and Cooperatives and Regional Agricultural Marketing and Cooperatives Offices ("DAMC/RAMCO") to foster commercial linkages. To strengthen agricultural lending, the Project will partner with the Bhutan Development Bank Ltd. (BDBL) and micro-finance institutions (MFIs) to train credit officers in cash flow-based lending.

##### **Output 1.1.2: Competitiveness and business development skills strengthened**

Farmer group consolidation will be supported through the formation of larger groups and cooperatives, using structured graduation criteria to assess organizational maturity for co-investment eligibility. Business development will be enhanced through financial education and business literacy training ("FEBL").

##### *5.1.2 Sub-component 1.2: Policy engagement for fostering commercialization*

##### **Output 1.2.1: Policy dialogue around priority issues supported**

To catalyze private investment and improve agricultural finance, the Project will launch two key policy dialogues focused on unlocking finance, through restrictive lending practices education and promoting risk management tools, and on promoting ownership, by advancing Public-Private-Producer Partnerships (PPPPs) to attract ethical investment and transitioning state-owned enterprises to farmer-owned models. A flagship initiative will be the gradual transfer of shares in Kofuku International Ltd dairy plant to high-performing dairy cooperatives, transforming farmers into co-owners with board representation and strategic decision-making power, and establishing a replicable model for nationwide adoption.

***Output 1.2.2: Branding and certification promoted***

To enhance product certification and quality standards, the Project will implement a three-pronged approach: Kingdom of Bhutan-specific quality standards; support for international standards (such as Organic, Fair Trade, Halal, or Geographic Indication); and end-to-end traceability systems. A complementary branding strategy will leverage Kingdom of Bhutan's unique selling points, while South-South cooperation with India will accelerate organic adoption through knowledge exchange.

**5.2 Component 2: Market oriented climate-resilient food systems (USD 21.689 million representing 82% of overall financing)**

This component aims to strengthen the resilience and profitability of Bhutan's agricultural sector by promoting sustainable market-driven production systems and investing in critical market infrastructure.

**5.2.1 Sub-component 2.1: Livestock productivity enhanced**

***Output 2.1.1: Livestock productivity enhanced***

To improve dairy cow productivity, the Project will train Community Artificial Insemination Technicians (CAITs), equip them with artificial insemination kits and cold chain facilities, and establish two community-owned breeding centers with viable business plans. Sex-sorted semen will be procured to reduce male calving and improve milk productivity. Partnerships with international institutions, including India's National Dairy Development Board, will support knowledge exchange, while selected youth will be trained on dairy cold chain equipment operation and provided with start-up toolkits. The Project will expand quality fodder cultivation, support silage-making technologies and 'Total Mixed Ration' production facilities. Animal health will be improved through integrated biosecurity measures, para-vet training of CAITs, and mobile apps for disease surveillance, in collaboration with Regional Livestock Development Centres and Bhutan Food and Drug Authority.

***Output 2.1.2: Climate resilient production practices introduced***

The project will support four youth groups with IoT-based (Internet of Things) smart farming systems for mushroom production, establishment of spawn production facilities, mobilize CARLEP 'Lead Farmers' for technical assistance, and support research for identifying a sustained supply of growth substrate for high-value mushroom species cultivation. Advanced honey production will be supported through queen bee breeding training, distribution of bee-hive boxes to youth and women groups, honey extraction machines, equipment sets, and women-friendly honey box lifters. Certified honey collection centers will be established for selected households and bee forage will be expanded by re-seeding nectar and pollen-producing native species and crop varieties across designated areas within each cluster. In remote areas, innovative drone technology will be used to broadcast native seed mixtures through a method known as seed bombing. Ten SMEs will be supported to produce bio-fertilizers, bio-pesticides, and organic soil amendments using local resources.

***Output 2.1.3: Sustainable land management fostered***

The Project will invest in sustainable land management through multiple dryland irrigation schemes. The project will also reclaim fallow land from the areas identified in eastern Dzongkhags and will support women and youth-led agricultural group enterprises to negotiate land leasing from landowners, while providing them with land preparation, fencing, irrigation, and semi-permanent shelters.

#### *5.2.2 Sub-component 2.2: Climate resilient production practices introduced*

##### **Output 2.2.1: Post-harvest and processing facilities supported**

The Project will upgrade 'Milk Collection Centres' (MCC) with automated milk analyzers for quality-based pricing to incentivize farmers and support product diversification. Two MCCs will be converted into 'Milk Processing Units' for cheese and butter production, supplying facilities like Koufuku International Limited. Support will be extended to dairy farmers with equipment such as chaff cutters, and to non-CARLEP farmers with improved cattle sheds. Vegetable aggregation will be enhanced through cooperative-managed centres equipped with washing and cold storage facilities to reduce post-harvest losses and improve marketability. Small-scale processing units will be established to add value to vegetables, mushrooms, honey, and cereals, with a focus on women and youth-led groups.

##### **Output 2.2.2: Logistics and market access promoted**

Transport and digital coordination will be promoted through refrigerated and insulated vehicles to enhance route optimization, and through mobile logistics platforms developed with the Building Resilient Commercial Smallholder Agriculture Programme ("BRECSA") between IFAD and the Kingdom of Bhutan for real-time booking and tracking to improve vehicle utilization. The project will deploy BRECSA-developed physical and digital marketing platforms across the Project Dzongkhags to provide market information, facilitate direct producer-consumer linkages, strengthen market access for eastern farmers, and improve bargaining power and income.

6. The Project's programme management, monitoring and evaluation, and knowledge management costs are USD 2.19 million, representing 8.3% of overall financing.

## **II. Implementation Arrangements**

7. *Lead Project Agency.* The MoAL will be the Lead Project Agency providing policy guidance, policy priority direction and facilitate project implementation.

8. *Project Oversight Committee.* A Project Steering Committee ("PSC") will be established and chaired by the Secretary of MoAL. The PSC shall meet at least twice a year. The main responsibilities of the PSC are: (i) oversight of project implementation; ii) compliance of project activities with Government's policies and the terms and conditions of the financing agreement; (iii) approval of AWPBs and Consolidated Procurement Plan ("CPP"), (iv) coordination of project interventions with other development programmes and projects; and (v) policy and strategic guidance for improved implementation.

9. *Project Management Unit.* A Project Management Unit ("PMU") will be co-located with the Agriculture Research and Development Center ("ARDC") in Wengkhaz, reporting directly to the Chief of the Policy and Planning Division ("PPD"), which serves as the day to day operating agency and a regular IFAD counterpart. The PMU will be responsible for project oversight, project planning, financial management, and coordination with implementing partners, while implementation will also be carried out by the District Departments of Agriculture and Livestock ("DDAL") in target Dzongkhags.

10. *Project Parties.* The Project will forge and continue partnerships with key technical agencies such as ARDC reporting to the PPD, DAMC/RAMCO, Farm Machinery Corporation



Limited ("FMCL"), Natural Resources Development Corporation Limited ("NLRDC") in Bumthang, DDALs, as well as financial institutions.

11. *Monitoring and Evaluation.* Drawing on the CARLEP and BRECSA systems, a robust geo-referenced Monitoring and Evaluation (M&E) system will be developed for the Project, with dedicated financial resources to support implementation. The PMU will establish an M&E unit responsible for monitoring Dzongkhag-level performance, while the PPD will oversee overall project progress. The system will harmonize with Bhutan's national government systems ("PLaMS") and ensure complementarity with IFAD and other partners' M&E requirements. The PMU M&E unit will design formats to capture critical field-level data not covered by PLaMS, incorporating lessons from CARLEP. Baseline, mid-term, and completion surveys will follow IFAD's Core Outcome Indicators methodology. Annual outcome surveys will provide rapid feedback, and an external agency will conduct the final impact survey. Eventually, IFAD will carry out a Project Completion Review.

12. *Knowledge Management.* The Project will establish a systematic knowledge management approach to capture, analyze, and share lessons, best practices, and evidence generated during implementation. This strategy addresses critical policy gaps in Bhutan, including the need for climate-resilient agriculture, inclusive market linkages for smallholders, and youth engagement models. Knowledge will be generated through rigorous impact analyses, thematic studies, and documentation of adaptive management, directly informing Bhutan's broader rural development knowledge base. Dissemination will occur through multiple channels, including policy briefs, a digital repository, learning events, and engagement with IFAD's global platforms and local media.

13. *Project Implementation Manual.* The Project Implementation Manual ("PIM") serves as a foundational guide for the PMU and implementing agencies, promoting standardized practices, transparency, and accountability throughout project implementation. It outlines comprehensive financial management procedures, including roles and responsibilities of project finance staff, internal control mechanisms, and reporting requirements. It details disbursement processes in line with the IFAD Loan Disbursement Handbook, requiring quarterly submission of Withdrawal Applications supported by Interim Financial Reports. The PIM also incorporates internal control systems, covering accounting procedures, segregation of duties, budgeting, procurement, payment protocols, account reconciliation, and financial reporting. User access and authorization protocols for accounting software are defined to ensure secure operations.

**Schedule 2***Allocation Table*

1. *Allocation of Loan Proceeds.* (a) The Table below sets forth the Categories of Eligible Expenditures to be financed by the Loan/Grant and the allocation of the amounts to each category of the Financing and the percentages of expenditures for items to be financed in each Category:

<b>Category No</b>	<b>Category Description</b>	<b>Loan A: Amount Allocated 80% eligible for SHC (USD)</b>	<b>Loan B: Amount Allocated 20% eligible for HC (USD)</b>	<b>Percentage eligible for IFAD financing</b>
I	Works	4 140 600	1 035 100	100%
II	Goods, Services and Inputs	3 015 500	753 900	100%
III	Training	685 500	171 400	100%
IV	Consultancies	54 700	13 700	100%
V	Operating Costs	67 700	16 900	100%
<b>TOTAL</b>		<b>7 964 000</b>	<b>1 991 000</b>	

The cost categories used in the Table above are explained as follows:

- I. Category I: "Works" shall mean eligible expenditures incurred for works and infrastructure-related expenditures.
- II. Category II: "Goods, Services and Inputs" shall mean eligible expenditures incurred for goods, equipment and materials and non-consultancy services only.
- III. Category III: "Training" shall mean eligible expenses incurred for all training and workshop-related expenditures under program activities.
- IV. Category IV: "Consultancies" shall mean eligible expenses incurred for international and national technical assistance; advisory services; consultancy services for impact studies, baseline, mid-line and end-line surveys; annual outcome surveys; capacity development; monitoring and evaluation; and other services.
- V. Category V: "Operating Costs" shall mean eligible expenses incurred for remuneration of Rural and Finance Expert, and Monitoring & Evaluation, Knowledge Management, Gender and Youth Engagement Manager.
- VI. The percentage shall be applied to project expenditures, excluding indirect taxes and the financial contributions of other financiers.
- VII. Government co-financing funds shall be allocated to support expenditures related to Works, Goods, Services and Inputs, Trainings, Consultancies and Operating Costs, with an estimated allocation of approximately USD 1.617 million equivalent.

- VIII. The estimated contribution from the Bank and Financial Institution is approximately USD 3.5 million.

2. *Disbursement arrangements*

- a) *Start-up Costs.*** Withdrawals in respect of expenditures for start-up costs incurred before the satisfaction of the general conditions precedent to withdrawal shall not exceed an aggregate amount of five hundred thousand United State Dollar (USD 500,000) from IFAD loan. Activities to be financed by Start-up Costs will require the no objection from IFAD to be considered eligible. The activities relating to the Project's start-up and preparatory activities are as follows: (i) recruitment of key PMU staff; (ii) Finalisation of the Project Implementation Manual (iii) Preparation of the first Annual Work Plan and Budget; (iii) Procurement planning and initial procurement actions (iv) Establishment of the financial management system (v) Implementation of baseline studies (vi) Organization of inception workshops at national and district levels.
- b)** The Royal Audit Authority (RAA) of Bhutan (Supreme Audit Institution-SAI) will audit project financial statements each year, in accordance with audit standards acceptable to IFAD. It will send audit reports to IFAD within six months of the end of the financial year.

## Schedule 3

### *Special Covenants*

#### **I. General Provisions**

In accordance with Section 12.01(a)(xxiii) of the General Conditions, the Fund may suspend, in whole or in part, the right of the Borrower to request withdrawals from the Loan Account if the Borrower has defaulted in the performance of any covenant set forth below, and the Fund has determined that such default has had, or is likely to have, a material adverse effect on the Project:

1. Within 6 months of entry into force of the Financing Agreement, the Project will procure and install a customized accounting software as it is the practice in IFAD on-going supported projects, to satisfy International Accounting Standards and IFAD's requirements.
2. Within six (6) months of entry into force of the Financing Agreement, the Project will enter into Memorandum of Understandings (MoU) with implementing partners that will structure the collaboration, define roles, responsibilities and duties with regards to implementation, financial management, accounting and reporting.
3. *Planning, Monitoring and Evaluation.* The Borrower shall ensure that (i) a Planning, Monitoring and Evaluation (PM&E) system shall be established within twelve (12) months from the date of entry into force of this Agreement.
4. *Anticorruption Measures.* The Borrower shall comply with IFAD Policy on Preventing Fraud and Corruption in its Activities and Operations.
5. *Sexual Harassment, Sexual Exploitation and Abuse.* The Borrower and the Project Parties shall ensure that the Project is carried out in accordance with the provisions of the IFAD Policy on Preventing and Responding to Sexual Harassment, Sexual Exploitation and Abuse, as may be amended from time to time.
6. *IFAD Client Portal (ICP) Contract Monitoring Tool.* The Borrower shall ensure that a request is sent to IFAD to access the project procurement Contract Monitoring Tool in the IFAD Client Portal (ICP). The Borrower shall ensure that all contracts, memoranda of understanding, purchase orders and related payments are registered in the Project Procurement Contract Monitoring Tool in the IFAD Client Portal (ICP) in relation to the procurement of goods, works, services, consultancy, non-consulting services, community contracts, grants and financing contracts. The Borrower shall ensure that the contract data is updated on a quarterly basis during the implementation of the Project.]
7. *The Key Project Personnel will be staffed within the PMU:* a Project Director (PD) (a senior officer from the MoAL selected through a competitive process), (i) Livestock Development Manager; (ii) Agriculture Manager; (iii) Marketing and Value Chain Manager; (iv) Monitoring & Evaluation, Knowledge Management, Gender and Youth Engagement Manager; (v) Rural Finance Specialist/Enterprise Development Manager; (vi) Procurement Expert; (vii) Accountant; and (viii) PPD Coordination Officer (located in Thimphu). In order to assist in the implementation of the Project, the PMU, unless otherwise agreed with IFAD, shall employ or cause to be employed, as required, key staff whose qualifications, experience and terms of reference are satisfactory to IFAD. Key Project Personnel shall be seconded to the PMU in the case of government officials or recruited under a consulting contract following the individual consultant selection method in the IFAD Procurement Handbook, or any equivalent selection method in the national procurement system that is acceptable to IFAD. The recruitment of Key Project Personnel is subject to IFAD's prior review as is the dismissal of Key Project Personnel. Key Project Personnel are subject to annual evaluation and the continuation of their contract is subject

to satisfactory performance. Any contract signed for Key Project Personnel shall be compliant with the national labour regulations or the ILO International Labour Standards (whichever is more stringent) in order to satisfy the conditions of IFAD's updated SECAP. Repeated short-term contracts must be avoided, unless appropriately justified under the Project's circumstances.

## **II. SECAP Provisions**

1. The Borrower shall carry out the preparation, design, construction, implementation, and operation of the Project in accordance with the measures and requirements set forth in the Updated Social, Environmental Climate Assessment Procedures of IFAD ("SECAP 2021 Edition"), as well as with all applicable laws and regulations to the Borrower and/or the sub-national entities relating to social, environmental and climate change issues in a manner and substance satisfactory to IFAD. The Borrower shall not amend, vary or waive any provision of the SECAP 2021 Edition, unless agreed in writing by the Fund in the Financing Agreement and/or in other relevant management plan (Management Plan), if any.

2. The Borrower shall carry out the implementation of the Project in accordance with the measures and requirements set forth in the Environmental, Social and Climate Management Plans (ESCMPs) as applicable, taken in accordance with SECAP requirements and updated from time to time by the Fund.

The Borrower shall not amend, vary or waive any provision of the ESCMPs and Management Plan(s), unless agreed in writing by the Fund and if the Borrower has complied with the same requirements as applicable to the original adoption of the ESCMPs and Management Plan(s).

3. The Borrower shall cause the Lead Project Agency to comply at all times while carrying out the Project with the standards, measures and requirements set forth in the SECAP 2021 Edition and the Management Plan(s), if any.

4. The Borrower shall disclose relevant Management Plan(s) with Project stakeholders and interested parties in an accessible place in the Project-affected area, in a form and language understandable to Project-affected persons and other stakeholders. The disclosure will take into account any specific information needs of the community (e.g. culture, disability, literacy, mobility or gender).

5. The Borrower shall ensure or cause the Executing Agency and Implementing Agency to ensure that all bidding documents and contracts for goods, works and services contain provisions that require contractors, sub-contractors and suppliers to comply at all times in carrying out the Project with the standards, measures and requirements set forth in the SECAP 2021 Edition, ESCMPs and the Management Plan(s), if any.

6. The Borrower will ensure that a Project-level grievance mechanism is established that is easily accessible, culturally appropriate, available in local languages, and scaled to the nature of the Project's activity and its potential impacts to promptly receive and resolve concerns and complaints (e.g. compensation, relocation or livelihood restoration) related to the environmental and social performance of the Project for people who may be unduly and adversely affected or potentially harmed if the Project fails to meet the SECAP standards and related policies. The Project-level grievance mechanism needs to take into account indigenous peoples, customary laws and dispute resolution processes. Traditional or informal dispute mechanisms of affected indigenous peoples should be used to the greatest extent possible.

7. This section applies to any event which occurs in relation to serious environmental, social, health & safety (ESHS) incidents (as this term is defined below); labor issues or to adjacent populations during Project implementation that, with respect to the relevant IFAD Project:

- (i) has direct or potential material adverse effect;
- (ii) has substantially attracted material adverse attention of outside parties or create material adverse national press/media reports; or
- (iii) gives rise to material potential liabilities.

In the occurrence of such event, the Borrower shall:

- Notify IFAD promptly;
- Provide information on such risks, impacts and accidents;
- Consult with Project -affected parties on how to mitigate the risks and impacts;
- Carry out, as appropriate, additional assessments and stakeholders' engagements in accordance with the SECAP requirements; and
- Adjust, as appropriate, the Project -level grievance mechanism according to the SECAP requirements; and
- Propose changes, including corrective measures to the Management Plan(s) (if any), in accordance with the findings of such assessment and consultations, for approval by IFAD.

**Serious ESHS incident** means serious incident, accident, complaint with respect to environmental, social (including labor and community), health and safety (ESHS) issues that occur in the context of the loan or within the Borrower's activities. Serious ESHS incidents can comprise incidents of (i) environmental; (ii) occupational; or (iii) public health and safety; or (iv) social nature as well as material complaints and grievances addressed to the Borrower (e.g. any explosion, spill or workplace accident which results in death, serious or multiple injuries or material environmental contamination, accidents of members of the public/local communities, resulting in death or serious or multiple injuries, sexual harassment and violence involving Project workforce or in relation to severe threats to public health and safety, inadequate resettlement compensation, disturbances of natural ecosystems, discriminatory practices in stakeholder consultation and engagement (including the right of indigenous peoples to free, prior and informed consent), any allegations that require intervention by the police/other law enforcement authorities such as loss of life, sexual violence or child abuse, which (i) have, or are likely to have a material adverse effect; or (ii) have attracted or are likely to arouse substantial adverse attention of outside parties or (iii) to create substantial adverse media/press reports; or (iv) give, or are likely to give rise to material potential liabilities).

8. The Borrower shall ensure or cause the Lead Project Agency, any Project Party, contractors, sub-contractors and suppliers to ensure that the relevant processes set out in the SECAP 2021 Edition as well as in the Management Plan(s) (if any) are respected.

9. Without limitation on its other reporting obligations under this Agreement, the Borrower shall provide the Fund with:

- Reports on the status of compliance with the standards, measures and requirements set forth in the SECAP 2021 Edition, ESCMPs and the Management Plan (if any) on a semi-annual basis - or such other frequency as may be agreed with the Fund;
- Reports of any social, environmental, health and safety incidents and/accidents occurring during the design stage, the implementation of the Project and propose remedial measures.

The Borrower will disclose relevant information from such reports to affected persons promptly upon submission of the said reports; and

- Reports of any breach of compliance with the standards, measures and requirements set forth in the SECAP 2021 Edition and the Management Plan(s) (if any) promptly after becoming aware of such a breach.

10. The Borrower shall fully cooperate with the Fund concerning supervision missions, midterm reviews, field visits, audits and follow-up visits to be undertaken in accordance with the requirements of SECAP 2021 Edition and the Management Plan(s) (if any) as the Fund considers appropriate depending on the scale, nature and risks of the Project.

11. In the event of a contradiction/conflict between the Management Plan(s), if any, and the Financing Agreement, the Financing Agreement shall prevail.

## Logical framework

Results Hierarchy	Indicators				Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Source	Frequency	Responsibility	
Outreach	1 Persons receiving services promoted or supported by the project				Progress Report / Project MIS	Rolling	PMU	
	Total number of persons receiving services - Number of people	0	7,750	15,500				
	Males - Males	0	3,875	7,750				
	Females - Females	0	3,875	7,750				
	Young - Young people	0	1,240	2,480				
	Male - Percentage (per cent)	0	50	50				
	Female - Percentage (per cent)	0	50	50				
	Young - Percentage (per cent)	0	16	16				
	1.a Corresponding number of households reached				Progress Report / Project MIS	Rolling	PMU	
	Women-headed households - Households	0	2,325	4,650				
	Households - Households	0	7,750	15,500				
	1.b Estimated corresponding total number of households members				Progress Report / Project MIS	Rolling	PMU	
	Household members - Number of people	0	34,100	68,200				
Project Goal Reduce poverty and improve resilience of smallholder households.	Number of households reporting at least 30 per cent increase in household income				Survey / Farm Business Diary	Baseline, mid-term and completion / Annual	PMU	(A) Continued social, political and economic stability in the country. (B) No major fluctuations in demand/prices for agricultural products. (C) No major environmental or climate hazard events.
	Percentage - Percentage (per cent)		40	70				
	Households (number) - Households		3,100	10,850				



<b>Development Objective</b> Transition smallholder farming towards climate-resilient food systems that are inclusive and profitable.	<b>2.2.2 Supported rural enterprises reporting an increase in profit</b>				Survey / Farm Business Diary	Baseline, mid-term and completion / Annual	PMU	(A) Producer organizations are provided sufficient support for the development of economically viable business plans. (B) Producer organizations receive sufficient and timely inputs and services to meet market demands and standards. (C) CARLEP lessons are effectively applied to improve implementation and performance.
	Number of enterprises - Enterprises		94	687				
	Percentage of enterprises - Percentage (per cent)		40	80				
	<b>2.2.1 Persons with new jobs/employment opportunities</b>				Survey	Baseline, mid-term and completion	PMU	
	New jobs - Number		325	650				
	Job owner - Men		195	390				
	Job owner - Women		130	260				
	Job owner - Young		260	520				
	<b>IE.2.1 Individuals demonstrating an improvement in empowerment</b>				Survey	Baseline, mid-term and completion	PMU	
	Total persons - Number of people		3,100	9,300				
	Total persons - Percentage (per cent)		40	60				
	Females - Females		1,550	4,650				
	Females - Percentage (per cent)		40	60				
	Males - Males		1,550	4,650				
	Males - Percentage (per cent)		40	60				
	<b>SF.2.1 Households satisfied with project-supported services</b>				Survey	Baseline, mid-term and completion	PMU	
	Households (number) - Households		6,200	12,400				
	Households (per cent) -		80	80				
	Household members - Number of people		24,800	49,600				

	<b>SF.2.2 Households reporting they can influence decision-making of local authorities and project-supported service providers</b> Households (number) - Households      5,425      10,850 Households (per cent) -      70      70 Household members - Number of people      23,870      47,740	Survey	Baseline, mid-term and completion	PMU	
<b>Outcome:</b> 1. Inclusive agri-livestock value chain development	<b>2.2.5 Rural producers' organizations reporting an increase in sales</b> Number of Rural POs - Organizations      120      640 Percentage of rural POs -      60      80 Total number of POs members      1,800      9,600 Women PO members      900      4,800 Men PO members      900      4,800 Young PO members      288      1,536	Survey / Farm Business Diary	Baseline, mid-term and completion / Annual	PMU	(A) Producer organizations adopt economically viable and bankable business plans. (B) Producer organizations are able to consistently meet the market volume and standards. (C) Producer organizations are effectively linked to markets.
	<b>Total private investment in value chains by smallholder producers, enterprises and other actors.</b> Private investment (US\$ thousand) - Money (US\$' 000)      500      1,000	Progress Report / Project MIS	Rolling	PMU	
	<b>Rural producers' organizations engaged in formal and informal partnerships/agreements or contracts with buyers and traders.</b> Number of POs - Formal      50      186 Number of POs - Informal      250      465	Survey / Farm Business Diary	Baseline, mid-term and completion	PMU	
	<b>1.2.5 Households reporting using rural financial services</b> Households - Households      1,750      5,600	Progress Report	Baseline, mid-term	PMU	

	Households - Percentage (per cent)		25	40		and completion	
	Total number of household members - Number of people		7,700	24,640			
	<b>Policy 3 Existing/new laws, regulations, policies or strategies proposed to policy makers for approval, ratification or amendment</b>				Progress Report / Policy Papers	Rolling	PMU
	Number - Number		0	2			
<b>Output</b>	<b>2.1.3 Rural producers' organizations supported</b>				Progress Report / Project MIS	Rolling	PMU
	Rural POs supported - Number	0	500	930			
	Total size of POs - Number of people	0	7,500	14,000			
	Males - Number of people	0	3,750	7,000			
	Females - Number of people	0	3,750	7,000			
	Young - Number of people	0	1,200	2,240			
	Rural POs supported that are headed by women - Number	0	250	465			
	<b>1.1.7 Persons in rural areas trained in financial literacy and/or use of financial products and services</b>				Progress Report / Project MIS / Credit Reports	Rolling	PMU / Partner Financial Institution
	Persons in rural areas trained in FL and/or use of Financial Products and Services (total)	0	7,000	14,000			
	Males - Number of people	0	3,500	7,000			
	Females - Number of people	0	3,500	7,000			

	Young - Number of people	0	1,120	2,240				
	<b>1.1.5 Persons in rural areas accessing financial services</b>				Progress Report / Project MIS / Credit Reports	Rolling	PMU / Partner Financial Institution	
	Total persons accessing financial services - credit - Number of people	0	1,200	2,400				
	Men in rural areas accessing financial services - credit - Males	0	600	1,200				
	Women in rural areas accessing financial services - credit - Females	0	600	1,200				
	Young people in rural areas accessing financial services - credit - Young people	0	600	1,200				
	<b>2.1.1 Rural enterprises accessing business development services</b>				Progress Report / Project MIS	Rolling	PMU	
	Number - Rural enterprises (number)	0	200	800				
	<b>Number of business-to-business linkage events conducted</b>				Progress Report / Project MIS	Rolling	PMU	
	Products - Number	0	200	300				
	<b>Number of products receiving international certifications for accessing global markets</b>				Progress Report / Project MIS	Rolling	PMU	
	Products - Number	0	0	2				
<b>Outcome</b> 2. Market oriented climate-resilient food systems	<b>1.2.4 Households reporting an increase in production</b>				Survey / Farm Business Diary	Baseline, mid-term and completion / Annual	PMU	(A) Participating smallholder producer organizations receive sufficient and timely inputs and services to adopt climate resilient practices and expand production. (B)
	Households - Households		4,500	11,200				
	Households - Percentage (per cent)		60	80				

	Women-headed households - Households		1,350	3,360				Market, processing and storage infrastructure is strategically located.
	Total number of household members - Number of people		18,000	49,280				
	<b>Reduction in the average post-harvest loss in supported value chains</b>				Survey / Farm Business Diary	Baseline, mid-term and completion	PMU	
	Loss - Percentage (per cent)		20	15				
	<b>3.2.2 Households reporting adoption of environmentally sustainable and climate-resilient technologies and practices</b>				Survey	Baseline, mid-term and completion	PMU	
	Households - Households		2,480	8,680				
	Households - Percentage (per cent)		80	80				
	Women-headed households - Households		744	2,604				
	Total number of household members - Number of people		10,912	38,192				
<b>Output</b>	<b>Rural producers' organizations engaged in project supported value chains</b>				Progress Report / Project MIS	Rolling	PMU	
	Rural POs - Number	0	500	800				
	Total size of POs - Number of people	0	7,500	12,000				
	Males - Number of people	0	3,750	6,000				
	Females - Number of people	0	3,750	6,000				
	Young - Number of people	0	1,200	1,920				
	<b>1.1.2 Farmland under water-related infrastructure constructed/rehabilitated</b>					Rolling	PMU	

Hectares of land - Area (ha)	0	175	350	Progress Report / Project MIS		
<b>Number of input production enterprises supported</b>				Progress Report / Project MIS	Rolling	PMU
Number - Total	0	5	9			
Number - Bio-inputs	0	3	5			
Number - Feed	0	2	4			
<b>2.1.6 Market, processing or storage facilities constructed or rehabilitated</b>				Progress Report / Project MIS	Rolling	PMU
Total number of facilities - Facilities	0	30	50			
Market facilities constructed/rehabilitated - Facilities	0	2	5			
Processing facilities constructed/rehabilitated - Facilities	0	3	10			
Storage facilities constructed/rehabilitated - Facilities	0	25	35			

## Integrated project risk matrix

<b>Risk Categories and Subcategories</b>	<b>Inherent</b>	<b>Residual</b>
<b>Country Context</b>		
<b>Political Commitment</b>	Low	Low
Risk(s): Minor shifts in priorities that could affect resource allocation		
Mitigations: Strong alignment with Bhutan's 13th Five Year Plan. Broad consensus on agricultural development priorities. Regular engagement with relevant ministries and agencies.		
<b>Governance</b>	Moderate	Moderate
Risk(s): Coordination challenges between multiple partner agencies. Potential delays in decision-making due to bureaucratic processes. Limited capacity at local government levels for project implementation and oversight.		
Mitigations: Establishment of Project Steering Committee with clear mandates. Capacity building for local government officials. Streamlined decision-making protocols and regular coordination meetings. Leveraging Bhutan's strong governance frameworks and transparency mechanisms.		
<b>Macroeconomic</b>	Substantial	Substantial
Risk(s): Economic fluctuations affecting import costs for agricultural inputs and equipment. Global commodity price volatility impacting commercialisation and market viability. Economic slowdown affecting government budget allocations and private sector investment.		
Mitigations: Focus on local value addition to reduce import dependency. Strategic Investment Plans to guide commercialisation value. Diversified market channels, leveraging comparative advantage of prime Bhutan products and value-added processing to buffer against price volatility. Strategic partnerships to leverage investment.		
<b>Fragility and security</b>	Low	Low
Risk(s): Minimal risk in Bhutan's stable political environment. Natural disasters affecting infrastructure and implementation.		
Mitigations: Disaster assessment prior to investments.		
<b>Sector Strategies and Policies</b>		
<b>Policy alignment</b>	Moderate	Moderate
Risk(s): Potential misalignment between project objectives and evolving national agricultural policies.		

Competing priorities between different sector strategies. Inconsistent implementation of policies at different administrative levels.		
Mitigations: Strong alignment with National Agriculture Policy and 13th Five Year Plan. Active participation in policy dialogue through PPD. Regular review and adaptation of project approaches based on policy developments. Close coordination with Ministry of Agriculture and Livestock.		
<b>Policy development &amp; implementation</b>	Moderate	Moderate
Risk(s): Non-conducive policies to support commercialization of the agri-food sector. Delays in policy formulation and implementation affecting project. Regulatory frameworks may not keep pace with market development needs.		
Mitigations: Active engagement in policy development through evidence-based advocacy. Documentation of project experiences to inform policy discussions. Technical assistance to government for policy development. Flexibility in project design to adapt to changing policy environment while maintaining alignment with national priorities.		
<b>Environment and Climate Context</b>		
<b>Project vulnerability to environmental conditions</b>	Moderate	Moderate
Risk(s): Agriculture in Bhutan remains the backbone of rural livelihoods, but environmental challenges such as human-wildlife conflict (HWC), resource degradation, and unsustainable farming practices threaten productivity. With over 70 per cent of the country under forest cover, limited arable land results in high competition for agricultural expansion, often leading to soil erosion and resource depletion. Smallholder farmers also face risks from water scarcity.		
Mitigations: The project will promote sustainable land management through sustainable land management and reclamation of fallow agricultural land, enhancing soil cover, reducing degradation, and contributing to local food security. The project will ensure responsible bio-fertilizer and bio-pesticide use to prevent pollution and integrate human-wildlife conflict (HWC) mitigation measures such as chain link fencing. In response to increasing water stress, the project will support dryland irrigation		



infrastructure to transform rainfed farming systems into more productive and climate-resilient agricultural landscapes.		
<b>Project vulnerability to climate change impacts</b>	Moderate	Moderate
Risk(s): Bhutan faces severe climate risks, including rising temperatures, erratic rainfall, and extreme weather events that threaten rural livelihoods. The project target areas are vulnerable to flash floods, landslides, droughts, and shifting agro-ecological zones.		
Mitigations: IMPACT integrates a range of climate-resilient strategies across its components. The project will invest in water-efficient dryland irrigation systems and strengthen value chain of climate resilient crops like buckwheat, mushrooms and honey which are better suited to shifting agro-ecological conditions. Re-seeding and restoration of bee pastures in degraded and underutilized areas will enhance pollination services and ecosystem health. Climate-sensitive design will be integrated into infrastructure such as post-harvest facilities, milk chilling centres, and cold storage units.		
<b>Project Scope</b>		
<b>Project relevance</b>	Low	Low
Risk(s): Minor misalignment between project interventions and evolving target groups/member's needs. Slight changes in market conditions affecting value chain priorities.		
Mitigations: Strong consultation during implementation phase with extensive stakeholder engagement. Project builds on proven CARLEP approaches. Regular feedback mechanisms and adaptive management protocols. Clear alignment with national agricultural priorities and strategies.		
<b>Technical soundness</b>	Moderate	Moderate
Risk(s): Complex value chain interventions requiring coordination across multiple technical areas. Climate-smart agriculture approaches may need adaptation to local conditions. Integration of digital technologies with farming systems.		
Mitigations: Building on successful CARLEP technical approaches and lessons learned. Strong technical support from ARDC, RLDC, and specialized agencies. Phased implementation allowing for learning and adaptation. Technical assistance from international experts where		

needed. Pilot testing of new technologies before scaling.		
<b>Institutional Capacity for Implementation &amp; Sustainability</b>		
<b>Implementation arrangements</b>	Substantial	Substantial
Risk(s): Coordination challenges between multiple implementing agencies (ARDC, RLDC, NLRDC...). Capacity constraints at district level for project implementation. Recruitment and retention of qualified staff in remote areas. Challenges and low capacity relevant to financial and procurement management.		
Mitigations: Clear implementation protocols and coordination mechanisms through the PIM and Project Steering Committee. Leveraging existing institutional structures and relationships. Enhanced staff incentives and benefits. Delegation of implementation to service providers where appropriate. Regular coordination meetings and capacity building support. Dedicated Finance and Procurement Officers with specialized training and ongoing technical support from IFAD. Advanced financing to ensure rapid start-up.		
<b>M&amp;E arrangements</b>	Low	Low
Risk(s): Minor capacity gaps in M&E techniques. Potential delays in data collection from remote areas. Integration challenges between project MIS and government system.		
Mitigations: Building on CARLEP and BRECSA M&E systems. Dedicated M&E unit with trained staff. Regular capacity building and technical support from IFAD. Adaptation of existing MIS systems.		
<b>Procurement</b>		
<b>Legal and regulatory framework</b>	Low	Low
Risk(s): The Public Finance Act, 2007 Chapter VI, under Financial Management Requirements, Issuance of Instructions clause No. 104(i) empowers Ministry of Finance to issue Procurement rules which is equitable, transparent, competitive and cost effective. Based on this provision, the Bhutan 2023 Procurement Rules and Regulations 2023 supersede the Procurement Rules and Regulations 2019, Simplified Procurement Rules and Regulation 2020 & Simplified Procurement Rules and Regulation 2021 and various notifications and fiscal measures issued thus far as amendment to Procurement Rules and Regulations. Overall, Bhutan has		

comprehensive procurement rules and regulations, but the assessment identified some issues in terms of participation by the international bidders.		
Mitigations: Although there is new regulation in procurement, this still needs to be absorbed and improved. In the event of a shortfall, IFAD procurement regulations needs to be followed.		
<b>Accountability and transparency</b>	Low	Low
Risk(s): Overall, the public procurement system operates with integrity, has appropriate controls and appropriate anti-corruption measures. All the procurement decisions are taken by committee and all the committees required to sign the statement of conflict of interest. Further, both the bidders and procuring agencies are mandated to sign the integrity pact. Some constraints have been observed related to the civil society engagement and stakeholder participation which might bring additional risks to the procurement process.		
Mitigations: NA		
<b>Capability in public procurement</b>	Substantial	Substantial
Risk(s): Public procurement operations and market practices exhibit some gaps and weaknesses. In particular, the capacity of the government agencies is quite weak due to lack of experienced procurement personnel and other technical officials. On the other hand, the market is not vibrant and lacks required capacity. Most of the contractors and suppliers are small and have limited capacity for large projects. The large contracts segment is dominated by foreign players.		
Mitigations: The Government and IFAD need to partner and engage more with the private sector to ensure value for money.		
<b>Public procurement processes</b>	High	High
Risk(s): Public procurement process exhibit some gaps and weaknesses. The provisions in the procurement regulations are very clear which can be compared to any international procurement process. However, due to lack of capacity to follow the procurement process with appropriate documentation, the efficiency and effectiveness is being compromised due to lack of skilled and experience procurement officials. Likewise, the bidders also lack the procurement		

experience of IFAD and other donor agencies.		
Mitigations: IFAD will depute experienced procurement officer or provide training to those officials involved in project procurement.		
<b>Financial Management</b>	Substantial	Substantial
<b>Organisation and staffing</b>	High	High
<p>Risk(s): During periods of high staff mobility within the RGoB, the project's financial management unit/department may engage personnel unfamiliar with IFAD accounting and reporting requirements, potentially affecting project implementation.</p> <p>The lack of qualified and experienced financial management (FM) staff is a significant issue in the country, potentially impacting financial management and compliance with IFAD reporting requirements</p>		
<p>Mitigations: The project will identify and hire dedicated financial management (FM) personnel and skilled professionals. Additionally, the recruitment process for FM staff should be open to all qualified candidates and conducted with transparency.</p> <p>A Project Implementation Manual (PIM) will be developed to ensure effective financial management, outlining clear procedures, controls, financial reporting and the responsibilities of project finance staff. Engage a Financial Management consultant to enhance the capacity of PMU finance staff, the Ministry of Agriculture and Livestock (MoAL) (Implementing Agency), and its personnel in financial management and compliance with IFAD accounting and reporting requirements, including the preparation of AWPBs, IFRs, WAs, and Unaudited Financial Statements</p>		
<b>Budgeting</b>	Substantial	Substantial
<p>Risk(s): There is a risk that the annual work plan and budget (AWPB) may not be prepared or revised in a timely manner, leading to fund unavailability when needed and poor budget execution. Additionally, expenditures may not align with the AWPB or may exceed budget ceilings and incur expenditure for the activities not included in AWPB.</p> <p>There is a lack of alignment between the medium-term expenditure budgeting perspective and costed strategic plans, as well as an absence of focus on achieving results consistent</p>		

with the strategic allocation of resources.		
<p>Mitigations: The annual work plan and budget must be prepared in alignment with the project design and COSTAB, following government budgeting procedures in the IFAD-prescribed format 60 days before the start of the fiscal year, ensuring all required information is included.</p> <p>Budget execution should be monitored periodically by comparing actual expenditures against the approved budget in terms of both quantity and amount.</p> <p>Capacity building on budgeting procedures for PMU-MoAL (Implementing Agency) and its staff.</p>		
<b>Funds flow/disbursement arrangements</b>	Substantial	Substantial
<p>Risk(s): There is a risk of fund commingling at the entity receiving advances for project implementation if the project funds are not kept in the separate bank accounts. In addition to financing from external development partners, counterpart funding is expected from the RGoB, target groups/members, and financial institutions. This risk stems from the absence of streamlined and robust mechanisms for funds flow and reporting.</p> <p>Delays in the submission and approval of withdrawal applications may cause cash flow challenges for the PMU, disrupting project implementation and hindering the achievement of project objectives within the designated timeframe.</p>		
<p>Mitigations: Ensure that the Project Designated Account (DA) and Operational Accounts are maintained separately in compliance with the provisions of the IFAD Financing Agreement. DAs shall be opened for the IFAD SHC and HC Loans respectively.</p> <p>The IFAD Loan Disbursement Handbook and the Project Implementation Manual (PIM) outline the disbursement procedures and require the quarterly submission of Withdrawal Applications (WAs) in alignment with Interim Financial Reports (IFRs).</p> <p>The timely preparation and approval of withdrawal applications will be facilitated through the use of appropriate accounting software in the PMU and the training of project</p>		

<p>financial management (FM) staff in its application.</p> <p>Supervision and implementation support missions will provide backstopping and assistance to FM staff to accelerate the preparation of withdrawal applications.</p> <p>The project must maintain a satisfactory disbursement rate by implementing planned activities and closely monitor disbursements to prevent implementation delays.</p> <p>Furthermore, an action plan for project co-financing from RGoB and other counterpart contributions should be developed, and actual disbursements should be monitored against the targets set in the Financing Agreement (FA) and Project Design Report (PDR).</p>		
<b>Internal controls</b>	Substantial	Substantial
<p>Risk(s): Inadequate internal controls within the PMU and MoAL (Implementing Agency) may lead to ineligible expenditures or non-compliance with the Financing Agreement terms, potentially disrupting project implementation. Lack of monitoring expenditures with the performance targets and defined outcomes hinders the efficient utilization of resources in service delivery units.</p> <p>The internal audit function is crucial for maintaining internal control by enabling the timely identification of ineligible expenditures, preparing bank reconciliations, monitoring, and assessing effectiveness of internal control system, and recommending mitigation measures for strengthening the overall internal control system. However, no internal audit function is currently in place for the existing projects</p>		
<p>Mitigations: The project implementing agency must establish robust internal control systems aligned with the Committee of Sponsoring Organizations (COSO) framework and the guidelines outlined in the Project Implementation Manual (PIM). Additionally, comprehensive training should be provided to project finance staff on IFAD's accounting and reporting requirements.</p> <p>Furthermore, the project must establish an internal audit function, with independent internal auditors conducting audit periodically or semi-</p>		

annually, evaluating the project management unit's internal controls and providing internal audit reports to IFAD upon request. Regular internal audits are essential to ensure the effectiveness of the project's financial management system.		
<b>Accounting and financial reporting</b>	Substantial	Substantial
<p>Risk(s): Significant weaknesses in the timely preparation of unaudited annual financial statements undermine the benefits of effective external scrutiny.</p> <p>There is a risk of not maintaining a well-structured framework for tracking counterpart contributions, including RGoB co-financing, which may lead to challenges in generating counterpart financing reports or providing detailed data breakdowns.</p> <p>Weaknesses and delays in the preparation of consolidated annual financial statements impinge on their effective use of financial information.</p> <p>The project finance department's failure to prepare and submit quarterly interim financial reports and annual financial reports in accordance with the standards outlined in the IFAD Financial Management and Financial Control Handbook in a timely manner.</p>		
<p>Mitigations: Develop detailed financial management and reporting procedures as part of the PIM and provide intensive training to PMU and project finance personnel on their implementation.</p> <p>A fully customized and well-maintained accounting software or financial management information system (FMIS) with accounting and reporting features should be utilized to ensure effective financial operations and the generation of required financial reports. Additionally, training should be provided to project finance personnel on the use of the accounting software and report generation.</p> <p>Ensure the timely submission of interim financial reports (IFRs) and annual unaudited financial statements for the project.</p>		
<b>External audit</b>	Substantial	Substantial
Risk(s): Delays in preparing consolidated annual financial statements result in delayed audits, thereby reducing the effectiveness of oversight.		

Delay in timely submission of audited financial statements weakens accountability.		
<p>Mitigations: The PMU will coordinate with the Royal Audit Authority (Supreme Audit Institution-SAI) to ensure submission of the audit report and management letter in accordance with the IFAD Handbook (May 2023), within the period specified by IFAD.</p> <p>Conduct the project audit in accordance with the relevant auditing standards, specifically adhering to the International Standards of Supreme Audit Institutions (ISSAIs) for the timely submission of the audit report and management letter.</p> <p>Royal Audit Authority (Supreme Audit Institution-SAI) should develop an awareness and capacity development program for their staff so that they are well prepared for the auditing requirements when the change happens</p>		
<b>Environment, Social and Climate Impact</b>	Moderate	Moderate
<b>Biodiversity conservation</b>	Low	Low
<p>Risk(s): The risks related to biodiversity conservation are low. Bhutan maintains over 70 per cent forest cover, with more than 50 per cent designated as protected areas and biological corridors. Committed to carbon neutrality, the country mandates at least 60 per cent forest cover in perpetuity. The project activities will have minimal impact on biodiversity and critical habitats. Bhutan's strong environmental and conservation policies effectively regulate land conversion and infrastructure development.</p>		
<p>Mitigations: While promoting climate-smart agriculture (CSA), the project will adhere to national regulations by avoiding activities in protected areas and buffer zones. Resource procurement, including wood, gravel, and sand, will adhere to Bhutan's stringent environmental regulations and its 16 biodiversity-related legislative acts. All project activities will align with national laws and management plans, ensuring minimal environmental impact and compliance with conservation standards. Additionally, the project will increase bee pasture through reseedling with native flora.</p>		



<b>Resource efficiency and pollution prevention</b>	Low	Low
Risk(s): The risks related to resource efficiency and pollution are low as IMPACT will adhere to Bhutan's strong environmental and pollution prevention policies.		
Mitigations: Through the promotion of best practices in bio-fertilizer and bio-pesticide application, the project ensures safe and efficient use. Integrated pest management (IPM) and organic farming approaches will be encouraged to minimize environmental impact. Additionally, capacity-building initiatives will train farmers on responsible input use, while monitoring mechanisms will track compliance with Bhutan's environmental standards. These measures align with the country's strong conservation policies, ensuring sustainable agricultural growth with minimal ecological disruption.		
<b>Cultural heritage</b>	Low	Low
Risk(s): Eastern Bhutan is rich in cultural heritage, with sacred sites, monasteries, and landscapes of religious significance. While project activities do not directly impact these sites, indirect effects include potential disturbances to sacred sites or intangible cultural practices.		
Mitigations: To mitigate these risks, strict land-use protocols will prevent activities near culturally significant areas.		
<b>Indigenous Peoples</b>	Low	Low
Risk(s): The government of Bhutan promotes a national identity based on the concept of Driglam Namzha (Bhutanese cultural code of conduct) and the philosophy of Gross National Happiness, which emphasizes cultural preservation, environmental sustainability, and socio-economic development. All Bhutanese citizens are considered part of a homogenous national identity. The country is home to various ethnic groups, including the Ngalop, Sharchop and Lhotshampa. The eastern Dzongkhags are primarily home to the Sharchop people.		
Mitigations: An Inclusive approach towards stakeholder engagement will be undertaken to ensure all relevant stakeholders are consistently included and aware of projects' benefits, implications, and risks. Relevant provisions will be considered to ensure the consultation process is robust and inclusive, with measures providing		

access to remote areas, distinct language and other barriers that may impede access to information and full participation in decision making.		
<b>Community health and safety</b>	Moderate	Moderate
<p>Risk(s): The project involves multiple activities—including dairy value chain development, post-harvest infrastructure, and youth-led agribusiness operations—that may pose health and safety risks to both workers and community members. Investments in milk collection and processing units, mushroom drying facilities, and vegetable aggregation centres might introduce occupational hazards, including risks of accidents, injuries from machinery, exposure to dust, organic waste, and noise pollution during construction and operation. The IMPACT project's livestock activities may pose limited health risks, particularly for individuals in direct contact with animals. Potential zoonotic disease transmission could occur through handling livestock or animal products, especially in areas with limited veterinary services.</p>		
<p>Mitigations: The project's focus on improving animal health services through Community para-vets will help mitigate these risks by strengthening disease surveillance and prevention. Additionally, the project will implement safety protocols to minimize minor occupational health and safety hazards for workers and community members. The project will have a strong focus on promoting food safety and hygiene standards in supported agri-businesses.</p>		
<b>Labour and working conditions</b>	Moderate	Moderate
<p>Risk(s): The project presents minor occupational health and safety (OHS) risks, particularly in construction, rehabilitation, mechanized and manual labour, and potential exposure to hazardous substances or pathogens.</p>		
<p>Mitigations: Employment terms and conditions are governed by Bhutan's Labour and Employment Act of 2007, which aligns with Standard 5. The Act mandates employers to provide written employment terms, specifying job duration, tasks, termination notice, wages, working hours, probation period, and leave entitlements (Chapter V). It also outlines provisions for compensation, benefits, overtime, minimum wage, labour dispute resolution, workplace grievance mechanisms, and worker associations.</p>		

The Department of Labour under the Ministry of Industry, Commerce and Employment (MoICE) the Act through the Regulation on Working Conditions 2012. IMPACT will enforce safety protocols, providing training on safe equipment use, and ensuring the use of personal protective equipment (PPE).		
<b>Physical and economic resettlement</b>	Low	Low
Risk(s): The project is not expected to result in physical or economic displacement, forced evictions, or significant changes to land tenure arrangements. However, minor risks could arise from localized land-use changes associated with agricultural infrastructure development. These changes may indirectly affect access to resources for some communities, although the impact is anticipated to be minimal.		
Mitigations: The project will adhere to the ESCMP and ensure its proper monitoring throughout the implementation phase.		
<b>Greenhouse gas emissions</b>	Low	Low
Risk(s): Some investments in the dairy value chain, infrastructure, irrigation activities might be sources of Greenhouse Gas (GHG) emissions.		
Mitigations: As Bhutan is a unique carbon sink with the forests absorbing large quantities of CO <sub>2</sub> from the atmosphere, the GHG emissions of the project will not be significant. In addition, the project is investing in activities that sequester carbon (like reseeded, organic and climate sensitive cropping approaches and inter-cropping).		
<b>Vulnerability of target populations and ecosystems to climate variability and hazards</b>	Moderate	Moderate
Risk(s): Smallholder farmers in Bhutan, particularly in eastern regions and highland areas like Bumthang are highly vulnerable to climate variability and change. Increasing temperatures and erratic rainfall patterns are affecting crop yields and water availability. Factors contributing to this vulnerability include climate-induced hazards such as flash floods, landslides, and droughts.		
Mitigations: IMPACT Project will promote climate-smart agricultural practices, including investment climate-resilient commodities like buckwheat, maize, mushrooms, and		

honey. The project will invest in water-efficient irrigation systems to reduce dependence on erratic rainfall and support the fallow land restoration and reseedling with dual-purpose plants that serve as both bee forage and commercial crops, enhancing pollination services and ecosystem health.		
<b>Stakeholders</b>		
<b>Stakeholder engagement/coordination</b>	Moderate	Moderate
Risk(s): Potential gaps in capacities and responsibilities among implementing partners. Limited experience with multi-stakeholder platforms for value chain coordination. Insufficient engagement of private sector actors in value chain development.		
Mitigations: Regular coordination meetings at national and dzongkhag levels. Development of multi-stakeholder platforms with structured engagement mechanisms. Strategic partnerships with private sector through formal agreements. Technical assistance for capacity building in stakeholder engagement and coordination management.		
<b>Stakeholder grievances</b>	Moderate	Moderate
Risk(s): Minor complaints related to target groups/members selection processes. Occasional misunderstandings about project procedures or timelines. Limited awareness of grievance redress mechanisms among remote communities.		
Mitigations: Establishment of comprehensive grievance redress mechanism including project-specific procedures and integration with government's eKaaSel system. Clear communication of grievance procedures during inception workshops and community meetings. Transparent target groups/members selection criteria with community validation. Regular feedback collection and responsive action protocols.		