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Report No: PAD3458

INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT APPRAISAL DOCUMENT
ON A
PROPOSED CREDIT

IN THE AMOUNT OF SDR 56.4 MILLION
(US$80 MILLION EQUIVALENT)

TO

NEPAL

FOR A

# RURAL ENTERPRISE AND ECONOMIC DEVELOPMENT PROJECT

OCTOBER 6, 2020

Agriculture And Food Global Practice
South Asia Region

CURRENCY EQUIVALENTS

(Exchange Rate Effective August 31, 2020)

| | |
|---|---|
| Currency Unit = | NPR |
| NPR 117.78 = | $1 |
| $ 1.41891= | SDR 1 |

FISCAL YEAR
July 16 – July 15

| | |
|---|---|
| Regional Vice President: | Hartwig Schafer |
| Country Director: | Faris H. Hadad-Zervos |
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| Task Team Leader(s): | Mio Takada/Anupa Aryal Pant |

## ABBREVIATIONS AND ACRONYMS

| | |
|---|---|
| ADS | Agriculture Development Strategy |
| ADC | Agriculture Development Committee |
| AFSP | Agriculture and Food Security Project |
| APA | Alternate Procurement Arrangements |
| CDD | Community Driven Development |
| CERC | Contingent Emergency Response Component |
| CGAS | Computerized Government Accounting System |
| CNA | Capacity Needs Assessment |
| CPF | Country Partnership Framework |
| CPSD | Country Private Sector Diagnostic |
| CSA | Climate Smart Agriculture |
| DFIL | Disbursement and Financial Information Letter |
| DTCO | District Treasury Controller Office |
| ECO | Economic Corridor Office |
| ECTCC | Economic Corridor Technical and Coordination Committee |
| EFA | Economic and Financial Analysis |
| ENPV | Economic Net Present Value |
| ERR | Economic Rate of Return |
| ESRS | Environmental and Social Review Summary |
| ESMF | Environment and Social Management Framework |
| ESSs | Environmental and Social Standards |
| EX-ACT | Ex-Ante Carbon Balance Assessment Tool |
| FAO | Food and Agriculture Organization |
| FCGO | Financial Comptroller General Office |
| FMIS | Financial Management Information System |
| GHG | Greenhouse Gas |
| GRM | Grievance Redressal Mechanism |
| GRS | Grievance Redressal Service |
| IDA | International Development Association |
| ICT | Information and Communication Technology |
| IFC | International Finance Corporation |
| IPF | Investment Project Financing |
| MEDPA | Microenterprise Development for Poverty Alleviation |
| MIS | Management Information System |
| MoALD | Ministry of Agriculture and Livestock Development |
| MoLMAC | Ministry of Land Management, Agriculture and Cooperatives |
| MPA | Multiphase Programmatic Approach |
| MSMEs | Micro, Small, and Medium Enterprises |
| NGO | Nongovernmental Organization |
| NPC | National Planning Commission |
| OPD | Office of the Project Director |
| PD | Project Director |
| PDO | Project Development Objective |
| PIM | Project Implementation Manual |
| POs | Producer Organizations |

| | |
|---|---|
| PPs | Productive Partnerships |
| PPSD | Project Procurement Strategy for Development |
| PSC | Project Steering Committee |
| PSW | Private-Sector Window |
| REED | Rural Enterprise and Economic Development |
| RF | Results Framework |
| SME | Small and Medium Enterprises |
| SPS | Sanitary and Phytosanitary Standards |
| STEP | Systematic Tracking of Exchanges in Procurement |
| TA | Technical Assistance |

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DATASHEET

## BASIC INFORMATION

| Country(ies) | Project Name | |
|---|---|---|
| Nepal | Rural Enterprise and Economic Development Project | |
| **Project ID** | **Financing Instrument** | **Environmental and Social Risk Classification** |
| P170215 | Investment Project Financing | Substantial |

### Financing & Implementation Modalities

| | |
|---|---|
| [ ] Multiphase Programmatic Approach (MPA) | [✓] Contingent Emergency Response Component (CERC) |
| [ ] Series of Projects (SOP) | [ ] Fragile State(s) |
| [ ] Performance-Based Conditions (PBCs) | [ ] Small State(s) |
| [ ] Financial Intermediaries (FI) | [ ] Fragile within a non-fragile Country |
| [ ] Project-Based Guarantee | [ ] Conflict |
| [ ] Deferred Drawdown | [ ] Responding to Natural or Man-made Disaster |
| [ ] Alternate Procurement Arrangements (APA) | [ ] Hands-on Enhanced Implementation Support (HEIS) |

| Expected Approval Date | Expected Closing Date |
|---|---|
| 28-Oct-2020 | 15-Jul-2025 |

Bank/IFC Collaboration

No

### Proposed Development Objective(s)

To strengthen rural market linkages and entrepreneurship ecosystem and to create job opportunities as the recovery actions from COVID-19.

### Components

| Component Name | Cost (US$, millions) |
|---|---|

| | |
|---|---|
| Component 1: Strengthening Market Linkages through Productive Partnership | 80.00 |
| Component 2: Strengthening the entrepreneurship ecosystem in the federal structure | 8.00 |
| Component 3: Restoring and strengthening COVID-19 disrupted food supply chain and local economy | 22.00 |
| Component 5: Contingency Emergency Response Component | 0.00 |
| Component 4: Project Management | 10.00 |

### Organizations

| | |
|---|---|
| Borrower: | Nepal |
| Implementing Agency: | Ministry of Agriculture and Livestock Development |

## PROJECT FINANCING DATA (US$, Millions)

### SUMMARY

| | |
|---|---|
| **Total Project Cost** | 120.00 |
| **Total Financing** | 120.00 |
| **of which IBRD/IDA** | 80.00 |
| **Financing Gap** | 0.00 |

### DETAILS

**World Bank Group Financing**

| | |
|---|---|
| International Development Association (IDA) | 80.00 |
| IDA Credit | 80.00 |

**Non-World Bank Group Financing**

| | |
|---|---|
| Counterpart Funding | 40.00 |
| Local Beneficiaries | 40.00 |

### IDA Resources (in US$, Millions)

| | Credit Amount | Grant Amount | Guarantee Amount | Total Amount |
|---|---|---|---|---|

| | | | | |
|---|---|---|---|---|
| **Nepal** | 80.00 | 0.00 | 0.00 | 80.00 |
| National PBA | 80.00 | 0.00 | 0.00 | 80.00 |
| **Total** | **80.00** | **0.00** | **0.00** | **80.00** |

### Expected Disbursements (in US$, Millions)

| WB Fiscal Year | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 |
|---|---|---|---|---|---|---|---|
| Annual | 0.00 | 5.41 | 12.57 | 18.44 | 19.05 | 18.57 | 5.96 |
| Cumulative | 0.00 | 5.41 | 17.98 | 36.42 | 55.47 | 74.04 | 80.00 |

## INSTITUTIONAL DATA

### Practice Area (Lead)

Agriculture and Food

### Contributing Practice Areas

Finance, Competitiveness and Innovation

### Climate Change and Disaster Screening

This operation has been screened for short and long-term climate change and disaster risks

## SYSTEMATIC OPERATIONS RISK-RATING TOOL (SORT)

| Risk Category | Rating |
|---|---|
| 1. Political and Governance | Substantial |
| 2. Macroeconomic | Substantial |
| 3. Sector Strategies and Policies | Moderate |
| 4. Technical Design of Project or Program | Substantial |
| 5. Institutional Capacity for Implementation and Sustainability | Substantial |
| 6. Fiduciary | Substantial |
| 7. Environment and Social | Substantial |
| 8. Stakeholders | Substantial |
| 9. Other | |

| | |
|---|---|
| 10. Overall | Substantial |

## COMPLIANCE

### Policy

Does the project depart from the CPF in content or in other significant respects?

[ ] Yes [✓] No

Does the project require any waivers of Bank policies?

[ ] Yes [✓] No

### Environmental and Social Standards Relevance Given its Context at the Time of Appraisal

| E & S Standards | Relevance |
|---|---|
| Assessment and Management of Environmental and Social Risks and Impacts | Relevant |
| Stakeholder Engagement and Information Disclosure | Relevant |
| Labor and Working Conditions | Relevant |
| Resource Efficiency and Pollution Prevention and Management | Relevant |
| Community Health and Safety | Relevant |
| Land Acquisition, Restrictions on Land Use and Involuntary Resettlement | Relevant |
| Biodiversity Conservation and Sustainable Management of Living Natural Resources | Relevant |
| Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities | Relevant |
| Cultural Heritage | Relevant |
| Financial Intermediaries | Not Currently Relevant |

**NOTE**: For further information regarding the World Bank's due diligence assessment of the Project's potential environmental and social risks and impacts, please refer to the Project's Appraisal Environmental and Social Review Summary (ESRS).

## Legal Covenants

Sections and Description
Project Steering Committee
Financing Agreement: Section I.A of Schedule 2

For the purposes of overall coordination and supervision of the Project the Recipient shall establish, no later than three (3) months from the Effective Date, and thereafter maintain, throughout the period of implementation of the Project, the Project Steering Committee which shall be chaired by the Permanent Secretary, MoALD, and shall include representatives of each participating Province, and with the composition, resources and terms of reference satisfactory to the Association.

Sections and Description
Economic Corridor Office and Economic Corridor Technical and Coordination Committee
Financing Agreement: Section I.A of Schedule 2

The Recipient shall, and shall cause the respective Provincial Governments to, establish for each Economic Corridor, no later thanthree (3) months from the Effective Date, and thereafter maintain, throughout the period of implementation of the Project: (a) Economic Corridor Office for the purposes of day-to-day implementation and management of Project activities within the respective Economic Corridor; and (b) Economic Corridor Technical and Coordination Committee for the purposes of overall coordination and supervision of the Project activities within the respective Economic Corridor; all with the composition, resources and terms of reference satisfactory to the Association.

Sections and Description
Technical Assistance Firm
Financing Agreement: Section I.A of Schedule 2

No later than six months from the Effective Date MoALD shall employ, and thereafter maintain, throughout the period of implementation of the Project a technical assistance company, with the terms of reference and capacity satisfactory to the Association, to assist the OPD with the implementation of the Project, including development of operational procedures for the Project, development of the communication campaign strategy and provision of Project related training.

## Conditions

| Type | Description |
|---|---|
| Effectiveness | The Recipient has established the Office of the Project Director pursuant to the provisions of paragraph 1 of Section I.A of Schedule 2 to Financing Agreement. |
| Type | Description |
| Effectiveness | The Recipient has adopted the Project Implementation Manual pursuant to the provisions of paragraph 5 of Section I.A of Schedule 2 to Financing Agreement. |

| Type | Description |
| --- | --- |
| Disbursement | The Recipient has adopted the Start-up Grants Manual satisfactory to the Association pursuant to the provisions of paragraph 1 of Section III.B of Schedule 2 to Financing Agreement |

| | Triggered? |
|---|---|
| Projects on International Waterways OP 7.50 | No |
| Projects in Disputed Areas OP 7.60 | No |

# I. Strategic Context

## A. Country Context

1. **Over the past decade, Nepal's economy has performed reasonably well, though vulnerabilities have increased with COVID-19.** Real gross domestic product (GDP) growth averaged 4.9 percent (at market prices) between 2010 and 2019. Although declining as a share in the economy, agriculture continues to play a large role, contributing more than 29 percent of GDP in fiscal 2019. The service sector has grown in importance, accounting for 46 percent of GDP in fiscal 2019. Industry and manufacturing have grown more slowly and their relative share in the economy has averaged 14 percent of GDP over the past decade. Similarly, exports continue to struggle, while imports are fueled by remittances, which remained stable between 2010 and 2019 with their share as a percentage of GDP averaging 24.5 percent, supported by an increased transfer of funds through formal channels in recent years. Inflation has been in single digits for most of the past decade, with the peg of the Nepalese rupee (NPR) to the Indian rupee (INR) providing a nominal anchor. Fiscal balances remained sustainable because of strong revenue growth and modest spending. However, the federal government is now sharing revenue and transferring grants to provincial and local governments as part of the recent reforms linked to federalism. The poverty headcount ratio (at the international poverty line of $1.90/day) was estimated at 8 percent in 2019, down from 15 percent in 2010. At a higher poverty line ($3.20/day), 39 percent of the population was estimated to be poor in 2019. With the COVID-19 pandemic, the risk of people falling into poverty has increased. About 31.2 percent of the population estimated to live on between $1.90 and $3.20 a day face significant risks of falling into extreme poverty in 2020, primarily because of reduced remittances, foregone earnings of potential migrants, job losses in the informal sector, and rising prices for essential commodities as a result of the pandemic.

2. **The COVID-19 pandemic is expected to derail the strong growth trajectory established over the past three years**. GDP growth averaged 7.3 percent (between 2017and 2019) and grew by 7 percent in fiscal year 2019 supported by an uptick in tourist arrivals, strong agricultural growth from good monsoons, and robust industrial growth due to increased electricity generation. On the demand side, the main growth drivers were private investment and private consumption, the latter supported by remittance inflows. In the first half of fiscal 2020 (mid-July to mid-January), agricultural growth slowed down with delayed monsoons and crop damage. In March 2020, stringent measures were imposed to contain the spread of COVID-19, including travel restrictions. This stopped tourist arrivals, leading to a significant reduction in hotel occupancy.[1] With lower oil prices, remittance inflows are declining, impacting services growth. Lockdowns and social distancing measures have disrupted domestic distribution channels causing shortages of fertilizer, livestock feed, labor, and transportation—all of which will further reduce agricultural growth in fiscal year 2020. The restrictions on trade (limited to only essential goods) has disrupted supply chains in the manufacturing sector. Shortages in imports of building materials and skilled labor have brought construction activity to a halt. Lower domestic demand has translated to lower consumption of electricity, gas, and water, further reinforcing the slump in overall economic activity, with an estimated GDP growth rate of 2.3 percent in fiscal year2020. However, a widespread and protracted COVID-19 outbreak—with the attendant lockdowns and supply disruptions—still has the potential to reduce GDP growth to as low as 0.5 percent in fiscal year2020. In fiscal year2021, growth is expected to remain subdued at 2.1 percent. However, a widespread outbreak that extends into the high agriculture

[1] As of April 2020, the Hotel Association of Nepal estimated the hotel occupancy rates among its 270 members at below 10 percent.

harvest and festival seasons could cause GDP to contract by as much as 2.8 percent in fiscal year2021.

3. **Inflation averaged 4.5 percent year-on-year in fiscal year 2019 but rose in the first half of fiscal year 2020, driven by higher food prices**. In fiscal year 2019, prices of nonfood items grew by 5.8 percent, driven mainly by housing and utilities, while food prices rose only 3.1 percent due to good agricultural production. Inflation averaged 6.4 percent (year-on-year) in the first half of fiscal year 2020, driven by higher food prices (particularly vegetables) and increased import duties on certain agricultural and industrial goods. In March 2020, inflation reached 6.7 percent (year-on-year), primarily led by food prices because of disruptions in distribution channels. This widened the inflation gap with India and contributed to a 2.1 percent (real effective) appreciation of the NPR over the first half of fiscal year2020. The NPR is pegged to the Indian Rupee at the rate of 1.6 NPR to one INR. As a result, inflation follows the price movements in India with a lag.

4. **The Nepal Communist Party-led government is backed by a majority in parliament, which took office on February 15, 2018.** This follows successful elections for all three tiers (local, state, and federal) of the new state architecture defined by the 2015 constitution, marking a protracted-but-successful conclusion of a political transition that began with the signing of the Comprehensive Peace Agreement in November 2006. State governments largely mirror the coalition at the center. At the sub-national level, funds, functions, and functionaries hitherto managed by the central, district, and village authorities are moving to the seven new provinces and 753 local governments for which new legislation, institutions, and administrative procedures are being formalized as constitutionally prescribed. Meanwhile, the central level authority is being streamlined with a focus on national policies and oversight. This profound level of state restructuring is expected to result in improved outreach and service delivery in the medium term, but it is likely to take time before becoming fully operational.

## B. Sectoral and Institutional Context

5. **Growth in agriculture has been slow and volatile, driven by higher relative prices for agricultural commodities and favorable monsoons rather than any productivity growth.**[2] A World Bank Country Private Sector Diagnostic (CPSD) highlights that although there are opportunities for growth by developing commercialized and high-value agriculture[3] (tea, spices, and vegetables), the sector is not adequately tapping into opportunities, despite a sizable domestic market for most food segments. The CPSD highlights several activities that could support agribusiness sector growth including: (i) strengthening the production base as a foundation for agribusiness competitiveness,; (ii) supporting the scaling up of agribusinesses by facilitating access to finance, strengthening small and medium enterprises (SMEs), enhancing food safety, and implementing sanitary and phytosanitary standards (SPS); and (iii) improving market relationships by supporting value chain linkages and investments in logistics and transport.

6. **The COVID-19 pandemic has affected agriculture production through foregone exports and the disruption of imports of agricultural inputs, especially to and from China and India, with significant impacts on the rural poor and vulnerable groups.** Given the large share of the population living in rural areas, losses in income from agricultural activities would impact national poverty levels. Moreover, Nepal

[2] World Bank. 2016. “Source of Agriculture growth”
[3] World Bank (2018) “Country Private Sector Diagnostics”

is expected to receive tens of thousands of returnees from earlier outmigration trends, resulting in increased unemployment in rural areas.

7. **The Government of Nepal recognizes the expansion of SMEs as one of the development priorities for job creation and economic development (15th Development Plan 2018/19 to 2022/23).** Several constraints in Nepal, however, are currently hindering the growth of agri-SMEs, including weak downstream linkages,[4] a regulatory framework that undermines the competitiveness of agri-SMEs, limited access to financial services, and poor support services for agri-SMEs. Successful entrepreneurs and agribusinesses thrive in environments with multiple actors working together to form an "entrepreneurship ecosystem" consisting of markets, policies, finance, support services, scalable production potential, and infrastructure attributes of a country with a level of development that will influence the growth of entrepreneurship.

8. **Gender and climate change are major issues in the agriculture sector.** The gender gap in access to markets, information, finance, technology, and other productive resources undermines female farmers and entrepreneurs from reaching their potential (see Annex 3 for more details). Climate change is another important challenge, with key hazards being extreme rainfall and resulting floods, landslides, and erosion, as well as more frequent droughts.[5]

9. **While the transition to the federal structure is expected to result in improved outreach and service delivery in the medium term, it is likely to take time before becoming fully operational**. There is a need to further strengthen the capacity of the newly established institutions especially at the provincial and local government levels to design and implement policies and regulations in the agriculture sector.

10. **Building on the country's experience and long-term vision, Nepal has an opportunity to invest in rural-based value chains[6] to pursue middle-income country status.** This will entail active linkage facilitation between private sector actors along the value chain, as well as the development of an enabling environment for long-term entrepreneurship growth under federalism, while addressing the recovery needs from COVID-19 in the agriculture sector. The sustainable development of agribusiness and other rural nonfarm businesses can make a significant contribution to rural economic development in Nepal, while maintaining a strong inclusion agenda and supporting communities' climate resilience.

## C. Relevance to Higher-Level Objectives

11. **The project is consistent with the Government of Nepal's Sustainable Development Goals strategy, in which it aspires to emerge as an inclusive, equitable, and prosperous middle-income country by 2030.** Nepal intends to graduate from the status of a least developed country to that of a developing country by 2022 and onward to the standard of a middle-income country by 2030.[17] Similarly, the project is consistent with key government strategies, including the Government of Nepal's 15th Development Plan (2018/19 to 2022/23).

[4] The World Bank's Enterprise Survey (2012) indicated that informal enterprises are predominantly micro firms, while their downstream linkages to other firms (formal or informal) are limited, hindering the sector's ability to play a role in the supply chain for the formal sector.
[5] See Annex 5
[6] Rural-based value chains are value chains where primary production is based in rural areas.
[7] Policies and Programs of the Government of Nepal for Fiscal Year 2072–73 (2015–16), presented by Rt. Hon. President Dr. Ram Baran Yadav at the Meeting of the Constituent Assembly/Legislature-Parliament.

12. **The project supports three pillars of the Government of Nepal's Agriculture Development Strategy 2015–35 (ADS), which provides a comprehensive roadmap for creating "a sustainable, competitive, and inclusive agricultural sector that drives economic growth" and which recognizes the private sector as the principal actor in the agriculture sector's transformation**. At present, however, private sector growth remains stunted. Among the four pillars of the ADS, the project will particularly contribute to the achievement of the pillars around "competitiveness," "commercialization," and "technology adoption," especially climate-smart agriculture for resilience and productivity.

13. **The World Bank Group Country Partnership Framework (CPF)[8] continues to be relevant, albeit with three major shifts** aimed at striking a balance between pivoting to address the short- and medium-term needs from the COVID-19 crisis and the focus on the long-term economic development path. The World Bank, International Finance Corporation (IFC), and Multilateral Investment Guarantee Agency (MIGA) will continue to collaborate closely in implementing these major shifts. First, ***supporting immediate response to the crisis***, via a **$29 million** IDA credit for the Nepal COVID-19 Emergency Response and Health System Preparedness Project approved in April 2020, to strengthen national systems for public health preparedness in the country, and via the **$10.85 million** Global Partnership for Education (GPE) COVID-19 Accelerated Funds to respond to COVID-19's impact on the school sector, approved in August 2020. Second, ***repurposing and restructuring of the ongoing World Bank portfolio*** through reallocations, cancellations, and creating contingency emergency response components (CERC) in six projects, and thereby making $310 million available for COVID-19 relief and recovery efforts. Also, efforts are underway to expedite the release of $143 million in advances or accelerating achievement of results across Program for Results operations. These represent approximately 18 percent of total committed amounts. Given the impact on the tourism industry, IFC has approved a standstill agreement for a hospitality client. Further, IFC conducted the Business Pulse Survey of 500 micro, small, and medium enterprises (MSMEs) to assess the impact and challenges faced by MSMEs and support mechanisms that they would require for recovery and resilience post COVID-19. Moreover, IFC is in discussions with a commercial bank to possibly support its SME clients through a working capital solution loan of about $30 million under the IFC COVID Response Facility approved by the Board. Third, working closely with the government to ensure that the allocation of IDA-19 resources is in conformity with both COVID-19-related priorities and the CPF Focus Areas, as detailed below.

14. ***Focus Area 1: Public Institutions.*** The FY21 pipeline includes a Finance for Growth Development Policy Credit (DPC; $200 million) series which will respond to the challenges brought about by the COVID-19 pandemic through addressing financial stability, disaster risk finance, capital and insurance market reforms, and constraints to SME financing. This DPC reiterates the Bank Group's concentration on private sector-focused market solutions and similar approach would be expected in upcoming operations, including the Programmatic Fiscal Policy for Growth Recovery and Resilience DPC Series. The new Programmatic Fiscal Policy for Growth Recovery and Resilience DPC Series ($150 million) will build on the previous series, with an FY21 focus on aspects of the COVID-19 response related to fiscal resilience and economic recovery aimed at sustainable and inclusive growth, as well as social protection to support the poor and vulnerable. These DPC initiatives draw on IFC advice on key enabling environment reforms that can foster the increased private sector initiatives and investments required for a resilient recovery. Policy reform actions would be centered around the government's 3Rs (Recovery, Restructuring, and Resilience)

[8] Report No. 83148-NP; July 10, 2018 discussed at the Board on August 7, 2018.

Plan. In parallel, IFC is also working with relevant government agencies to implement a tourism advisory project designed to adapt to the changing needs of the industry in the context of COVID-19, and to prepare the post-COVID-19 recovery. The FY22 pipeline may include the next series of the Finance for Growth DPC and/or Fiscal Policy for Growth, Recovery, and Resilience DPC.

15. ***Focus Area 2: Private Sector-Led Jobs and Growth.*** In FY21, with a view toward supporting the response to the COVID-19 pandemic, the following World Bank-financed projects are planned: Rural Economic Development Project ($80 million) and Urban Governance and Development Project ($150 million). The Sustainable Tourism Project ($70 million) will be redefined to focus on reinvigorating the sector (the most impacted sector in Nepal) with a focus on grant- and job-creation schemes. In FY22, the Provincial and Local Roads Project ($200 million) and Upper Arun Hydroelectric Project are potential areas of support. Across existing investments, including the Youth Employment Transformation Initiative (YETI), Emergency Housing Reconstruction Project (EHRP), Strategic Road Connectivity and Trade Improvement Project (SRCTIP), and planned Urban Governance and Development Project (NUGIP), World Bank investments are expected to create more than 19 million person days of employment. This includes COVID-19 responses to increase creation of temporary employment opportunities for the most vulnerable, including those most affected by COVID-19, particularly under YETI and NUGIP. YETI supports the government's key employment program, the Prime Minister's Employment Program. IFC utilized IDA Private Sector Window (PSW) for the Upper Trishuli 1 hydropower generation project in FY20, committing $460 million to support Nepal's energy sector, which is instrumental for Nepal's development both in terms of the improved supply of electricity in the domestic market and job creation during the construction phase of the project. IFC has continued to strengthen the financial sector through three projects, committing more than $60 million last year. In FY21, IFC plans to support two microfinance institutions with financing in Nepali currency through a blend of IDA PSW Local Currency Facility and Nepali currency denominated offshore bonds. Additional private sector-led projects can be supported through collaboration with IFC and MIGA.

16. ***Focus Area 3: Inclusion and Resilience***. In addition to the DPC series supporting the COVID-19 response mentioned under Focus Area 1, the $80 million Human Capital Service Delivery at the Local Level Project (P167531) aims to promote greater access to a set of interrelated and mutually complementary human capital services—particularly for more than 100,000 poor and vulnerable households in selected disadvantaged areas—and the Nurturing Excellence in Higher Education Project ($60 million) aims to modernize the higher education sector through digitization, a key aspect of the response to the issues caused by the COVID-19 pandemic. The medium-term response will be framed through the envisaged continued support in the two sector-wide programs in the education and health sector.

17. **The financing gap is expected to be bridged through the Crisis Response Window (CRW), Regional IDA, and Scale Up Window (SUW).** Estimated resources available under IDA-19 concessional financing include $956 million,[9] with a tentative allocation of $423 million in FY21 and $266 million each for FY22 and FY23, respectively. Total demand for FY21 is about $720 million. To meet this financing gap, 30 percent frontloading from the FY22 allocation and $85 million cancellation from three ongoing projects is envisaged. To further close the financing gap of $142 million, Nepal would seek additional resources from CRW and Regional IDA. To close the financing gap in FY22, Nepal would seek additional resources

[9] US Dollar amount may change due to exchange rate fluctuation against SDR. IDA19 allocation is SDR 661.8 million.

from CRW and SUW for the Provincial and Local Roads Project, as well as Regional IDA and SUW for the Upper Arun Hydroelectric Project in addition to 30 percent frontloading from the FY23 allocation and collaborating with IFC.

18. **The proposed operation uses IDA19 resources in conformity with Nepal's COVID-19-related priorities** (reflected in the World Bank Group's COVID-19 Policy Options Note for Nepal Relief, Recovery, and Resilience [April 2020] in the Agriculture Sector), and is consistent with the Bank Group approach paper "*Saving Lives, Scaling Up Impact, and Getting Back on Track,*" contributing to three of the four pillars of the approach paper including, principally: (a) strengthening policies, institutions, and investments for rebuilding better; (b) protecting the poor and vulnerable; and (c) ensuring sustainable business growth and job creation.

19. **The project is consistent with the joint IFC-World Bank CPSD** with its focus on improving market linkages, scaling up agribusinesses, strengthening SMEs, and addressing food safety and SPS aspects, as well as in supporting investments in logistics and transport. The project will attempt to link to future IFC investments and advisory services activities.

## II. Project Description

### A. Project Development Objective

20. **The project development objective (PDO) is to strengthen rural market linkages and the entrepreneurship ecosystem; and create job opportunities as the recovery actions from COVID-19**.

21. The entrepreneurship ecosystem requires a policy framework, support services, platforms and infrastructure that facilitate the creation and growth of entrepreneurs. For this project that is focused on rural economic corridors, rural entrepreneurs are defined as: (i) smallholder farmers and rural producers organized in groups, organizations, cooperatives, or other forms of association, such as cottage industries, referred to as producer organizations (POs); (ii) agribusiness SMEs; and (iii) agritech start-ups.

22. **Key Performance Indicators**. The following PDO-level indicators will be used to monitor the key outcomes of the project:

- Number of beneficiaries of interventions (POs including the share of women);
- Number of SMEs and agritech startups reached (with the share of women);
- Percentage increase in the average gross value of sales of producer organizations under productive partnerships; and
- Jobs created by COVID-19 interventions (short-term employment for construction and returnee migrants with the share of women).

### B. Project Components

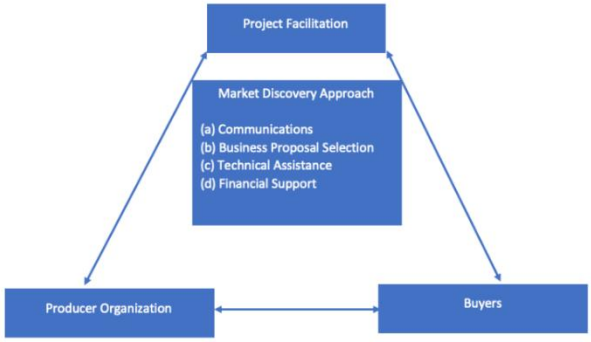
23. **The project has five components**. *Component 1* will support market linkages. *Component 2* will support activities that enhance the entrepreneurship ecosystem. *Component 3* will provide support to

restore COVID-19-disrupted food and agriculture supply chains. *Component 4* will support project management. *Component 5* is a zero-cost CERC that will allow the rapid reallocation of credit proceeds from other components to provide emergency recovery and reconstruction support. Implementation arrangements are detailed in Annex 1.

***Component 1: Strengthening Market Linkages through Productive Partnerships ($40 million)***

24. **The project will build productive partnerships to promote rural-based value chains**, including: (i) conducting a comprehensive communications campaign, including a targeted communication campaign for women; (ii) brokering support for prospective buyers and POs to prepare simple joint profiles; (iii) provision of technical assistance to POs with the development of mutually-agreed business plans; (iv) provision of Start-up Grants for POs to fulfil the terms of their business plans; and (v) supporting formalization of POs as legal entities (see Figure 1)[10].

**Figure 1: Productive Partnership Approach**




***Component 2: Strengthening the Entrepreneurship Ecosystem in the Federal Structure ($8 million)***

***Subcomponent 2.a: Capacity Building of Provincial and Local Government and Related Agencies ($5 million)***

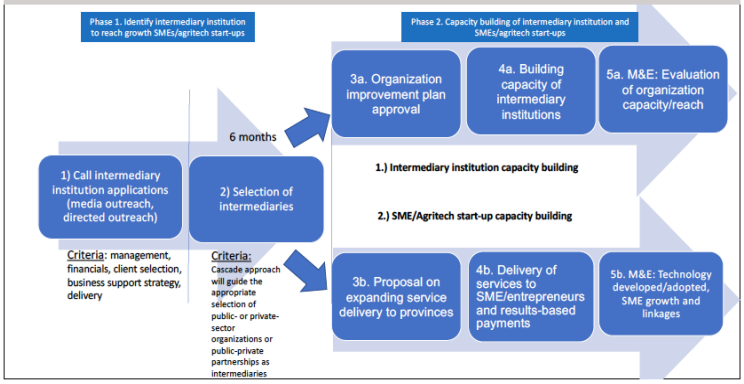
25. The project will build the capacity of provincial and local governments and related agencies in the agriculture sector in: (i) agriculture services development; (ii) climate-induced risks and challenges and strengthen climate resiliency (iii) strategies to enhance efficiency and resources use along the agri-business value chains; (iv) food safety and certification of organic food; (v) reducing post-harvest losses; (vi) developing mechanism and framework to deepen extension of advisory services; (vii) development of digital platform for market information at local level; (viii) fiduciary and audit capacity; and (ix) implementation of local level agriculture development plans.

***Subcomponent 2.b: Capacity Building of Intermediary Institutions and SMEs ($3 million)***

[10] A preparatory assessment and analysis indicated that 90 percent of buyers currently source from individual producers, whereas only 23 percent of buyers source from the POs. Buyers' preferences for individual producers is guided by low transaction costs and consistency in supply, whereas insufficient long-term commitment and poor group cohesion among existing POs have prevented buyers from engaging with POs in a sustainable manner. The analysis highlighted that although existing POs are interested in supplying to buyers, they need capacity building and financial assistance to meet buyers' quality and quantity requirements.

26. Building the capabilities and outreach of: (i) intermediary institutions[11] to provide services to small and medium enterprises and agritech start-ups; and (ii) small and medium enterprises and agritech start-ups to improve their businesses to enable them to participate in productive partnerships (Figure 2) The intermediary institutions will then reach out to provide improved training and services to the wider ecosystem of businesses and leverage existing APTC facilities to deliver business coaching.

**Figure 2. Proposed Implementation Process-Hybrid Model**




***Component 3. Restoring and Strengthening COVID-19-Disrupted Food Supply Chain and Local Economy ($22 million)***

27. The project will finance investments in: (i) municipal agriculture centers for safe food and seed storage and supply, including distribution of seeds and other agricultural inputs to local population, agri-businesses, producers and farmers; and (ii) upgrading and building demand-driven market and value chain related infrastructure and demand-driven semi-public infrastructure at local level, including through financing of labor-intensive works, which could include regional market centers, collection centers, storage centers, cold-chain centers, packaging and processing centers, value addition facilities.

***Component 4: Project Management ($10 million)***

28. The project will provide support to MoALD as well as the respective provincial and local governments for Project implementation and management, including support for procurement, financial management, environmental and social risk management, monitoring and evaluation and reporting; provision of Training and Incremental Operating Costs.

***Component 5. Contingent Emergency Response Component ($0)***

29. The project will provide immediate response to an Eligible Crisis or Health Emergency.

## C. Project Areas

30. **The project focuses on economic corridors that offer opportunities for successful linkage activities of the rural entrepreneurs to be supported by the project**. The criteria for the selection of economic corridors included the economic potential of the surrounding areas—including SME intensity,

[11] These intermediary institutions can be public, private, and nonprofit organizations, such as technology centers, innovation centers, incubators, accelerators, business support organizations, tech hubs, technology commercialization offices, and industry associations, will and will have appropriate selection of private or public-private partnerships with institutions like Agribusiness Promotion and Training Centers (APTCs).

the presence of scalable value chains identified by the CPSD and other studies, the intensity of financial access, and the density of the youth population, among others. Five economic corridors have been selected, covering six provinces (Provinces 1, 2, Bagmati, Gandaki, Province 5, and Sudurpashchim).

a. Mid-hill highway (Provinces 1, Bagmati and Gandaki)
b. East-West Highway[12] (Province 2)
c. Postal Highway (Province 2)
d. Bhalubang-Rolpa Highway (Province 5)
e. Mahakali Highway[13] (Sudurpashchim)

31. **The project will take a phased approach**. In the first phase, the project will be implemented in two or three selected economic corridors based on the readiness of the ECOs and in accordance with the evolving needs the country's COVID-19 pandemic fight. The second phase will begin at project mid-term. In addition, the project areas could be expanded to other feasible economic corridors and Karnali province, based on the lessons learned during early phase, funding availability and the results achieved. Such changes will be made through the revisions of the PIM during implementation.

## D. Project Beneficiaries

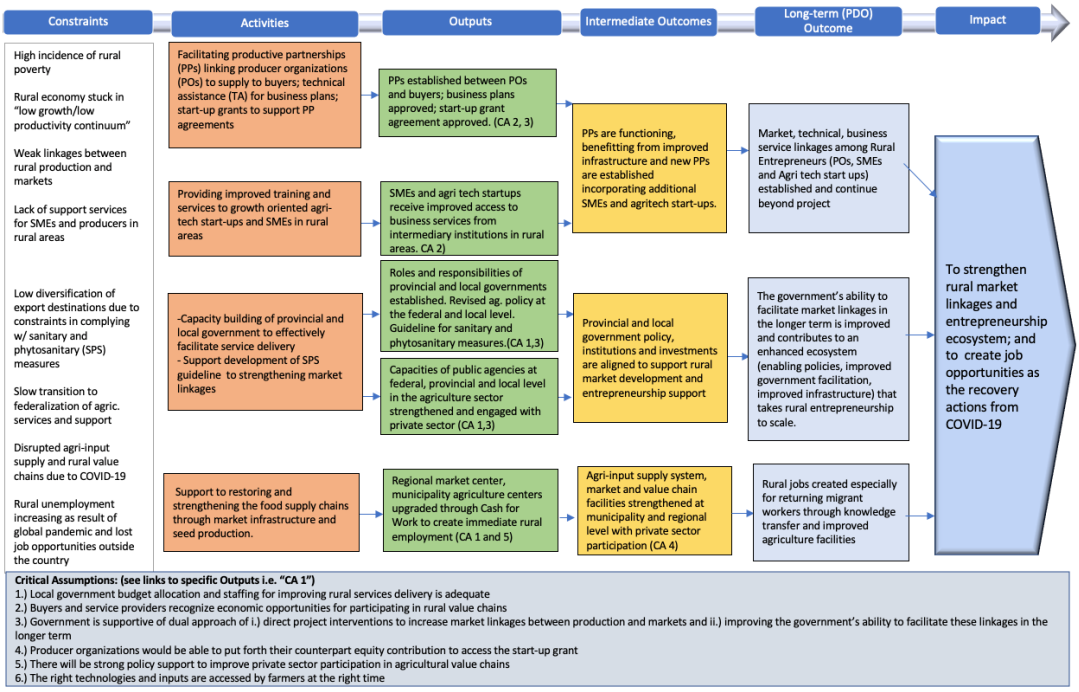
32. **The primary beneficiaries targeted by this project are *rural entrepreneurs* who are defined as**: (i) smallholder farmers and rural producers organized in groups, cooperatives, or other forms of association, to be defined as POs; (ii) agribusiness SMEs; and (iii) agritech start-ups. Smallholder farmers and rural producers to be organized as POs are growth-oriented and will be competitively selected for participation in PPs. "Growth-oriented" can be defined as the segment of potential beneficiaries who are not engaged in subsistence-level activities. Growth-oriented producers actively seek new opportunities, aspire to grow, and create more jobs.[14] Furthermore, the project will benefit the intermediary institution providing support services to agribusiness SMEs and agritech start-ups and decentralized governments (provincial and local-level governments).

33. **The project will reach out to approximately 940 POs[15] that are expected to have a membership of about 24,000 small-scale farmers and rural producers (at least 35 percent of total beneficiaries should be female)**. About 100 SMEs and agritech startups will be reached through training provided by a competitively selected intermediary institution that will expand their services based on the lessons learned from the pilot phase. Further, through municipal agriculture centers, market centers, and improved value-chain infrastructures, at least 3,500 farmers will benefit from the project, while the project will generate short-term rural employment opportunities for about 5,700 people in response to

[12] East-West Highway in Province 2 will overlap with the Kamala-Dhalkebar-Pathlaiya (KDP) Road under the Strategic Road Connectivity and Trade Improvement Project.
[13] It was noted that Dhangadhi-Darchula Highway in Sudurpaschim may have fewer economic activities as evidenced by data. Given that there are only a few interventions in these areas but there are potential value chains, such as organic agriculture, medicinal herbs and honey, this highway has been included. However, these specific interventions will have a limited scale and scope (and a relatively smaller implementation unit) focusing on the selected value chains identified during the initial phase of the project.
[14] Global Entrepreneurship Monitor Report.
[15] Including women-led producer organizations. The number of POs and smallholder farmers is estimated under assumption that each PO will be comprised of 25 individual members. While the minimum number of individual members required in one PO is 15, there is no maximum limit to the number of individuals who can join. The average for start-up grants is approximately $1,700 per individual member, which can be adjusted during implementation as per the nature of the business plan or sub-project application. In the results framework, 900 POs are indicated as minimum targets.

COVID-19. The project will also support institutional building in the federalized context and will likely reach out to 86 government agencies (6 at the provincial level and 80 at the municipality level). Landless families and agricultural wage laborers will indirectly benefit from the project in terms of real wage gains as a result of increased productivity and demand for labor. The theory of change (Figure 3) provides an overview of the project components and the complementarity between different components.

**Figure 3: Theory of Change**




## E. Rationale for World Bank Involvement and Role of Partners

34. **In addition to critical financing of the project, the World Bank's added value will center around its ability to promote market competition in selecting PPs and its engagement with the government as well as with agencies in multiple sectors**. The World Bank will leverage its significant global experiences in productive partnership approaches (25+ countries) to provide a design framework that reflects lessons learned. The World Bank has gained broad experience with similar sector and competitiveness projects in multiple sectors in Nepal as well as globally, thus it is in an advantageous position to draw lessons from similar development efforts. Public sector financing is justified given the importance of agricultural production to the country's overall growth and employment, foreign exchange revenues, and poverty reduction, but also specifically for COVID-19 economic recovery and health objectives through maintained nutrition. It is also justified due to the provision of environmental public goods.

## F. Lessons Learned and Reflected in the Project Design

35. **Lessons from earlier projects with similar objectives suggest that a more performance-based and results-driven approach on the TA arrangements can yield greater impact on project outcomes**. These include supporting public infrastructure for market development; facilitating access to inputs, Establishment and operationalization of the project's implementation structure to avoid start-up delays should remain a key priority for TA to be successful and productive. The need for utilization of grants to address identified market failures, a clear targeting mechanism for verified market demand, and the selection of sub-projects through an open and competitive process based on clearly defined technical evaluation criteria can be crucial to establishing credibility among stakeholders and avoiding political interference.

## III. Implementation Arrangements

### A. Institutional and Implementation Arrangements

36. **The executing agency will be MoALD**. Implementation will take place in five economic corridors, which will encompass six provinces (Provinces 1, 2, Bagmati, Gandaki, Province 5, and Sudurpashchim). The project will establish four ECOs in Provinces 1 (for Provinces 1 and Bagmati), 2, 5 (for Gandaki and Province 5), and Sudurpashchim. (See Annex 1).

### B. Results Monitoring and Evaluation Arrangements

37. **Monitoring, evaluation, and reporting on results framework indicators will be the core part of supervising and assessing project achievement and progress**. A baseline survey will be conducted at the start of project implementation, a midline survey will be conducted at the mid-term review stage, and an endline survey will be conducted at project completion. The project M&E system will also cover: (i) implementation progress, including physical and financial status; (ii) achievement of intermediate and PDO outcome indicators as specified in the results framework; and (iii) impact evaluation outcomes. The M&E system will be supported by a computerized, web-based management information system (MIS), managed by OPD- and ECO-level M&E officers.

### C. Sustainability

38. **The project's sustainability is bolstered by the Government of Nepal's strong ownership of the overall project concept and design elements, which build on the strategic pillars of the ADS.** In using a maximizing finance for development approach to determining appropriate public and private roles under federalism, the project could help the long-term promotion of private sector participation, which will keep the PPs sustainable and will support scaling them up as per future demands. The project will strengthen the federalized public institutions through staff training, more efficient organization, and the provision of adequate support for agriculture service delivery. Finally, the project will also contribute to climate change adaptation and mitigation through promotion of climate-smart agriculture (CSA).

## IV. Project Appraisal Summary

## A. Technical, Economic, and Financial Analysis

### (i) Technical Analysis

39. **The overall technical design of the project is based on well-established and tested local and global practices and lessons gained from World Bank, Asian Development Bank, European Union, International Fund for Agriculture Development, Swiss Development Cooperation, and US Agency for International Development-supported projects in Nepal, ensuring synergy and complementarity**. The technical design of Component 1 is based on global experiences and learning from the PP models in Latin America, East Asia, and Africa. The studies and analytics conducted during preparation contributed to the design of the component, which was tailored to the Nepal-specific context. Components 1, 2, and 3 are closely interlinked. The promotion of market linkages will strengthen the trade position of the participating value-chain actors and the entire sector. Building the capacity of local governments and SME intermediaries as an ecosystem is crucial for the sustainability of the PPs. Restoring and strengthening the food supply chain, disrupted by the COVID-19 pandemic, is needed to build a resilient recovery in the agriculture and rural sector, which will, in turn, support the sustainability of the PP.

40. **The project team has identified activities that aim to leverage private sector resources where relevant, while using public sector resources where private sector approaches are less appropriate or feasible.** For instance, under Component 1, project funding is expected to leverage private sector funding, wherein PPs will require equity contributions from POs (which could include financing from financial institutions) to unlock the start-up grant funds. Similarly, Subcomponent 2.b will expand outreach of support services to rural SMEs, while requiring agricultural SMEs and agritech start-ups to pay a portion of the costs to access TA and capacity building support. These activities demonstrate the project's effort to ensure the project design uses the minimum amount of public resources to leverage additional private resources. Investments under the project will fill a financing gap that is not currently being met by the private sector.

41. **The project team will ensure a clear communication strategy to highlight the "growth" nature of this project as opposed to the "livelihood" approach**. The project will support commercially active producers and young firms who have both growth orientation and potential to create large, vibrant businesses and generate jobs.

42. **The project will address gender gap in: (i) access to markets and market information; (ii) access to technology; and (iii) access to business development services, in agribusiness sector**. The Project will undertake activities and interventions embedded with a gender lens, by focusing on strengthening women's participation in the PP, generating their profit and coaching them toward growth-oriented SMEs (Annex 3). The project targets greater increase in the average gross value of sales from women led producer organizations than from the overall producer organizations under productive partnerships/alliances.

43. **To mitigate climate change induced risks and consequent negative impacts in the agriculture sector, the project is designed to promote climate smart agriculture and contribute to climate co-benefits (Annex 4).** Components 1 and 2 will support the development of climate-smart technologies and

the dissemination of CSA practices. Further, Component 3 will support and promote the use of renewable energy for the proposed infrastructure improvements.

(ii) **Economic and Financial Analysis**

44. **The ex-ante economic and financial analysis confirms that the project is a sound investment**. The economic analysis includes all project investments and operational costs and estimates the economic benefits most directly associated with the project. These benefits are largely derived from Component 1 investments. The expected greenhouse gases (GHG) impact is an insignificant net increase of approximately 4,637 tons of CO2-eq per annum in GHG emissions mostly due to the increased number of livestock. Without considering the GHG impact, the project would be economically feasible, with an economic rate of return (ERR) of 24 percent, economic net present value (ENPV) of $115.9 million, and a benefit-cost ratio of 4.6.

45. **The economic analysis incorporates the impact of GHG emissions using a low and a high carbon price, according to the World Bank's 2017 guidelines**. The analysis yields an ERR of 23.9 percent with a low carbon shadow price and an ERR of 23.7 percent with a high carbon shadow price. The ENPV was estimated at $114 million for the low carbon shadow price scenario and at $113 million for the high carbon shadow price. The benefit-cost ratio ranges from 4.51 to 4.46 for the low and high carbon shadow prices, respectively.

## B. Fiduciary

**(i) Financial Management**

46. **MoALD has prior experience in conducting World Bank-financed projects, hence, the OPD is assumed to be able to run a strong financial management arrangement**. The major risks identified include: (i) the misuse of start-up grants; (ii) lack of adequate and reliable finance staff at the ECO and local government levels (iii) difficulty in operationalizing the financial management information system (FMIS) at the OPD- and ECO-levels, which may generate financial reports as and when necessary; and (iv) implementation of the Subnational Treasury Regulatory Application (SuTRA) at each local government, if SuTRA is not used by local government. As mitigation measures to these risks, the project has detailed a transparent mechanism for start-up grants with a strong Grievance Redressal Mechanism (GRM) in place; and MoALD will make arrangements with Financial Comptroller General Office (FCGO) to second an Account Officer/Accountant on a regular basis at each ECO. Further, the project team can hire a financial management expert on needs basis. In addition, MoALD is establishing appropriate control measures for financial reporting even as the government is rolling out its computerized government accounting system (CGAS), which is expected to cover ECO transactions as well.

**(ii) Procurement**

47. **To mitigate the associated risk of inadequate procurement capacity, the staffing capacity at the OPD will be strengthened by deputizing a procurement officer and hiring an experienced procurement consultant**. Procurement capacity at ECOs would be strengthened by identifying and deploying those officials of MoALD who have obtained procurement experience by working for previously implemented

projects in the agriculture sector and hiring a procurement consultant with intermittent input, as needed so that procurement activities can be executed as per the approved procurement plan and the contracts monitored. The OPD/MoALD will carry out trainings/capacity building programs for relevant ECO staff on the Systematic Tracking of Exchanges in Procurement (STEP) and share pertinent market approached/procurement methods from the World Bank's Procurement Regulations to be applied in the project (See Annex 1 for further details about procurement procedures).

## C. Legal Operational Policies

| | Triggered? |
|---|---|
| Projects on International Waterways OP 7.50 | No |
| Projects in Disputed Areas OP 7.60 | No |

## D. Safeguards

48. **The project aims to support upgrading and building of demand-driven market- and value-chain-related infrastructure, which could include regional market centers, collection centers, storage centers, cold-chain centers, and packaging and processing centers to promote opportunities for market access and trade**. The project may also support demand-driven small infrastructure, which could include small irrigation schemes, small bridges, and farm access roads. The key environmental risks are related to the possibilities of land degradation in areas subjected to the opening of construction, causing localized sedimentation in rivers and streams, water and wastewater pollution, and pollution from possible increased use of pesticides and agrochemicals. The MoALD's capacity to manage environmental and social risks is weak and will require strengthening. However, the anticipated risks and impacts are expected to be site-specific, reversible, and can be mitigated with measures that are readily identifiable.

49. **The project is expected to have a positive impact as it aims to stimulate the development of rural smallholder producers and SMEs, which, in this case, are mostly women, those from indigenous populations, and vulnerable groups**. However, there may be a possibility of exclusion of indigenous peoples, vulnerable, and disadvantaged groups from a range of benefits and opportunities the project is providing to stakeholders, startup matching grants, jobs and business opportunities, agriculture advisory services, seeds and inputs, and capacity building opportunities mainly because of poor communication and information disclosure, capacity constraints, and prevalent structural inequalities to the vulnerable and indigenous people communities. Similarly, possible land acquisition using counterpart funds or restricted use of land for/on account of construction/upgrading of infrastructure might result in permanent or temporary physical as well as economic displacement. As the project is expected to mainly support demand-driven small infrastructure the labor influx is expected to be minimum. However, this may trigger some social risks related to sexual exploitation and abuse/ sexual harassment and child labor which is relatively high particularly in construction works in Nepal.

**Table 2: Relevant Social and Environmental Safeguards for the Project**

| World Bank Environmental and Social Standards (ESSs) | Relevant / Not Relevant |
|---|---|
| ESS 1: Assessment and Management of Environmental and Social Risks and Impacts | Relevant |

| | |
|---|---|
| ESS 2: Labor and Working Conditions | Relevant |
| ESS 3: Resource Efficiency and Pollution Prevention and Management | Relevant |
| ESS 4: Community Health and Safety | Relevant |
| ESS 5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement | Relevant |
| ESS 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources | Relevant |
| ESS 7: Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities | Relevant |
| ESS 8: Cultural Heritage | Relevant |
| ESS 9: Financial Intermediaries | Not Relevant |
| ESS 10: Stakeholder Engagement and Information Disclosure | Relevant |

50. **To mitigate identified impacts and risks, the project conducted an Environmental and Social Assessment and developed a comprehensive ESMF**. The ESMF provides: (i) the principles, rules, guidelines, and procedures to assess the environmental and social risks and impacts of project; (ii) measures and plans like site specific environment and social management plans (ESMPs) to reduce, mitigate or offset adverse risks and impacts; (iii) budget estimates for taking the mitigating measures; and (iv) the identification of agencies responsible for addressing risks and impacts, including their capacity to manage them. Additional assessments or plans required under the Environmental and Social Framework or other World Bank requirements, including the environmental and social capacity assessment at the different levels of government and the community level, the Stakeholder Engagement Plan, and the Sexual Exploitation and Abuse/Sexual Harassment risk mitigation action plan, child labor risk mitigation measures have been prepared and included in the ESMF as per the WB's ESF and the prevailing national laws. Along with a comprehensive ESMF report, an Environmental and Social Commitment Plan has been prepared and disclosed on August 2, 2020.

### E. Citizen Engagement

51. **The project will ensure the integration of citizen engagement, and has included specific beneficiary-focused indicators at the PDO and intermediate levels**, the development of a full-fledged stakeholder engagement plan, support to the OPD and ECOs in standardizing instruments for engaging communities and affected groups along the project cycle, and strengthened documentation and reporting.

## V. Grievance Redress Mechanism

52. Communities and individuals who believe they are adversely affected by specific country policies supported as prior actions or tranche release conditions under a World Bank Development Policy Operation may submit complaints to the responsible country authorities, appropriate local/national GRMs, or the World Bank's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed to address pertinent concerns. Affected communities and individuals may submit their complaint to the World Bank's independent Inspection Panel, which determines whether harm occurred, or could occur, as a result of World Bank noncompliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and World Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate GRS, please visit http://www.worldbank.org/GRS. For information on how to submit complaints to the World Bank Inspection Panel, please visit www.inspectionpanel.org."

## VI. Key Risks

53. **Political and Governance risk is rated as *Substantial***. The new government, until recently, had enjoyed a two-thirds majority in parliament but with the withdrawal of support by one of the parties, the government now has only a simple majority. The new federal system, in principle, provides opportunities to decentralize development benefits and make service delivery more effective and accountable. Despite the lack of clarity at this stage to define roles, rules, and create governance capacity at the provincial and local levels, the overall political and governance risk has decreased from High to Substantial.

54. **Macro-economic risk is rated *Substantial*.** Key risks include a widespread domestic outbreak of COVID-19, requiring an extended period of movement restrictions, protracted recessions globally, and a significant decline in remittance inflows (particularly from the Gulf region). These risks could potentially translate into an increase in fiscal and external deficits. Key mitigating factors include the steps already taken by the government to reduce the economic risk from COVID-19 and its efforts to mobilize concessional financing for a comprehensive economic support package. Despite the mitigating factors, residual risks to the operation remain substantial. This is because the crisis could divert the government's resources to deal with the evolving situation and this could potentially impede activities supported by this project.

55. **Institutional capacity risk is rated *Substantial*.** The project will be implemented in multiple provinces and ECOs will be new establishments that might take time to build capacity. To mitigate these risks, the project will hire a TA Consultant (firm) to support OPD as needed during project implementation.

56. **Technical design risk is rated *Substantial.*** The project success is predicated on operation of viable PPs. To mitigate the risk of failure, the project has a specific capacity building component, and has conducted upfront consultations with private sector buyers and intermediary institutions providing TA services confirming their interest in and support for the project.

57. **Fiduciary risk is rated *Substantial***. The fiduciary capacity of local governments remains weak. There is a possibility of misuse of start-up grants; there might be difficulty in operationalizing the FMIS; there might be delays in the selection of beneficiaries and in the release of grant installments to beneficiaries, which may lead to the situation bribes would be solicited for verification of the completion of required activities by grant recipients. To mitigate the associated risk, the staffing capacity at the OPD and ECO will be strengthened by deputizing a procurement officer and hiring experienced financial management and procurement consultants. The PIM will include detailed fiduciary processes with a strong GRM mechanism, monitoring and governance. A detailed Start-up Grant manual will be developed. A simplified funds tranche mechanism will also improve risk management of grants.

58. **Environment and social safeguards risks are rated as *Substantial***. The key environmental risks of the project relate to land degradation, sedimentation in rivers and streams, water and wastewater pollution. Other social risks are possibility of exclusion of indigenous peoples, vulnerable groups from project benefits, poor communication, information disclosure and stakeholder engagement, permanent or temporary physical as well as economic displacement due to land acquisition, labor influx and risks related to sexual exploitation and abuse/sexual harassment and child labor. Another significant risks will

arise from the weak capacity of the provincial and local government levels in the management of environmental and social risks which will be a challenge. To mitigate these risks, the project has developed a comprehensive ESMF which includes procedures to assess the environmental and social risks and impacts of project; measures and plans to reduce and mitigate and budget as per WB ESF and national requirements. The project includes a robust institutional capacity and skills development program to help strengthen the federal and decentralized government agencies on environment and social risks mitigation measures.

## VII. Results Framework and Monitoring

### Results Framework
COUNTRY: Nepal
Rural Enterprise and Economic Development Project

### Project Development Objectives(s)

To strengthen rural market linkages and entrepreneurship ecosystem and to create job opportunities as the recovery actions from COVID-19.

### Project Development Objective Indicators

| Indicator Name | PBC | Baseline | End Target |
|---|---|---|---|
| **Beneficiaries reached in rural areas** | | | |
| Beneficiaries of interventions (Number) | | 0.00 | 24,000.00 |
| Beneficiaries of interventions - Female (Number) | | 0.00 | 9,600.00 |
| Number of SMEs and Agritech Startups reached (Number) | | 0.00 | 100.00 |
| Number of SMEs and Agritech Startups reached (female) (Number) | | 0.00 | 20.00 |
| **Increased incomes and investment in market linkages** | | | |
| Increase in the average gross value of sales of producer organizations under productive partnerships (Percentage) | | 0.00 | 20.00 |
| Increase in the average gross value of sales of producers under productive alliances - Female (Percentage) | | 0.00 | 35.00 |
| **Employment Opportunities Created by Covid-19 response** | | | |
| Jobs created by COVID-19 intervention (Number) | | 0.00 | 5,700.00 |

| Indicator Name | PBC | Baseline | End Target |
|---|---|---|---|
| Jobs created for Female by COVID-19 intervention (Number) | | 0.00 | 2,850.00 |

## Intermediate Results Indicators by Components

| Indicator Name | PBC | Baseline | End Target |
|---|---|---|---|
| **Strengthening Market Linkages through Productive Partnerships** | | | |
| Productive Partnership business plans approved (Number) | | 0.00 | 900.00 |
| Productive Partnerships business plans approved - by women led POs (Percentage) | | 0.00 | 35.00 |
| Percentage of Productive Partnership business plans successfully closing the start-up grant agreement (Percentage) | | 0.00 | 70.00 |
| Number SMEs/Agri tech startups participating in PPs (Number) | | 0.00 | 20.00 |
| **Strengthening the entrepreneurship ecosystem in the federal structure** | | | |
| No of government agencies built capacity on the identified capacity gap (Number) | | 0.00 | 86.00 |
| Beneficiary satisfaction with Intermediary Institutions' services (Percentage) (Percentage) | | 0.00 | 80.00 |
| Beneficiary satisfaction with Intermediary Institutions' services (Female) (Percentage) | | 0.00 | 80.00 |
| **Restoring and strengthening COVID-19 disrupted food supply chain and local economy** | | | |
| Number of Regional Market Centers constructed/upgraded with climate and disaster-resilient standards and operating (Number) | | 0.00 | 4.00 |
| Number of municipal agriculture centers and value chain infrastructures constructed/established with climate and disaster-resilient standards and operating (Number) | | 0.00 | 140.00 |

| Indicator Name | PBC | Baseline | End Target |
|---|---|---|---|
| Farmers reached with agricultural assets or services (CRI, Number) | | 0.00 | 3,500.00 |
| Farmers reached with agricultural assets or services - Female (CRI, Number) | | 0.00 | 600.00 |
| **Project Management, Monitoring and Evaluation** | | | |
| Periodic reports submitted on time (Number) | | 0.00 | 3.00 |
| Grievances registered related to delivery of project benefits satisfactorily (Percentage) | | 0.00 | 85.00 |

**Monitoring & Evaluation Plan: PDO Indicators**

| Indicator Name | Definition/Description | Frequency | Datasource | Methodology for Data Collection | Responsibility for Data Collection |
|---|---|---|---|---|---|
| Beneficiaries of interventions | Number of beneficiaries of interventions (including small farmers with share of women)<br><br>Composition: 24,000 from PP (Component 1)<br>The project is expected to provide direct socio-economic benefits to approximately 900-940 producer groups equivalent to 24,000 rural agricultural | Annual | Sample based surveys and MIS<br>Data from TA (implementing) firm and intermediaries | Monitoring of systems using checklist for each System developed<br>Periodic data collection from TA (implementing) firm and intermediaries<br>Entrepreneurship ecosystem is meant an increased presence of support services, policies, platforms and guidelines for private sector entrepreneurs | OPD |

| | | | | | |
|---|---|---|---|---|---|
| | households who will benefit from start-up grants (Component 1, US$40 million). A typical producer organization (PO) consists of 25 farming households. | | | | |
| Beneficiaries of interventions - Female | Number of female beneficiaries of interventions 40% of total PP beneficiaries | Once or twice a year | Sample survey and test report | Summary analysis of sampled data. | OPD |
| Number of SMEs and Agritech Startups reached | SMEs and Agritech startups will receive technical assistance from project selected intermediary institutions providing support services to entrepreneurs. The intermediaries will provide group based training to 100 SMEs/Agri tech startups and incubation/in depth coaching to select 25 out of that 100.<br>Based on the proof of concept of the model and lessons learned, this activity will be scaled up.<br><br>This activity contributes to strengthening rural entrepreneurship ecosystem by creating a | Annual | MIS, Progress reports | Monitoring of systems using checklist for each System developed | OPD |

| | | | | | |
|---|---|---|---|---|---|
| | sustainable entrepreneurship support system in select provinces. By entrepreneurship ecosystem is meant an increased presence of support services, policies, platforms and guidelines for private sector entrepreneurs. | | | | |
| Number of SMEs and Agritech Startups reached (female) | SMEs and Agritech startups (female owned) will receive technical assistance from project selected intermediary institutions providing support services to entrepreneurs. Female owned SMEs will be defined by 50% or more shares owned by women. Based on the proof of concept of the model and lessons learned, this activity will be scaled up.<br><br>This activity contributes to rural entrepreneurship ecosystem building by creating a sustainable entrepreneurship support system in select provinces. By entrepreneurship | Annual | MIS, Progress reports | Monitoring of systems using checklist for each System developed | OPD |

| | | | | | |
|---|---|---|---|---|---|
| | ecosystem, it is meant an increased presence of support services, policies, platforms and guidelines for private sector entrepreneurs. | | | | |
| Increase in the average gross value of sales of producer organizations under productive partnerships | The indicator measures the percentage increase in the gross value of sales for the POs in Productive Partnerships. | Three times (baseline, MTR, endline) | Sample survey and test report | Summary analysis of sampled data. | OPD |
| Increase in the average gross value of sales of producers under productive alliances - Female | Increase in the average gross value of sales of women led producer organizations under productive partnerships. There's an expectation that women will have a greater increase in gross average value of sales than the overall increase for producer organizations under productive partnerships/alliances. | Once or twice a year | Sample survey and test report | Summary analysis of sampled data. | OPD |
| Jobs created by COVID-19 intervention | The indicator measures:<br>A) Short-term employment through cash for work during construction/upgrading of infrastructures - 4500<br>B) Returnee migrant | Mid term and End of project | MIS | Monitoring of systems using checklist for each System developed | OPD |

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| | workers reengaged in agriculture in 6 provinces - 1200<br>(Total A+B = 5700) | | | | |
| Jobs created for Female by COVID-19 intervention | The indicators measures short-term employment generated for female through COVID-19 intervention | Annual | MIS | Monitoring of systems using checklist for each System developed | OPD |

| **Monitoring & Evaluation Plan: Intermediate Results Indicators** | | | | | |
|---|---|---|---|---|---|
| **Indicator Name** | **Definition/Description** | **Frequency** | **Datasource** | **Methodology for Data Collection** | **Responsibility for Data Collection** |
| Productive Partnership business plans approved | The indicator refers to the total number of approved business development plans via productive partnerships. The project aims to establish 900-940 POs, hence, target was set as at least 900 POs | Biannually | MIS and Progress reports | Monitoring of systems using checklist for each System developed | OPD |
| Productive Partnerships business plans approved - by women led POs | | Once or twice a year | Sample survey and test report | Summary analysis of sampled data. | OPD |
| Percentage of Productive Partnership business plans successfully closing the start-up grant agreement | The indicator refers to percentage of productive partnership business plans successfully closing the grant agreement with both | Biannually | MIS and Progress reports | Monitoring of systems using checklist for each System developed | OPD |

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| | buyers and POs meeting the agreement commitments | | | | |
| Number SMEs/Agri tech startups participating in PPs | Number SMEs/Agri tech startups participating in PPs. It will be a hybrid approach- i) shallow training to 1100 and incubation to 300. This will done in phases where total 100 will be reached at the pilot phase. Therefore only 20 will be targeted for PP linkages | Annual | MIS Progress Reports | Summary analysis of sampled data. | OPD |
| No of government agencies built capacity on the identified capacity gap | No of government agencies at municipal and provincial level | Annually | MIS and Progress reports | Monitoring of systems using checklist for each System developed | OPD |
| Beneficiary satisfaction with Intermediary Institutions' services (Percentage) | The indicator refers to the percentage of project benefited growth-oriented firms satisfied with the service delivery of intermediary institution/s | Biannual | MIS and progress reports | Monitoring of systems using checklist for each System developed | OPD |
| Beneficiary satisfaction with Intermediary Institutions' services (Female) | The indicator refers to the satisfaction of female-led growth oriented SME with the service delivery of intermediary institutions | Biannual | MIS and Progress reports | Monitoring of systems using checklist for each System developed | OPD |
| Number of Regional Market Centers constructed/upgraded with climate and disaster-resilient standards and operating | Number of Regional Market Centers constructed/upgraded with climate and disaster-resilient standards and | Once a year | MIS Progress Reports | Monitoring of systems using checklist for each System developed | OPD |

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|---|---|---|---|---|---|
| | operating | | | | |
| Number of municipal agriculture centers and value chain infrastructures constructed/established with climate and disaster-resilient standards and operating | Number of municipal agriculture centers and value chain infrastructures constructed/established and operating | Annual or bi-annual | MIS and Progress reports | Monitoring of systems using checklist for each System developed | OPD |
| Farmers reached with agricultural assets or services | This indicator measures the number of farmers who were provided with agricultural assets or services as a result of World Bank project support. "Agriculture" or "Agricultural" includes: crops, livestock, capture fisheries, aquaculture, agroforestry, timber, and non-timber forest products. Assets include property, biological assets, and farm and processing equipment. Biological assets may include animal agriculture breeds (e.g., livestock, fisheries) and genetic material of livestock, crops, trees, and shrubs (including fiber and fuel crops). Services include research, extension, training, education, ICTs, inputs (e.g., | | Periodically. Baseline, MTR and endline | periodic surveys | OPD |

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| | fertilizers, pesticides, labor), production-related services (e.g., soil testing, animal health/veterinary services), phyto-sanitary and food safety services, agricultural marketing support services (e.g., price monitoring, export promotion), access to farm and post-harvest machinery and storage facilities, employment, irrigation and drainage, and finance. Farmers are people engaged in agricultural activities or members of an agriculture-related business (disaggregated by men and women) targeted by the project. | | | | |
| Farmers reached with agricultural assets or services - Female | | Annual | MIS | Periodically. Baseline, MTR and endline | OPD |
| Periodic reports submitted on time | The indicator refers to submission of key project review reports (baseline, midline and endline) on-time by the project management unit. | Annual | Periodic reports submitted on time | Monitoring of systems using checklist for each System developed | OPD |
| Grievances registered related to delivery of project benefits satisfactorly | Response rate through GRM | Biannual | MIS and Progress reports | Monitoring of systems using checklist for each System developed | OPD |

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## Annex 1: Implementation Arrangements and Support Plan

**COUNTRY: Nepal**
**Rural Enterprise and Economic Development Project**

1. The borrower will be the Government of Nepal and the executing agency will be the Ministry of Agriculture and Livestock Development (MoALD). Implementation will take place in five economic corridors, which will encompass six provinces (Provinces 1, 2, Bagmati, Gandaki, Province 5, and Sudurpashchim). The project will set up four economic corridor offices (ECOs) in Provinces 1, 2, 5, and Sudupashchim.

2. At the federal Level, the project implementation mechanism will be comprised of (i) the Project Steering Committee (PSC) and (ii) the Office of the Project Director (OPD) based in Kathmandu.

3. The PSC will be chaired by Secretary for MoALD and will comprise representatives from National Planning Commission (NPC), the Ministry of Finance, Ministry of Industry and Commerce, Department of Agriculture, Department of Livestock Services and Provincial Ministry of Land Management Agriculture and Cooperatives (MOLMAC) representatives. The project director of the OPD shall serve as the Secretariat of the Project Steering Committee. The PSC will (a) ensure strategic oversight of overall project implementation; (b) ensure coordination and cooperation among all participating agencies, federal, and subnational governments; (c) endorse annual work plans and budgets for all project-related activities; (d) provide overall guidance during project implementation; and (e) endorse financial, programmatic, and monitoring reports to be presented to the World Bank and other national stakeholders to ensure transparency and accountability. Depending on the PSC meeting agenda, the Chair of the PSC may invite high-level representatives of other concerned ministries, departments, and subnational governments, to the meetings as well as private sector representatives, multi and bilateral agencies, and notable citizens.

4. The OPD will be headed by a Joint Secretary, designated as Project director (PD), deputized from the MoALD. The PD will be operationally and managerially in charge of the organization structure established at the federal and provincial levels for implementing the project. The PD will have the authority to make decisions related to project administration as well as financial. The PD will be supported by the following government staff: undersecretary, account officer, planning officer, and a monitoring and evaluation (M&E) officer, to assist in the smooth functioning of project management. Further, the PD will be supported by the following consultants: an environment specialist, a social specialist, and a procurement specialist. Computer operators, an office secretary, office assistants, and drivers will be hired for the project period on service contracts. The OPD will be responsible for preparing an approving an annual work plan with inputs from beneficiaries, key stakeholders, and partners and (i) overseeing overall performance of the project and providing policy guidance; (ii) suggesting necessary adjustments based on M&E results; (iii) development and consolidation of procurement plans and the procurement of works, goods, services, and non-consulting services for project activities in accordance with legal agreements; and (iv) the implementation of the Environmental and Social Management Framework (ESMF).

5. The OPD will be supported by a TA Consultant (firm), with relevant technical experts, that will be procured competitively by MoALD. The TA Consultant (firm) will assist the OPD and ECOs in (i) the development of principles and guidelines for all project activities; (ii) the development and execution of a communication campaign to identify profiles of potential POs and buyers; (iii) the formation of productive partnerships (PPs) throughout project implementation ;

(iv) conducting the Capacity Needs Assessment (CNA); and (v) planning for capacity building assistance to rural municipalities based on the assessment.

6. Once the business plans are prepared by the POs and buyers with the support from the project, a team of independent technical reviewers (technical, financial and safeguard experts) hired on an on-call basis, will validate them from their respective perspectives and recommend for approval by the OPD.

7. At the economic corridor level, the project implementation mechanism will be comprised of (i) an Economic Corridor Technical and Coordination Committee (ECTCC), (ii) an Economic Corridor Office (ECO), and (iii) a Local Coordination Committee (LCC).

8. The ECTCC will be established within MoLMAC in the four provinces where ECOs will be established. The ECTCC will be headed by the province-level Secretary of MoLMAC and consist of members from the Provincial Planning Commission, MoLMAC Planning and Monitoring, ECO Project Directors, the Food and Security and Agricultural Business Promotion Division, and the Ministry of Industry, Tourism, Forest and Environment. The ECTCCs will have the equivalent function as the PSC at the provincial level and (a) ensure strategic oversight of overall project implementation at the provincial level; (b) facilitate provincial-level program planning and implementation of all project activities within their respective provinces; (c) coordinate with relevant implementing line departments and agencies and stakeholders; (d) organize periodic progress reviews; (e) guide ECOs to work in accordance with the spirit and principles of the project; (f) monitor and supervise the work being done in the field; (g) ensure coordination and cooperation among all participating agencies at the provincial level; and (h) provide overall guidance during project implementation.

9. For each identified economic corridor, the project will set up ECOs**.** The ECO will be led by an undersecretary deputized by MoLMAC/MoALD with government staff support including an accountant, planning officer, M&E officer, and an administrative assistant, to assist in the smooth implementation of the project. There will be procurement of technical staff (e.g. junior agriculture associates and agriculture technical experts), for the implementation of project activities. Details of the composition of ECO will be dependent on each province and economic corridor and will be detailed in the PIM. The ECO will be responsible for: (a) implementing the project activities at the economic corridor level; (b) conducting procurement activities for infrastructure-related activities under Component 3; (c) facilitating planning and inter-agency coordination; (d) assisting in the selection of project sites and beneficiaries; and (e) ensuring appropriate governance and accountability, including through management of a suitable grievance redressal system.

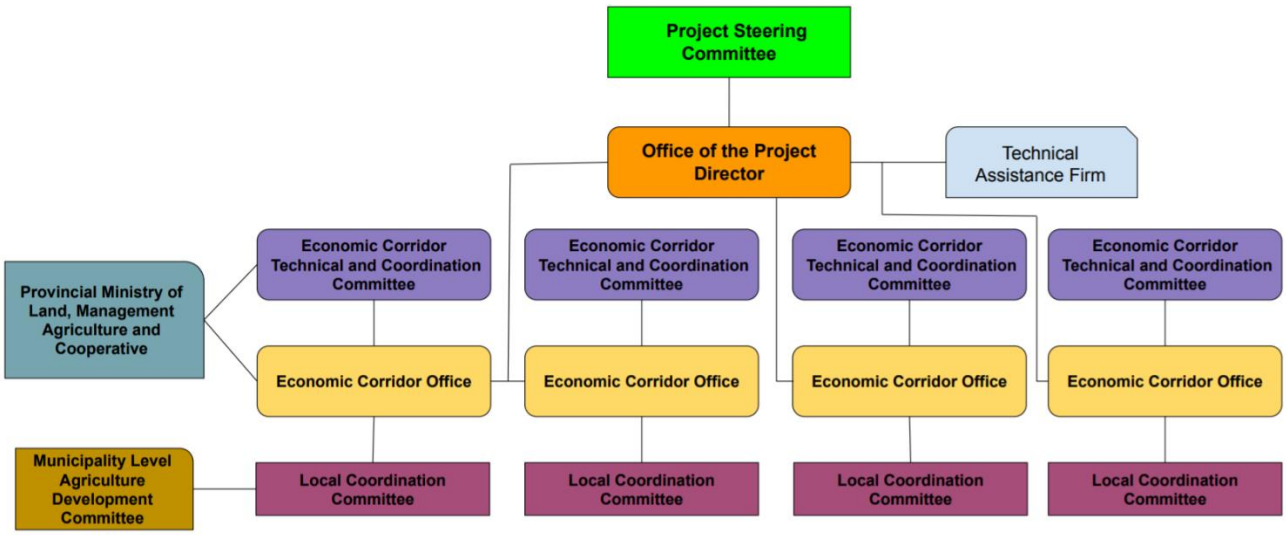
10. At the local level, an LCC will be created building on the existing municipal agricultural development committee led by mayors/chairpersons, who will work in association with the economic corridor team. The committee will be responsible for: i) helping in production and cluster area identification and facilitation; ii) providing input and facilitation in municipal-related project activities, such as infrastructure identification; and iii) social mobilization.

11. For participating municipalities where municipal agriculture centers, value chain infrastructure, and demand-driven semi-public infrastructure investments under Component 3 will be implemented, an implementation supervision committee will be formed composed of representatives from participating rural municipalities, ECOs, and the OPD. The committee will participate in procurement meetings. The procurement of agricultural centers will be done through the ECO. Participating municipalities will ensure land for the construction of agriculture centers and infrastructure investments within the vicinity of municipal offices. For value chain infrastructure investments, only government/public land will be used for construction. Additionally, the municipal office will be sought for co-financing in cash and/or in kind, where appropriate. The procurement committee will also participate in implementation,

monitoring, and evaluation of these infrastructures under the component to ensure timely implementation and work quality.

12. The Project Implementation Manual (PIM) details the organization and technical procedures that will govern the implementation, including financial management, procurement, environmental and social safeguards management, M&E, and the Grievance Redressal Mechanism.

**Figure 1: Implementation Modality**




**Financial Management**

13. **Institutional Set-up and Staffing**. MoALD has prior experience conducting World Bank-financed projects, so, the OPD is assumed to be able to run a strong financial management arrangement. The OPD will be responsible for overall financial management of the project, supported by ECOs and involved local governments. The expenditures incurred by the ECOs will be monitored by the OPD. MoALD in coordination with the Financial Comptroller General Office (FCGO) shall deputize an Account Officer/Accountant (government official) to each ECO who will be the co-signatory with the ECO-in-Charge for operating financial transactions, including bank account operation. Financial management consultants will be hired on intermittent basis at the OPD to support the finance unit in project financial management.

14. **Planning and Budgeting**. MoALD shall arrange a separate budget line for the project, which will be sub-divided among the OPD, and ECOs. The ECOs shall conduct their financial transactions with their respective District Treasury Controller Office (DTCO). The budget authorization to the ECOs along with the budget-release shall be arranged by the MoALD in coordination with the Ministry of Finance, National Planning Commission (NPC), FCGO, and as needed. Accordingly, the Line Ministry Budget Information System shall be maintained.

15. **Internal Control**. The financial management shall be arranged at the OPD, ECO level and local government. The OPD, with ultimate responsibility, in cooperation from the ECOs and other agencies, will coordinate with various

departments/agencies, provincial, and local governments. The financial management of the project will be based on country systems, policies, and procedures. The additional control measures, as required, will be included in the PIM, which will also include details on planning and budgeting, budget authorization and release, funds flow, accounting, reporting, internal controls, monitoring, internal audit, external audit, financial management arrangements for project closure.

16. One of previous project implemented by the MoALD experienced implementation shortcomings like unnecessary delays in the selection of beneficiaries and delays in the release of grant installments to beneficiaries These substantial delays resulted in delays in the accomplishment of the target activities, and also led to some cases where bribes were solicited by some officials before they would verify the completion of required activities by other grant recipients. Therefore, a strong internal control mechanism is necessary in providing the start-up grants by deciding upon the grant applications in a timely manner and ensuring timely release of the grant installments to the beneficiaries. That will be addressed in the project by categorically stipulating the grant distribution mechanism in the PIM and in the Financial Management Manual. The management information system (MIS) shall be utilized to the maximum in the grant application and distribution process to track and monitor where a particular flow is blocked and/or delayed. Further, the PIM shall include a Grievance Redressal Mechanism (GRM), among other things, for the matching grant distribution process (Section IV, GRM).

17. **Accounting, Financial Reporting, and Auditing**. The OPD will prepare consolidated financial reports based on reports from ECOs and local governments. Such financial reports will be submitted on a quadrimester basis no later than 45 days after the end of each quadrimester. The external audit report for the project will be submitted within nine months from the end of the fiscal year. Audit reports and IUFRs have been received and updated from other projects under the implementing ministry—MoALD. The project will benefit from the financial management information system (FMIS) already developed under the Agriculture and Food Security project (AFSP) and from the Subnational Treasury Regulatory Application (SuTRA) that are used by local governments to ensure timely and updated reporting. Based on AFSP experience, financial monitoring needs to be emphasized in the project. The project shall maintain necessary project accounts including the credit ledgers at the OPD.

18. The government-consolidated funds (treasury single account) will be used for pre-financing project expenditures. Direct payment to various payees or direct reimbursement to the government treasury can be requested from the World Bank as per the Disbursement and Financial Information Letter (DFIL).

19. **Fund Flow**. The fund flow shall be basically coordinated and handled by the OPD.[16] The OPD shall arrange adequate measures that the start-up grants under this project shall be matched up and utilized for the intended purpose. The PIM and the Financial Management Manual (FMM) shall elaborate the procedures. The payments can also be made from the provincial and district treasury controller offices after an adequate fund flow control mechanism is established.

20. The ECOs shall coordinate with the concerned DTCO/PTCO to operate a separate bank account for the project and shall submit financial reports to the OPD for preparation of a statement of expenditure (SOE) in a timely manner. The start-up grants shall be directly deposited by the DTCO/PTCO into the designated bank account of the beneficiary.

[16] During the implementation, it might become necessary to explore the use of the Government of Nepal's conditional grant mechanism to local governments for implementation of infrastructure-related activities, while the federalism process advances. In such a case, a financial capacity review will be conducted to assess the fiduciary capacity of local governments, who will be selected to participate in the project. Then, funds flow will be adjusted accordingly and a restructuring will be made to revise the Financing Agreement.

The expenditure of start-up grants shall be included in the financial reports of the ECO and the SOE to be submitted to IDA.

21. **Disbursement**. The disbursement to the project shall be pre-financed from the government and shall be reimbursed on an SOE basis. The OPD shall collect required financial reports and information from the ECO and local government on a regular basis and prepare and submit the SOE as required. IDA shall disburse the reimbursement amount into the Government of Nepal treasury. In addition to the reimbursement modality, the disbursement can be made on the direct payment and special commitment method, the details will be as per the DFIL. The minimum value of applications shall be $10,000 for direct payment and special commitment methods. Other arrangements for disbursement shall be as per the provisions of DFIL.

22. **Risk Analysis and Mitigation Measures**. The risk rating for financial management is *Substantial*. The major risks identified include: (a) misuse of start-up grants; (b) lack of adequate and reliable finance staff at the ECO and local government level; (c) difficulty in operationalizing the FMIS at the OPD and the ECO level, which may generate financial reports as and when necessary about implementation of the SuTRA at each local government. If SuTRA is not used by a local government, the concerned DTCO shall ensure that the financial reports are input in the SuTRA. As mitigation measures to these risks, the project will detail a transparent mechanism for the start-up grants with a strong GRM in place. MoALD will make arrangements with FCGO to second an Account Officer/Accountant on a regular basis at each ECO. Further, the project can hire a financial management expert as-needed. MoALD shall establish appropriate control measures for financial reporting. Further, the government is rolling out a Computerized Government Accounting System (CGAS), which is expected to cover ECO transactions as well. Table1 summarizes the risks and mitigation measures. A simplified funds tranche mechanism will also improve risk management of grants. During implementation support, as a standard component of tasks, the Bank team will ask about any issues reported through GRM related to potential fraud and corruption and document these in mission documents.

**Table 1: Financial Management Risks and Mitigation Measures**

| S. No. | Risks | Mitigation Measures |
|---|---|---|
| 1 | Lack of finance staffs at the ECOs | MoALD shall coordinate with the FCGO and shall ensure placing adequately qualified finance staffs at each ECO on a regular basis |
| 2 | Weak internal control at the ECO level | PIM and FMM shall stipulate adequate measures |
| 3 | Inadequate FMIS coverage | MoALD has assured to make the FMIS and CGAS fully operational by the time of project effectiveness. SuTRA shall be used in case of LGs. |
| 4 | Lengthy time to select a grant beneficiary | PIM shall ensure possible earliest time for selecting grant beneficiaries |
| 5 | Delayed release of grant instalments to the beneficiary | PIM shall ensure timely release of grant instalments with defined roles and responsibilities of involved officials and control through MIS. GRM shall be utilized. |
| 6 | Misutilization of start-up grant | Grant monitoring and supervision shall be emphasized through defined process in PIM. GRM shall be utilized. |

## Procurement

23. Procurement under this project would be implemented by the (i) OPD; and (ii) ECOs. The procurement capacity at the OPD will need to be strengthened by the deployment of a full-time procurement officer and a qualified and experienced full-time procurement consultant. The ECO offices at the provinces will be responsible for managing their

own procurement activities. The ECO offices will also have a dedicated procurement staff from the civil service and one procurement consultant at each ECO to be hired intermittently, depending upon the workload. In addition to implementing procurement activities at the federal level, the OPD will be responsible for providing procurement-related technical support to ECOs and monitor their procurement activities. The procurement consultant at the OPD will also provide training/orientation on project procurement and STEP to ECOs, as required, and collect reports and correspond with the World Bank.

24. **Applicable Procurement Procedure**. The World Bank's Procurement Regulations for IPF Borrowers, July 2016 (Revised November 2017 and August 2018) and the provisions stipulated in the Financing Agreement will be applicable for the procurement of goods, works, non-consulting, and consulting services. No high value goods, works, or non-consulting services are envisaged to be procured, hence the procurement of goods, works, and non-consulting services, will be carried out using national procurement procedures, as agreed in the procurement plan entered in STEP and the Project Procurement Strategy for Development (PPSD), with caveats for national procedures as described as follows.

25. **National Procurement Arrangements**. In accordance with paragraph 5.3 of the Procurement Regulations, when approaching the national market (as specified in the Procurement Plan tables in STEP), the Country's own procurement procedures may be used with applicable caveats as follows.

26. **National Procurement Procedures**. These procedures are applicable for the procurement of goods, works and non-consulting services only. In accordance with paragraph 5.3 of the Procurement Regulations, when approaching the national market, as agreed in the Procurement Plan tables in STEP, the country's own procurement procedures may be used. When the Borrower uses its own national open competitive procurement arrangements as set forth in Nepal's Public Procurement Act, 2007, as amended by Amendment 2073 (2016) - (1st Amendment) and the Public Procurement Regulation, 2007, as amended by Amendment 2073 (2017) - (5th Amendment) and the Public Procurement Regulation 2007, as amended by 9th Amendment (25 Dec. 2019), Public Procurement Regulation 2007, as amended by 10th Amendment (April 27, 2020), such arrangements shall be subject to paragraph 5.4 of the Bank's Procurement Regulations and the following conditions:

(a) Model bidding documents, including contract conditions agreed with the Bank (as amended from time to time), shall be used. Bidding documents shall be made available, by mail or in person, or through e-GP portal to all who are willing to pay the required fee.

(b) The eligibility of bidders shall be as defined under Section III of the Procurement Regulations. Accordingly, no bidder or potential bidder shall be declared ineligible for contracts financed by the Bank for reasons other than those provided in Section III of the Procurement Regulations.

(c) The request for bids/request for proposals document shall require that Bidders/Proposers submitting Bids/Proposals present a signed acceptance (in the form attached) at the time of bidding, to be incorporated in any resulting contracts, confirming application of, and compliance with, the Bank's Anti-Corruption Guidelines, including without limitation the Bank's right to sanction and the Bank's inspection and audit rights.

(d) Qualification criteria (in case pre-qualifications were not carried out) shall be stated in the bidding documents for all contracts, irrespective of the value, and if a registration process is required, a foreign firm declared as the lowest evaluated bidder shall be given a reasonable opportunity to register, without let or hindrance.

(e) Procurement Documents include provisions, as agreed with the Bank, intended to adequately mitigate against environmental, social (including sexual exploitation and abuse and gender-based violence), health and safety ("ESHS") risks and impacts.

(f) Performance security should be an amount of five (5) to ten (10) percent of the contract price and shall not be increased merely based on comparison of the bid price of awarded bidders with the pre-bid cost estimate.

(g) If a contract is terminated because of fundamental breach of contract by the contractor, the amount to be recovered from the contractor representing the employer's additional costs for completing the contract shall be provisioned as agreed with the Bank in model bidding documents.

27. For very small and scattered procurement activities, provincial level ECO offices will follow community-driven development (CDD) procedure in accordance with Clause 6.52 of the World Bank's Procurement Regulations, for works contracts below NPR 2.0 million, and goods, consulting and non-consulting contracts below NPR 1.0 million. Project activities to be carried out through CDD approach will be stipulated in the Project Implementation Manual (PIM), under a separate procurement heading, which will be approved by the World Bank. For such CDD type of procurement, Government of Nepal procurement procedure will be applied and the federal OPD will have the responsibility to regularly monitor the implementation.

28. **Procurement Significance**. Major consulting assignments include a TA Consultant (firm) to assist the OPD on a full-time basis and to ECOs as necessary, a consulting firm to manage the activities of intermediary institution/s assisting agriculture SMEs to enhance their entrepreneurship, and a consulting firm for development of a Management Information System. On demand, major works contracts are envisioned to be construction/upgradation of four regional market centers, to be constructed strategically along the economic corridors, in the participating provinces, and few consulting assignments at the federal level. Although few of these activities will be prior review, majority of the activities are envisaged to be post.

29. **Procurement Plan and Use of the World Bank's STEP System**. The project will implement the World Banks' STEP system for procurement planning and tracking. This provides data on procurement and establishes benchmarks. Procurement methodologies and approaches will be detailed in Project's Implementation Manual. The OPD and ECO offices will have separate accounts for STEP and respective staff of all ECO offices will get STEP profile to enter/upload for all procurement related transactions including procurement planning, bidding, bid/proposal evaluation, contract awarding and contract management for both prior review and post review contracts. The ECO offices will be responsible for maintaining their own procurement activities in STEP, while the same will be closely monitored by the OPD/MoALD. All the procurement activities except those under CDD procedure, will be uploaded in STEP.

30. **Selection of consultants**. Major consulting assignments under this project will be (a) one consulting firm mainly to provide technical assistance to the federal level OPD and ECO offices, (b) one intermediary institution to build capacity/equip agri-SMEs and start-ups for growth (on pilot basis)under component 2.(B) of the project, of the project (c) hiring of a MIS firm; (d) firms to conduct baseline, midterm and end line survey. The TA Consultant (firm) assisting the OPD is envisaged to carry out broad set of activities such as developing communication strategy and executing the communication campaign, developing PP business guidelines, t assist in the procurement of regional market centers etc. Approximately 15 individual consultants with various expertise such as Procurement, Environment & Social safeguard, are envisaged to be hired for the project. Likewise, Junior Technical Assistants (JTAs), civil engineers for supervision of construction/upgradation of regional market centers, at the provinces will be hired at the provincial level.

**31. Procurement of Goods**. No major procurement of goods is envisaged, except Office equipment, IT equipment, vehicles (two wheelers and 4 wheelers), office furniture etc. at the federal OPD and ECO offices. With regards to the

procurement of four-wheel vehicles, the OPD/MoALD will be required to obtain prior approval from the Ministry of Finance, before proceeding with the procurement process.

32. **Procurement of Works**. All major works contracts will occur in provinces 1, 2, 5 and Sudurpashchim and participating municipalities. Upgradation/construction of 4 regional market centers along the economic corridor zones are envisaged as well as construction of 90 municipal agricultural centers and 50 value-chain infrastructures is envisaged, under Component 3 of the project. Procurement of regional market centers will be done by the OPD/MoALD, and ECO offices will be responsible for procuring agriculture service centers and value chain centers. Similarly, construction of demand-driven semi-public infrastructures will also be carried out under the Component 3. However, the scope and value of such works will be determined upon completion of the assessment of economic corridors, pocket areas of rural enterprises, and assessment of proposals from municipalities among others.

33. **Procurement under Community-Driven Development Procedure**. In accordance with the World Bank's Procurement Regulations for CDD procedure, for very small contracts, ECO offices will follow community-driven development (CDD) procedure of the Government of Nepal, for works contracts below NPR 2.0 million and below NPR 1.0 million for goods, consulting and non-consulting contracts. For such CDD type of procurement, Government of Nepal procurement procedure will be applied and the OPD will have responsibility to regularly monitor the implementation.

34. **Procurement Risk Assessment**. The World Bank team conducted procurement risk assessment of MoALD. The MoALD has experience of implementing World Bank financed contracts. Based on the assessment and prior experience of implementing World Bank financed projects, the procurement risk is "Substantial". The assessment of the ECOs will be conducted upon its establishment.

35. **Prior and Post Reviews**. Considering all activities to be of small value, procurement review requirement is envisaged to fall under post review. However, the procurement plan approved in STEP will determine the review threshold. For post review contract procured through CDD procedure, audit conducted by the supreme audit institution of the GON, will be acceptable to the World Bank.

36. **Procurement Support by the World Bank**. The World Bank team will provide implementation support at least twice a year at the field level. In the beginning of the project, a procurement orientation will be provided to all project related staff including project directors/coordinators, procurement officials and consultants, FM officials and consultants and others. The World Bank procurement team will especially organize procurement clinics customized to the project need.

37. **E-Procurement**. Since the National Public Procurement Act and Regulations were passed, procurement has gradually incorporated the use of electronic Government Procurement (e-GP). This is a single online procurement portal operated by PPMO. An upgraded system called e-GP II which allows for online entry of procurement plan, invitation of bids, online submission of bids, uploading of signed contract document. The project will use e-GP for its procurement as per the PPMO's e-GP directive.

**Implementation Support**

38. The World Bank team will provide regular implementation support throughout the project period, with a focus on the initial implementation phase to ensure rapid start-up. It is envisaged that intensive implementation support will

be needed in view of the ow project implementation and fiduciary safeguards capacity of the implementing departments at provincial ECO level.

39. The core World Bank team includes seasoned staff from the Nepal country office, the Washington, DC office, and the South Asia subregion. This reflects the importance of a mix of skills and proximity to the client, especially during the early phases of project implementation.

40. Regular technical missions will be fielded on needed basis (in addition to the biannual implementation support missions to ensure smooth implementation). The World Bank team will also continue to liaise closely with other project teams in Nepal who manage similar operations to ensure regular and continued lesson learning across the portfolio.

41. During implementation support missions, as a standard component of mission tasks, the World Bank team will ask about any issues reported related to potential fraud and corruption and document these in mission documents."

42. During implementation, the World Bank team will continue to explore partnerships with development partners and academic institutions to support project implementation through TA and grant, especially with Development Partners who are active in the agriculture/rural development and in SME/entrepreneurship support.

## Annex 2: Economic and Financing Analysis

1. **Rationale for public sector provision**. Public sector financing is justified given the importance of agricultural production to the country's overall growth and employment, foreign exchange revenues, and poverty reduction as well as the potential provision of environmental public goods. A share of the additional household farm revenues will be used to improve the food security status of these households, while the remainder will generate monetary revenues for them to meet recurrent cash needs and investment requirements.

2. **Direct beneficiaries**. The proposed project is expected to provide direct socio-economic benefits to approximately 900-940 producer groups equivalent to 24,000 rural agricultural households who will benefit from start-up grants (Component 1, $40 million). A typical producer organization (PO) consists of 25farming households each household farming 0.6 ha and comprising 5.5 persons.[17]

3. **Indirect beneficiaries**. In addition, the project expects to benefit a range of indirect beneficiaries through the provision of infrastructure under Component 3, and capacity building under Component 2.

### Financial Analysis

4. The objective of the financial analysis is to demonstrate viability of the project's proposed inventions at the farm household level of illustrative potential producer organizations (PO). Gross margin enterprise budgets are established for cropping and livestock activities to demonstrate the efficiency of investment through positive changes in net income resulting from the REED project. These budgets provide the basic building blocks of the household farming business as expressed in farm budgets. Farm budgets are developed for each of the illustrative types of POs. A farm budget is therefore a function of the farm's cropping (and in some cases) livestock production pattern and the representative budgets for that household type. The farm budget also reflects the investments, the debt service, the on-farm use, household consumption and the labor availability. The financial and economic analysis is formulated on an incremental basis and as such compares the "with" project (WP) situation to the "without" project (WoP) over a 20-year projection period. In this way, the incremental net benefit is derived and forms the basis of the appraisal.

5. **Enterprise and activity production models**. The key PO models developed for the analysis are ginger, off-season vegetables, potato, goat meat and milk. Variants of some models are developed to account for altitude.

6. **Illustrative PO group investments.** The typical investment components at the PO group level include physical assets such as irrigation schemes, storage sheds and livestock housing and would also include a provision for local technical assistance and first years incremental working capital[18]. The grant proportion of the investment amount is assumed 50 percent.[19] The non-grant portion of the investment is assumed to be borrowed over three years at 15 percent interest per annum from a local agricultural finance institution. An example of a business proposal for a goat producer group for example would likely comprise: (a) irrigation scheme; (b) goat housing; (c) a dip tank; (d) breeding bucks; as well as, (e) technical assistance and working capital.[20]

[17] In the case of the economic modelling the $40 million is allocated to the PO HH types as described below. Each HH/PO type has a specific configuration of investment items. The allocation across these PO commodity types is a best estimate given that the project is demand driven. The MG investment amount, the investment package and the number of groups at 25 HH per group defines the number of HHs. A 70 percent adoption rated is applied to the approximately 900 POs identified in the modelling based on the $40 million investment and the typical investment packages for each farm type.
[18] Technical assistance assumed at 15 percent of the asset value. First incremental working capital derived from the farm financial models.
[19] Financed under Subcomponent 1.a Building Productive Partnership to promote rural-based value chains.
[20] Detailed breakdown of typical investment packages for all of the illustrative models is provided in the project file.

7. **Financial Analysis Results.** Table 2.1 indicates rates of return well above the hurdle rate of 10 percent being the proxy for the financial cost of capital[21]. The key indicators clearly indicate the potential of the illustrative PO commodities when assessed on a household basis. The performance of the PO groups as opposed to the households presented here is analogous as in the modelling a group is defined as 25 households. In each instance the IRR is greater than the hurdle rate of 10 percent. The NPV at the 10 percent discount rate is greater than zero and the benefit cost ratio is greater than one. The switching value (SV) is a form of sensitivity test. The SV indicator indicates the percentage change in costs or benefits that would bring the NPV of the project to zero, or more generally, would cause the outcome of the model to fall below the minimum level of acceptability. In the case of Ginger (shown in the table below) the benefits could drop by up to 30 percent before the NPV would show that the model was unviable. Similarly, the Ginger model could "withstand" a 42 percent increase in costs before it is considered unviable.

**Table 2.1 - Key Financial Performance at Household Level**

| Producer Organisation Type | Internal Rate of Return (IRR) % | Net Present Value (NPV) (NPR)\1 | Benefit Cost Ratio (BCR) | Switching Value (%)[2] | |
|---|---|---|---|---|---|
| | | | | Benefits | Costs |
| Ginger | 32.7 | 342,419 | 1.42 | -30 | 42 |
| OSV – Low Hills | 41.6 | 394,552 | 1.68 | -40 | 68 |
| OSV – Mid Hills | 79.6 | 563,900 | 2.28 | -56 | 128 |
| Potato – Mid Hill | 39.9 | 379,220 | 1.73 | -42 | 73 |
| Potato – High Hills | 46.1 | 405,988 | 1.80 | -45 | 80 |
| Goat – Low Hills | 63.4 | 352,616 | 1.53 | -35 | 53 |
| Goat – High Hills | 36.9 | 599,319 | 1.32 | -24 | 32 |
| Milk – Mid Hills | 61.2 | 3,546,639 | 3.12 | -68 | 212 |
| | | | | | |
| *Criteria:* | *>10* | *> NPR 0* | *>1* | | |

Source: REED financial models

\1 NPV @ 10 percent.

\2 Switching value indicator provides the percentage change in costs or benefits that would bring the NPV of the project to zero, or more generally, would cause the outcome of the project to fall below the minimum level of acceptability. See text above.

**Economic Analysis**

8. **Objectives and Methodology.** The objective of the economic analysis is to evaluate the expected contribution of the proposed project to the economic development of the REED project districts and economy at large. The purpose of such analysis is to determine whether the economic benefits sufficiently justify the use of the project resources. The analysis includes all incremental costs and incremental benefits that are quantifiable and associated with proposed REED investments. Non-quantified benefits are also described.

9. **Approach**. The estimation of the incremental production at household level forms the basis of the benefit valuation analytical framework. Individual crop production and livestock enterprise models representing the likely value chain commodities are established together with the typical household staple crops. In the manner described in the

[21] A 10 percent discount rate equivalent to a one-year retail bank deposit rate, e.g. www.nibl.com.np 29 Jan 2020.

financial analysis, crop and livestock enterprise models are combined to estimate incremental household production and cashflow. These representative households are then aggregated to establish a project level value of incremental production. This is then combined with incremental project costs to derive the key appraisal indicators. The key parameters underpinning the economic analysis are the application of a standard conversion factor of 0.91[22] and a shadow wage rate factor of 85 percent[23] as well as the elimination of value added tax of 13 percent.[24]

10. **Quantified Benefits—Incremental Production**. The quantified benefits assume a phased introduction of the PO households. For the purposes of the economic analysis it is assumed the incremental uptake across the illustrative PO types is shown in Table 2.2. This table indicates that by the end of the implementation period around 24,000 household will be involved in PO activities. At 25 households per PO this equates to around 900 POs. These figures assume a conservative adoption rate of 75 percent, allowing for both non-adoption and drop out over time. The performance of the potential PO households is described above in the financial analysis. The project incremental benefits are derived through the aggregation of the individual household models phased according to the distributions shown in Table 2.2, with values expressed in economic terms.

11. The entry of each household into the project is represented in the cost benefit analysis cashflow by the incremental net benefit stream of the related household model.

12. Economic analysis also considers externalities, in the form of avoided carbon emissions. The GHG Accounting exercise undertaken estimates that the annual impact is a net increase in emissions at full implementation is 4,637 tonnes CO2-e per annum (see Annex GHG accounting for details). This analysis applies the low and high carbon pricing regimes to the analysis following the 2017 World Bank Guidance Note for the shadow price of carbon. The low and high price scenarios starting at $40 and $80 respectively in 2020 and increasing to $50 and 100 by 2030. The results are presented below.

13. **Note on Unquantified Benefits**. Unquantified benefits are expected to be realised for a significant number of households through the establishment and/or improvement to public infrastructure under Component 2 and Capacity Building of Component 3.

14. **Increment economic costs**. The costs are based on the full REED project costing with the elimination of the value of the beneficiaries' contributions.[25] Remaining costs have been adjusted to economic terms with taxes, duties, grants and price contingencies removed. An annual allowance has been made for the ongoing maintenance of public infrastructure under Component 3 during the post implementation period (Years 6 to 20).

[22] As commonly applied in recent projects designs in Nepal. As appropriate all financial costs are converted into economic costs through the elimination of subsidies, duties and taxes.
[23] Applied to unskilled wage rates to reflect the relative abundance of unskilled labor, though in some locations at sometimes of year this may undervalue unskilled labor due to the temporary migration of labor to other parts of Nepal or abroad.
[24] Included in project costs and eliminated as appropriate for conversion to economic costs.
[25] The value of the investments included in the household modelling are deducted from the project cost to avoid double counting.

**Table 2.2 – Economic Analysis projected PO Household Participation**

| Illustrative Producer Organisations | Household Numbers | | | | | |
|---|---|---|---|---|---|---|
| | PY 1 | PY 2 | PY 3 | PY 4 | PY 5 | Total |
| Ginger | - | 405 | 1,080 | 1,080 | 135 | **2,700** |
| Goats Mid Hills | - | 383 | 990 | 990 | 135 | **2,498** |
| Goats High Hills | - | 383 | 990 | 990 | 135 | **2,498** |
| Milk | - | 450 | 1,215 | 1,215 | 158 | **3,038** |
| OSV Low Hills[\1] | - | 383 | 990 | 990 | 135 | **2,498** |
| OSV High Hills | - | 383 | 990 | 990 | 135 | **2,498** |
| Potato Mid Hills | - | 405 | 1,080 | 1,080 | 135 | **2,700** |
| Potato High Hills | - | 405 | 1,080 | 1,080 | 135 | **2,700** |
| **Total** | **-** | **3,197** | **8,415** | **8,415** | **1,103** | **21,130** |

Source: REED beneficiary model - Consultants estimates
Assumes 75% adoption rate
[\1] Off-season vegetables

15. **Project economic viability.** Three indicators have been used to assess the overall performance of the project. These are: (i) the economic rate of return (ERR); (ii) the economic net present value (ENPV) and the benefit cost ratio (BCR). These were estimated using cash flow of the incremental benefit and cost streams as outlined above. The overall REED project (prior to the inclusion of the value of GHG emission impacts) has an ERR of 24.0 percent. The estimated ENPV at a 10 percent discount rate is NPR 13,323 million ($115.9 million). The BCR of 4.6 indicating a return of approximately 4.60 dollars for every dollar invested. These results indicate that the project investments yield a positive rate of return as the ERR > the hurdle rate (10 percent) and the ENPV > zero[26]. An increase in programme costs by 10 percent will reduce the ERR to 23.3 percent, while a decrease in overall programme benefits by 20 percent will result in an ERR of 22.2 percent. A one-year delay in benefits reduces the ERR to 22.4 percent and a two-year delay to 20.8 percent. A combination of a reduction in benefits of 20 percent and an increase in costs by 20 percent reduces the ERR to 20.6 percent indicating the investment is remains viable in the face of adverse circumstances. The switching values[27] show that the programme would remain economically viable if benefits decreased by 78 percent, or programme costs increased by 356 percent.

16. **Incorporation of the value of avoided emissions.** The impact on the key economic indicators of the inclusion of the GHG emission reductions is shown in Table 2.3 below. See above for details of the estimation and valuation of the GHG impacts. The average annual value of the emission impacts at the low and high shadow price projections are equivalent to an additional cost impost of $51 million and $101 million per annum respectively over the course of the 20-year analysis period. The inclusion of the value of the GHG impacts has a slight negative impact, however the project investment remains justified.

[26] A social discount rate of 10 percent is assumed consistent with recent World Bank practice.
[27] Switching values —indicate the change in a parameter required for the project decision to shift from acceptance to rejection. In the instance of the Base Case (Table 2.3) the benefits would need to decrease by 78 percent to make the ERR equate to 9 percent i.e. the hurdle rate or the economic NPV equal to USD zero.

Table 2.3 – Inclusion of GHG impacts in the Economic Analysis.

| Scenario | ERR % | NPV (NPR mill)[\1] | BCR | Switching Values (%) | |
|---|---|---|---|---|---|
| | | | | Benefits | Costs |
| Base case (no GHG co-benefits) | 24.0 | 13,323 | 4.56 x | (78) | 356 |
| Base case + Low carbon price projection[\2] | 23.9 | 13,137 | 4.51 x | (78) | 351 |
| Base case + High carbon price projection [\2] | 23.7 | 12,952 | 4.46 x | (78) | 346 |

Source: REED economic model – Consultants estimates

[\1] NPV @ 10 percent.

[\2] Note that the project's GHG impact is positive and consequently is a cost impost not a benefit.

[\3] Switching values —indicate the change in a parameter required for the project decision to shift from acceptance to rejection. In the instance of the Base Case (Table 2.3) the benefits would need to decrease by 78 percent to make the ERR equate to 9 percent i.e. the hurdle rate or the economic NPV equal to USD zero.

## Annex 3: Gender Gap Analysis

1. The gender mainstreaming approach for the REED Project is informed by a literature review of women's non-farm employment in Nepal,[28] and an in-depth analysis[29] of rural women in terms of barriers, economic participation, employment and empowerment and also qualitative assessment based on primary data collected through focus group discussion (FGD)[30]. Women are more likely than men to work in agriculture and less likely than men to work in industry/manufacturing and service.

2. Rural women entrepreneurs face greater challenges than male entrepreneurs in Nepal (Bushell 2008, Dwibedi 2015, FAO 2019). Gendered social norms as well as institutional and legal frameworks which often put strenuous demands on women's time (as they are often expected to carry out the bulk of the unpaid and care work in the household, in addition to the demands in paid work), restrict their mobility, limit equitable access to markets and market information, finance, and technology and other productive resources and information, and thus do not allow producers and entrepreneurs to reach their full potential. Moreover, women entrepreneurs tend to be concentrated in lower skill business (gendered labor market segregations), that are often closer to home, so that women could still take care of their household responsibilities. Mobility constraints may limit women's ability to attend training, to access higher-value markets. Women are also under-represented in producer organizations. This is in part because women are often not seen as primary farmers or decision-makers. The analytical study (Kar et al. 2018) clearly shows that this is changing and women's roles and responsibilities in rural economies are growing. According to the 2014/15 Household Survey (Central Bureau of Statistics 2016), women's weekly workloads (58.8 hours) exceed that of men (47.9 hours) by 11 hours. Similar, outcomes from the primary data based on FGD revealed women are bounded by household work, child-rearing, taking care of elderly members in the household and farming responsibilities, which do not allow them to focus on their business growth.

3. The REED project aims to support women's entrepreneurship by addressing constraints in the areas of (i) access to markets and market information and (ii) access to technology, and (iii) access to business skills training and business development services.

4. **Access to markets and market information.** Access to market information for women in a rural setting can be challenging, given that women entrepreneurs face not only lack of information sources to consult but also that the sources they consult can be poor in quality. The analytical study showed for rural women very low engagement in higher value chain activities can be linked to women's low skills, lack of access to market information. Also, most front-line extension workers are men, extension messages and information, including agriculture inputs and technology, do not reach out to women living in remote areas. Due to lack of market information, rural female producers/entrepreneurs often struggle to understand the opportunities in both domestic and international markets, distribution options, the industry standards associated with each target demographic, and the logistical constraints. Combined, lack of market information can hinder women, rural entrepreneurs, to establish and strengthen commercial linkages with qualified buyers in absence of a unique business support model that contains the inbuilt capacity to contribute valuable interventions for enterprise creation and development.

[28] World Bank study "Women's Non-Farm Employment in Nepal: A Desk Review" prepared by the SARTFP Gender Platform.
[29] Kar,Anuja; Slavchevska,Vanya; Kaaria,Susan; Taivalmaa, Sanna Lisa; Mane, Erdgin; Ciacci, Riccardo; Hoberg,Yurie Tanimichi; Townsend,Robert; Stanley,Victoria 2018. "Male outmigration and women's work and empowerment in agriculture: the case of Nepal and Senegal." Washington, DC: World Bank Group. https://hubs.worldbank.org/docs/imagebank/pages/docprofile.aspx?nodeid=30214769
[30] The sample of participants for the FGD were selected from Poverty Alleviation Fund (PAF) communities, Microenterprise Development Program (MEDPA) program community members, Heifer International Project Area and potential Food and Nutrition Enhancement Project (FANSEP) beneficiaries.

5. **Access to Technology.** Access to labor-saving technology is found to be a critical challenge both in the in-depth analytical paper and FGD. Rural women in Nepal are also less likely to afford or have access to mobile phones and the Internet. In 2017, only 1 percent of women used the Internet to pay a bill or buy something online (Demirgüç-Kunt et al., 2018). Given that the Internet has become increasingly important for business processes and e-commerce, women's low access to such technology results in critical information gaps about market prices of inputs as well as consumer products and services sold to intermediaries. In addition, women are unable to communicate with other sellers and prospective buyers or to make use of online marketing tools (e.g., websites). However, given structural and physical barriers (e.g., living outside of Internet / cell network areas), financial constraints, limited knowledge and skills of information and communication technology (ICT)-use, and a general lack of decision-making power, women are unable to leverage the Internet and similar technologies to their full potential. It is noted that women's agricultural technologies – traditional technologies that are labor-intensive – tend to be overlooked in technology support, particularly those for land preparation, weeding, drying, and energy.

6. **Access to business skills training and business development services**. Rural women often found to be heavily reliant on traditional knowledge and expertise in their domain. To expand business activities and meet market demand, women need to be supported in acquiring technical skills in product development and design as well as in better understanding market trends and consumer demand. Furthermore, skills enhancement support is necessary to enable women to meet quality assurance and standards. Understanding these standards would assist women in benchmarking the quality of their products against international standards. Finally, women require training in business development (for example, business plan development, enterprise management, networking/market linkages/negotiating skills, policy lobbying, governance, technology transfer, technical aspects, administration and bookkeeping).

7. **Gender Dimension of COVID-19.** Globally, COVID-19 may amplify the existing gender gaps (World Bank 2020).[31] One of the major transmission channel through which the pandemic can adversely women in the context of REED is through increase in social responsibilities and care demands, which may exert additional pressure for women's availability to work and generate income. In particular, rural entrepreneurs may face additional challenges to resume operation after prolong lockdown due to lack of access to finance and access to appropriate technology to function in a restrictive environment.

8. To address the gender gap in the agricultural and business development/entrepreneurs' sector, the project will undertake activities and interventions embedded with a gender lens. While all major REED activities will have a gender-sensitive approach, the component 1.a Building Productive Partnership to promote rural-based value chains) will embed targeted gender-sensitive sub-activities. The broader objective of the interventions is to focus on strengthening women's roles in productive partnerships, and their profit and market orientation as growth-oriented SMEs. The project will invest in organizational development that enables women's farming groups to become economically viable and sustainable, facilitate leadership training, mentorship and sensitization of private sector, cooperatives etc to improve women's representation at the management and decision-making levels of the institutions. At the farm-level the project will build entrepreneurial and innovative business development skills in women and provide suitable equipment to ease the burden of farming. The component design includes measures to specifically target the economic participation of women in business development activities and, incubator hubs will include activities dedicated exclusively for women entrepreneurs in partnership with various women's networks. The project will leverage the potential of these networks to become effective conduits of information and delivery of market information to its beneficiaries in the areas:

[31] World Bank (2020). Gender Dimensions of the CoVID-19 pandemic

(a) Targeted communication campaign
(b) Virtual Business Incubation to increase entrepreneurial skills (coaching on the formulation of business plans and associated subproject applications, handholding, building self-esteem, and leadership capabilities)
(c) Increase women farmer's access to finance, also via enabling access to 'alternative delivery channels' such as the use of technology solutions
(d) Digital market channels for women entrepreneurs

9. **Communication campaign.** REED will roll-out a targeted communications strategy to inform and attract potential women rural entrepreneurs, through hosting promotional events, activities, campaigns through electronic and print media, workshops, training vents, mass information. As part of the communication campaign print materials will be designed specifically targeted for rural entrepreneurs (including those with basic literacy skills). The materials will be distributing through local radio channels or television (in partnership with local cable television networks) and also using social media and other platforms that can work offline. The communication campaign will be a impactful avenue to provide appropriate preventive measures, increase social awareness.

10. **Virtual Incubation.** Building on Microenterprise Development for Poverty Alleviation (MEDPA)-TA's micro-enterprise development model, REED will provide technical assistance (for women's groups and leaders in productive alliances using 'Virtual Entrepreneurship Incubators' (provide training, technical assistance, business counseling, mentoring). As part of the incubation, REED will also provide (via Enterprise Development Facilitator (EDF) trained by MEDPA-TA; specialized trainers/consultants) training and council for 'women-only' groups as well as spouses and/or male decision-makers in the house to provide gender-informed sensitization, which is imperative for creating a stronger enabling environment for female farmers to operate. REED will provide hand-holding and sustainable training to continue the chain of learning throughout the phase of incubation rather than 'Adhoc' training which results in limited success as came out from FGDs.

11. **Access to Finance.** REED embeds promotion and delivery of inclusive financial services (e.g. start-up grant), which can be obtained by rural women entrepreneurs to meet the product specifications in terms of quality, quantity, agreed price and consistency of supply as demanded by the buyers. To facilitate access to finance, targeted financial literacy, product development training will be given through the business incubation (as mentioned above).

12. **Digital market channels for women entrepreneurs.** For facilitating access to technology REED will work with a consortium of private technology providers, who can be either identified as 'Growth-Oriented' SME/Technology start-up and help producer-groups to avail access to technology and provide technical assistance. REED will also create avenues for service providers (NGOs etc.) to be trained on new technologies such as accessing 'digital tokens' (e.g. a platform connecting users to financing and vendors to build a vibrant economy of small-scale agri-businesses); 'virtual platform' that works online or offline (e.g. offers package of practices; price information; buying and selling options; access the contact details of helping intuitions like NGO/INGO, DADO, DLSO, government bodies, research centers, and banks; etc.).

## Annex 4: Climate Co-Benefits and GHG Accounting

Part A: Climate Co-Benefits

### Climate Vulnerability Context

1. The key hazards to agriculture production and livestock and agribusiness development in the project areas are climate induced extreme weather events such as precipitation and resultant flood, landslide and erosion. Past floods in the project areas have caused significant damages to crop, livestock and arable land. For instance, the agriculture sector faced substantial damages from 2017 floods. Mean annual precipitation is estimated to increase by 50.7 mm and the proportion of rain that falls in heavy events is projected to increase with some estimating threefold increase in monsoon rainfall. This could result in more frequent monsoon floods. Similarly, temperature has risen by on average 0.5 to 0.6 °C per decade and is projected to increase by 1.3- 3.8 °C by 2060s relative to present condition. Drought due to intra-seasonal monsoon such as late onset, long dry spells, and intensive rainfall spells after long dry spells, has led to crop losses. Changes in precipitation patterns and increased weather-related hazards are likely to affect rain-fed agriculture, causing higher yield variability and production risks. It has been estimated that yield levels of maize, potato, sugarcane and lentil could decrease by -16 percent, -8.9 percent, -8.0 percent and -4.9 percent, respectively, compared to business-as-usual scenario in 2050. Climate variability and extreme events are projected to affect overall economic performance, costing Nepal between $270 million to $360 million/year (in 2013 prices), representing 1.5 to 2 percent of the country's GDP.[32]

2. Therefore, climate resilient agriculture and adaptation is critical to mitigate climate change induced risks and consequent negative impacts in the agriculture sector. Many of the climate smart agriculture practices, technologies (see Table 1) and capacity building initiatives which will be supported by REED, also contribute to a reduction of GHG emissions from the sector and have the potential to enhance carbon sequestration. Supporting climate-resilient measure through REED is also in line with Nepal's Agriculture Development Strategy's (ADS 2015-2035) which also aims to implement climate resilient agriculture practices to increase productivity and promote adaptation to climate change, extreme weather, drought, flooding and other disasters that progressively improve land and soil quality.

3. Climate change also poses risks to physical infrastructure critical for rural enterprises. Agricultural production and agribusinesses related to high-value agricultural products are concentrated in specific regions, in most cases along different road corridors. The performance and stability of road, bridges and other market-related infrastructure are at risk of suffering severe impacts of climate change, when increased precipitation amounts result in surface run-off from slopes, increased flows in gullies, drainage channels, and rivers. The vulnerability to market centers, value-chain infrastructures and transports infrastructure could critically affect the success of rural enterprises promoted by REED. The performance of climate risk and hazard assessments, and support of climate resilient infrastructure is thus of utmost importance for REED.

[32] CIAT and World Bank (2017), "Nepal. Climate-Smart Agriculture Country Profile."

Table 1: Component-wise Adaptation and Mitigation Climate Benefits

| Component/Subcomponent | Adaptation Co-Benefits | Mitigation Co-Benefits |
|---|---|---|
| ***Component 1: Strengthening Market Linkages through Productive Partnerships*** | | |
| This sub-component aims to support rural entrepreneurs to establish and strengthen commercial linkages with qualified buyers and end-markets by building "Productive Partnership (PP)". The business plans of PPs will be climate-informed. | Preparation of climate informed business plans and consideration for climate adaptive measures and climate smart agriculture practices such as drought/flood resilient crops and seeds varieties, precision irrigation, integrated pest and fertility management, improved feed and pasture management, feed stalls, manure management water management, nutrient management, and residue management will increase resilience of farmers and thus contribute to climate adaptation and enhance climate resilience of the targeted beneficiaries. | Consideration for potential climate mitigation measures such as integrated pest and diseases management, fertilizer management, improved pasture management, crop residue management, feed stalls which allow to enhance productivity, energy-efficient or renewable energy irrigation systems and improved, water management, will aid in reducing GHG emissions |
| ***Component 2: Strengthening the entrepreneurship ecosystem in the federal structure*** | | |
| *Subcomponent 2a: Building the capacity of provincial and local government and related agencies* | | |
| This subcomponent will carry out capacity needs assessment (CNA) to identify expertise and skills required to support the provincial and local government. The subcomponent will support in building the institutional capacity of climate-induced risks and challenges and strengthen climate resiliency, strategies to enhance efficiency and resources use along the agri-business value chains (e.g. production input use efficiency, energy-efficiency), reducing post-harvest losses, mechanism and framework to deepen extension advisory services at ward level and development of digital platform for market information at local level. | This subcomponent, will strengthen the ability of local, provincial and federal government to incorporate climate smart technology and practices, climate risk mitigation and adaptation measures in policies, guidelines, strategies and standards developed under the regulatory framework and capacitate them to enforce implementation of such practices and measures. This subcomponent will complement the Climate Adaptation and Resilience for South Asia (CARE) Project which will improve dataflows and functionalities of existing Agriculture Management Information System (AMIS) and roll out AMIS to local/provincial level to support agriculture extensions/advisories to farmers. It will provide training to local governments on climate change adaptation, conduct analytical work to establish the scientific base for agro-climatic zoning policy and agricultural policy analysis to support climate-resilient policy actions. | |
| | | |
| *Subcomponent 2.b: Capacity building of Intermediary Institutions and SMEs* | | |

| | | |
|---|---|---|
| This subcomponent will build a pipeline of potential PPs by nurturing additional rural entrepreneurs through business incubators and accelerators and by linking them to buyers identified through PPs establish under component 1.a. These buyers will be selected among those that have proximity to market and market information and are innovators and respected thought leaders in their industries. | The subcomponent will support capacity building of intermediary institutions so that they can address climate-induced risks and strengthen climate resilience in SMEs and agri-tech start-ups. It will specifically target selected SMEs/start-ups specializing in CSA technologies, climate innovation, digital and ICT sector which will in turn provide services to project-supported POs and rural agri-entrepreneurs and agri-SMEs. These services will include weather forecast, early warning and advisory services, technology precision agriculture, drip irrigation, crop nutrient management which will aid in building resilience of beneficiaries and contribute to climate adaptation. | The proposed activities have a potential for climate mitigation. The selected SMEs/start-ups providing renewable energy systems and services such as renewable energy irrigation, solar water lift system, and precision irrigation such as drip irrigation system will contribute to decreased emission compared to business-as-usual scenario and thus could aid in climate mitigation. |
| *Component 3: Restoring and strengthening COVID-19-disrupted food supply chain and local economy* | | |
| The component will support investments in (i) regional market centers that will promote trade, market linkages and agribusiness development at the selected economic corridors and, (ii) municipal agriculture centers and value-chain infrastructures at local level. | Targeted beneficiaries and other farmers/producers will be able to safely store their produce during extreme weather and unfavorable market access conditions through market centers and value chain infrastructures thus increasing their resilience against climate shocks. Agriculture Centers will cater to farmers by introducing and/or developing climate-resilient and improved varieties of crops and seeds as per local needs and, providing agriculture extension/advisories including climate smart agriculture which will increase climate resilience of beneficiaries and farmers. | These infrastructure investments will be designed with renewable and efficient energy considerations, which will contribute to climate mitigation. |

Part B "Green House Gas Accounting"

4. **Corporate Mandate.** The GHG analysis has been carried out as part of a corporate mandate to conduct GHG emissions accounting for investment lending in relevant sectors. The ex-ante quantification of GHG emissions is an important step in managing and ultimately reducing GHG emissions, and it is becoming a common practice for many international financial institutions. The assessment will be further refined during the project's appraisal stage.

5. **Methodology.** To estimate the impact of agricultural investment lending on GHG emissions and carbon sequestration, the Ex-Ante Carbon-Balance Tool (EX-ACT v8.5), developed by the Food and Agriculture Organization (FAO) was used. EX-ACT allows the assessment of a project's net carbon balance, defined as the net balance of CO2 equivalent (CO2eq) GHG emitted or sequestered as a result of project implementation compared to a Without project (WOP) scenario. EX-ACT estimates the carbon stock changes (emissions or sinks), expressed in equivalent tons of CO2 per hectare and year.

6. **Project characteristics and assumptions.** The dominant climate of the project area is warm temperate climate and moist. The dominant soil type is HAC Soils. The project implementation phase is 5 years of actual implementation and the capitalization phase is assumed to be 15 years, resulting in a 20 years implementation period which is common in the use of EX-ACT and aligned with the project period for the Economic and Financial Analysis. During project consultations, it was assumed that the main benefit from Component 1.a. on primary production would come from improved agricultural management through improved agronomic practices, no residue/biomass burning and residue management, nutrient management and water management. This will aid in GHG emission reduction.

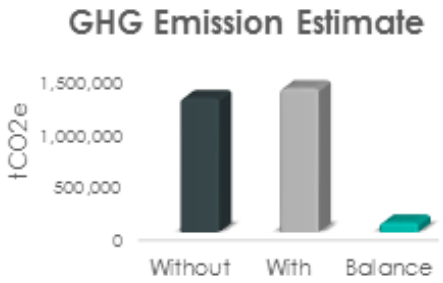
7. For the majority of crops, it is estimated that inputs, in particular fertilizers, would increase under the project. This will lead to GHG emission. Similarly, for dairy cattle value chain, it is estimated that the project activities will lead to improvement in feeding practices in at least 50 percent of the herd reducing net GHG emissions. However, in case of dairy cattle and goat value-chain, it is estimated that the total number of cattle and goats will increase by 450 and 42,744 numbers respectively under the project scenario by the end of the implementation phase. Therefore, this will lead to significant increase in GHG emission which contributes to net GHG emission under the project scenario.

8. The project's economic and financial analysis (EFA) and GHG Accounting is based on FARMOD's model output. The source of input data for the FARMOD model is High Value Agriculture Project in Hill and Mountain Areas (2009-2018) under International Fund for Agriculture Development (IFAD). The model projects that the cattle's and goats' numbers will continue to increase until year 14 from the project's commencement year. There is limitation in EX-ACT tool to reflect this increment that will occur even after the completion of the project and thus, does not account for consequent GHG emission. Additionally, the project includes the construction of municipal agriculture centers, value-chain infrastructures and market centers which is estimated to be 45,000 $m^2$. This has been reflected under Agriculture Buildings (concrete) in EX-ACT and the construction of these new infrastructures will also contribute to GHG emission.

| | Existing (ha) | WoP (ha) | WiP (ha) | Remarks/Assumptions |
|---|---|---|---|---|
| Ginger | 1620 | 162 | 1134 | Improved management in 70 percent of farm areas through improved agronomics, no residue/biomass burning, water and manure management |
| off-season veg low hills | 1499 | 150 | 1049 | |
| off-season veg mid hills | 1499 | 150 | 1049 | |
| potato mid hills | 1620 | 162 | 1134 | |
| potato high hills | 1350 | 135 | 945 | |

Indicative improvement in management practices of production areas

9. **Results.** The project leads to estimated total GHG emission of 96,000 tCO2e over the economic lifetime of the project when compared to a business-as-usual baseline scenario. The calculations showed that improved agriculture management and agronomic practices, nutrient management, water management and residue management lead to increased carbon sequestration and thus result in GHG mitigation. However, increased usage of fertilizers mainly, urea, potash and phosphorous, under the project scenario will lead to GHG emission. The calculations showed that livestock sector will significantly contribute to GHG emission as the number of dairy cattle and in particular, goats, is assumed to increase under the project scenario. Also, GHG emission from construction of agriculture centers, value-chain infrastructures is estimated to be 50,427 tCO2e. Therefore, there will be net positive GHG emission under the project scenario. After 20 years, a time frame consistent with the EFA of the project, net GHG emission amounts to 96,000 tCO2eq. This is equivalent to annual GHG emissions of 4,800 tCO2e.




Annual and Total GHG Emissions with and without Project and balance ($tCO_2eq$)

| Project activities | Over the economic Project lifetime (tCO2eq) | | | Annual average (tCO2eq/year) | | |
|---|---|---|---|---|---|---|
| | GHG emissions of "without Project" | Gross emissions of "with Project | Net GHG emissions (2–1) | GHG emissions of "without Project" | Gross emissions of "with Project" | Net GHG emissions (4–3) |

| | scenario (1) | scenario (2) | | scenario (3) | scenario (4) | |
|---|---|---|---|---|---|---|
| Agriculture | -81,164 | -281,630 | -200,466 | -4,058 | -14,081 | -10,023 |
| Livestock | 1,071,298 | 1,314,072 | 242,773 | 53,565 | 65,704 | 12,139 |
| Inputs | 278,239 | 328,6663 31,584 | 50,427 | 13,912 | 16,433 | 2,521 |
| Total | **1,268,373** | **1,361,107** | **92,734** | **63,419** | **68,055** | **4,637** |