



FOR OFFICIAL USE ONLY

Report No: PAD5485

INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED GRANT

IN THE AMOUNT OF US\$20 MILLION

FROM THE GLOBAL AGRICULTURE AND FOOD SECURITY PROGRAM (GAFSP)

TO

NEPAL

FOR A

FOOD AND NUTRITION SECURITY ENHANCEMENT PROJECT II

September 18, 2023

Agriculture and Food Global Practice
South Asia Region

CURRENCY EQUIVALENTS
(Exchange Rate Effective July 31, 2023)

Currency Unit = Nepalese Rupee (NPR)

NPR 130 = US\$1

FISCAL YEAR
July 16 – July 15

ABBREVIATIONS AND ACRONYMS

| | |
|--------|---|
| ADS | Agricultural Development Strategy |
| AI | Artificial Insemination |
| BCC | Behavior Change Communication |
| CPF | Country Partnership Framework |
| CSA | Climate-Smart Agriculture |
| DA | Designated Account |
| DIME | Development Impact Evaluation |
| EIRR | Economic Internal Rate of Return |
| ESCP | Environmental and Social Commitment Plan |
| ESF | Environment and Social Framework |
| ESMF | Environmental and Social Management Framework |
| ESS | Environmental and Social Standards |
| FANSEP | Food and Nutrition Security Enhancement Project |
| FAO | Food and Agriculture Organization |
| FBS | Farm Business School |
| FFS | Farmer Field School |
| FIRR | Financial Internal Rate of Return |
| FM | Financial Management |
| GAFSP | Global Agriculture Food Security Program |
| GDP | Gross Domestic Product |
| GHG | Greenhouse Gas |
| GoN | Government of Nepal |
| GRID | Green, Inclusive, and Resilient Development |
| GRM | Grievance Redress Mechanism |
| H1FY | First half Fiscal Year |
| HNG | Home Nutrition Garden |
| IUFR | Interim Unaudited Financial Report |
| LTS | Long-term Strategy for Net-zero Emission |
| M&E | Monitoring and Evaluation |
| MoALD | Ministry of Agriculture and Livestock Development |
| MOU | Memorandum of Understanding |
| MSNP | Multi-Sector Nutrition Plan |
| MTR | Midterm Review |

| | |
|--------|---|
| NAFHA | Nuts and Fruits in Hilly Areas of Nepal |
| NAP | National Adaptation Plan |
| NARC | Nepal Agricultural Research Council |
| NFS | Nutrition Field School |
| NGO | Nongovernmental Organization |
| NLSIP | Nepal Livestock Sector Innovation Project |
| OAG | Office of the Auditor General |
| OCC | Opportunity Cost of Capital |
| PCU | Project Coordination Unit |
| PDO | Project Development Objective |
| PG | Producer Group |
| PIM | Project Implementation Manual |
| PLR | Performance and Learning Review |
| PMIS | Project Management Information System |
| PMU | Project Management Unit |
| PPSD | Project Procurement Strategy for Development |
| REED | Rural Economic Enterprise Development Project |
| SDGs | Sustainable Development Goals |
| SEA/SH | Sexual Exploitation and Abuse/Sexual Harassment |
| SEP | Stakeholder Engagement Plan |
| SNDC | Second Nationally Determined Contribution |
| STEP | Systematic Tracking of Exchanges in Procurement |
| TA | Technical Assistance |
| UN | United Nations |

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DATASHEET

BASIC INFORMATION

| | | | |
|-----------------------------------|--|--|--|
| Project Beneficiary(ies) Nepal | Operation Name Food And Nutrition Security Enhancement Project II | | |
| Operation ID P181087 | Financing Instrument Investment Project Financing (IPF) | Environmental and Social Risk Classification Moderate | |

Financing & Implementation Modalities

| | |
|---|--|
| <input type="checkbox"/> Multiphase Programmatic Approach (MPA) | <input type="checkbox"/> Contingent Emergency Response Component (CERC) |
| <input type="checkbox"/> Series of Projects (SOP) | <input type="checkbox"/> Fragile State(s) |
| <input type="checkbox"/> Performance-Based Conditions (PBCs) | <input type="checkbox"/> Small State(s) |
| <input type="checkbox"/> Financial Intermediaries (FI) | <input type="checkbox"/> Fragile within a non-fragile Country |
| <input type="checkbox"/> Project-Based Guarantee | <input type="checkbox"/> Conflict |
| <input type="checkbox"/> Deferred Drawdown | <input type="checkbox"/> Responding to Natural or Man-made Disaster |
| <input type="checkbox"/> Alternative Procurement Arrangements (APA) | <input type="checkbox"/> Hands-on Expanded Implementation Support (HEIS) |

| | |
|---------------------------------------|--------------------------------------|
| Expected Approval Date 29-Sep-2023 | Expected Closing Date 30-Jun-2027 |
| Bank/IFC Collaboration No | |

Proposed Development Objective(s)

The PDO is to enhance climate resilience, and improve agricultural productivity and nutrition practices of targeted smallholder farming communities in selected areas of Nepal.

Components



| Component Name | Cost (US\$) |
|---|--------------|
| Component A: Climate and Nutrition Smart Agricultural Technology Adaptation and Dissemination | 7,800,000.00 |
| Component B: Income Generation and Diversification | 5,400,000.00 |
| Component C: Improving Nutrition Security | 4,800,000.00 |
| Component D: Project management, communication, and M&E | 2,000,000.00 |

Organizations

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

PROJECT FINANCING DATA (US\$, Millions)**Maximizing Finance for Development**

Is this an MFD-Enabling Project (MFD-EP)?

Is this project Private Capital Enabling (PCE)?

SUMMARY

| | |
|-----------------------------|--------------|
| Total Operation Cost | 22.00 |
| Total Financing | 22.00 |
| Financing Gap | 0.00 |

DETAILS**Non-World Bank Group Financing**

| | |
|--|-------|
| Counterpart Funding | 2.00 |
| Borrowing Agency | 2.00 |
| Trust Funds | 20.00 |
| Global Agriculture and Food Security Program | 20.00 |

Expected Disbursements (US\$, Millions)



| WB Fiscal Year | 2024 | 2025 | 2026 | 2027 | 2028 |
|----------------|------|------|-------|-------|-------|
| Annual | 3.00 | 6.00 | 6.00 | 3.00 | 2.00 |
| Cumulative | 3.00 | 9.00 | 15.00 | 18.00 | 20.00 |

PRACTICE AREA(S)

Practice Area (Lead)

Agriculture and Food

Contributing Practice Areas

Climate Change; Environment, Natural Resources & the Blue Economy; Gender; Health, Nutrition & Population

SYSTEMATIC OPERATIONS RISK- RATING TOOL (SORT)

Risk Category

Rating

| | |
|---|---------------|
| 1. Political and Governance | ● Substantial |
| 2. Macroeconomic | ● Moderate |
| 3. Sector Strategies and Policies | ● Moderate |
| 4. Technical Design of Project or Program | ● Low |
| 5. Institutional Capacity for Implementation and Sustainability | ● Moderate |
| 6. Fiduciary | ● Moderate |
| 7. Environment and Social | ● Moderate |
| 8. Stakeholders | ● Moderate |
| 9. Other | |
| 10. Overall | ● Moderate |

POLICY 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

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

| E & S Standards | Relevance |
|--|------------------------|
| ESS 1: Assessment and Management of Environmental and Social Risks and Impacts | Relevant |
| ESS 10: Stakeholder Engagement and Information Disclosure | 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 | Not Currently Relevant |
| ESS 9: 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

Legal Covenants

Sections and Description

For purposes of Project oversight, implementation and coordination, the Recipient shall maintain, throughout the period of Project implementation, the Project Steering Committee , chaired by the Secretary, MoALD and having composition and functions satisfactory to the Recipient and the Bank, such functions to include facilitation of inter-agency/inter-ministerial cooperation and coordination, provision of oversight and policy guidance, approval of annual work plans, monitoring of Project implementation, and resolving of outstanding issues. In addition, Project Technical Coordination Committee . A Project Technical Coordination Committee, chaired by Joint Secretary Planning and Development Cooperation Coordination Division of MoALD, will provide technical guidance and recommendations to



the Project Steering Committee and field implementation will be carried out by the four Project Cluster Units created under FANSEP in each Project Municipality Cluster.

The Recipient shall maintain a Project Management Unit within MoALD, headed by a Project Director, supported by qualified staff in sufficient numbers under terms of reference satisfactory to the Recipient and the Bank, responsible for implementation, coordination, monitoring and evaluation, and reporting.

The Recipient shall ensure that the Project is implemented in accordance with, the Project Implementation Manual, including the Matching Grant Manual and the Small Grant Manual annexed thereto, and shall not take or concur in any action which would have the effect of assigning, amending, abrogating or waiving such documents or any provision thereof, without the prior written consent of the Bank.

Conditions

| Type | Citation | Description | Financing Source |
|------|----------|-------------|------------------|
|------|----------|-------------|------------------|



I. STRATEGIC CONTEXT

A. Country Context

1. **Over the past decade, Nepal's economy has demonstrated impressive growth and resilience when faced with a wide variety of economic shocks.** Movement restrictions and the almost complete shutdown of tourism during the COVID-19 pandemic resulted in Nepal's first economic contraction in almost 40 years in FY20 (-2.4 percent). A decisive vaccine rollout and reopening of the borders have supported the economy's recovery, with growth increasing to 4.2 percent in FY21. The growth momentum continued in FY22, with industries and services expanding by 10.2 and 5.9 percent, respectively. However, agricultural growth decelerated slightly from 2.8 percent in FY21 to 2.3 percent in FY22, reflecting a fall in main season rice paddy production following unseasonal rains in October 2021.

2. **The economy grew at a slower pace in the first half of FY23 (H1FY23).** This reflects tighter monetary policy, higher international prices, and the continuation of import restriction measures. The central bank raised the policy repo rate in February 2022 and again in August 2022, and the measures were effective at cooling credit growth and inflation. Import restriction measures were first imposed on December 29, 2021, and continued until January 19, 2023. On the supply side, growth was driven by the services sector. With an expansion in main season rice paddy production, the agricultural sector also grew, while industrial sector growth declined as construction activities slowed.

3. **Average consumer price inflation increased to 8.2 percent year-on-year in H1FY23, above the central bank's ceiling of 7 percent and the highest inflation registered since H1FY16.** Inflation has become broad-based, with food prices expanding by 7.5 percent year-on-year in H1FY23, up from 3.8 percent in the same period of FY22. This reflected higher vegetable prices, associated in part with supply shocks in India, and cereal grain prices triggered by India's export ban on wheat and rice. Similarly, non-food price inflation increased to 8.7 percent year-on-year in H1FY23, primarily due to higher transportation prices associated with the increase in global energy prices, as well as housing and utility prices.

B. Sectoral and Institutional Context

4. **Nepal's agriculture remains characterized by subsistence farming with the continued use of traditional farming practices.** Small landholding of less than 1 ha per capita makes farming less profitable and competitive. Low returns from small landholding farming systems have encouraged youth to abandon farming and explore better prospects in cities and abroad. The underperformance and low returns from agriculture call for urgent adoption of more efficient market-based farming systems, which yield higher outputs and prices per unit of land. These include nutrient-rich and minor crops such as lentil, buckwheat, finger millet, and local beans.

5. **The agriculture sector faces multifaceted challenges.** These include: (a) low availability of good quality seed, improved animal breeds, and other farm-level inputs; (b) thinly spread and inadequate extension support with weak research-extension-farmer linkages; (c) low investment in productive assets, including supplementary irrigation infrastructure to reduce rain dependence; (d) poor market linkages due to high transfer and transaction costs and weak market leverage of small farmers; (e) impacts of climate change evidenced through changes in pest dynamics, irregular rainfall pattern, declining soil fertility because of low organic matters, and lack of rainwater for irrigation; (f) inadequate institutional



capacity to support resilience; and (g) volatile markets and weak nutrition sensitiveness of agricultural interventions.

6. Nepal's agriculture sector has seen a dramatic shift toward feminization. The proportion of the labor force in the agriculture sector fell from 74 percent in 2008 to to 62 percent in 2020, with women farmers constituting 76 percent of the labor force,¹ with the outmigration of menfolk to urban areas and beyond (Central Bureau of Statistics 2011). Despite this, women continue to face exclusion with respect to ownership over assets, access to resources, decision-making processes, capacity-building opportunities, and consequently, economic gains.

7. Food insecurity, poor nutrition, and malnutrition continue to pose risks to Nepal's human capital accumulation and utilization. Despite the country's progress in reducing stunting in children below 5 years of age, from 57 percent in 2000 to 25 percent in 2022 (Nepal Demographic and Health Survey 2022), Nepal continues to perform poorly in infant and young child feeding practices such as exclusive breastfeeding, maternal and child anemia, treatment of infections among children, and deficiencies in micronutrients—which are immediate and underlying determinants of malnutrition. Much of undernutrition occurs during the first 1,000 days of life. Without appropriate food intake and care for young children and women, and with declining environmental health, damage to physical and cognitive development is largely irreversible, with future impacts on health and economic productivity. In contrast, children who escape stunting are more likely to survive and stay in school, and 33 percent are more likely to escape poverty as adults and go on to earn incomes 5–50 percent higher than their stunted peers. While rural incomes are low, an estimated 13 percent of daily incomes are spent on food, the second highest for rural households among South Asian countries.²

8. Nepal's agriculture sector is highly vulnerable to climate change. By the 2080s, Nepal is projected to warm by 1.2°C–4.2°C, under the highest emission scenario compared to the baseline period 1986–2005.³ Temperature increases are projected to be higher than the global average and expected to be strongest during the winter months, especially in the high mountains. Precipitation is projected to increase gradually, especially in the east and in central areas, with increased likelihood of heavy precipitation events. More rainfall is expected in more intense periods, especially in the wetter season, leading to increasing risk of flooding and landslides. Increased rainfall will not compensate for increased and extreme high temperatures and variability, which will likely contribute to increasing water scarcity and drought risks, especially in rainfed and lowland areas, the west and mountains, and dry and winter seasons. Changes in precipitation patterns are likely to affect rainfed agricultural activities, causing significant annual yield variability and higher production risks. The direct economic cost of climate vulnerability in the agriculture sector in 2020 was 1.5–2.0 percent of gross domestic product (GDP).⁴ Agriculture is expected to experience increased stresses from high temperatures and dry periods for rainfed crops, especially in the terai and hill areas. Increased occurrence of diseases and pests of crops and livestock; loss of arable land from flash floods and landslides; and accelerated soil degradation and loss of fertility, will result in declining crop yields. These stresses have the potential to affect food security, overall production, and nutrition requirements at the household level. Addressing climate change impacts in the sector is a priority to address increasing food insecurity, and also reduce the pressure on the

¹ World Bank. 2022. Employment in Agriculture. <http://data.worldbank.org/indicator/SL.AGP.EMPL.FE.ZS?locations=NP>.

² World Food Programme. 2017. *Counting the Beans: The True Cost of a Plate of Food Around the World*.

³ Nepal, World Bank Group, and Asian Development Bank (2021): Climate Risk Country Profile.

⁴ NAP (National Adaptation Plan) 2021.



national economy as the agriculture sector together with forestry contributes to about one-fourth of the national GDP.

9. Nepal’s Agricultural Development Strategy (ADS) and the 15th Development Plan provide the main policy framework for the sector. The ADS was endorsed by the Cabinet of Ministers in 2015 to support the GoN’s vision of “A self-reliant, sustainable, competitive, and inclusive agricultural sector that drives economic growth and contributes to improved livelihoods and food and nutrition security.” The ADS calls for a 4 percent growth in agriculture GDP by 2020 and 6 percent by 2025, through four strategic pillars: (a) improving governance, with targets for credibility of policy commitment, engaging stakeholders (both from government and civil society) in the formulation, implementation, and monitoring of results on the ground; (b) increasing productivity, by developing effective agricultural research and extension and efficient use of agricultural inputs, promoting efficient and sustainable practices and use of natural resources (land, water, soils, and forests), and increasing resilience to climate change and disasters; (c) promoting profitable commercialization, by transforming the agricultural sector from subsistence farming toward higher levels of commercial agriculture, connected to local, national, and international markets; and (d) enhancing competitiveness, by capturing the energy, innovation, and inventiveness of the private sector and cooperative sector to spur growth and development in the sector.

C. Relevance to Higher Level Objectives

10. Achieving food and nutrition security and reducing poverty are national goals of the Government of Nepal (GoN), in line with commitments to realize the Sustainable Development Goals (SDGs) and Zero Hunger Challenge. The country’s agricultural development priorities are aligned with these two main goals and the Sustainable Development Agenda—particularly SDG1 and SDG2—focusing on access to increased employment opportunities, sustainable management of natural resources, supportive infrastructures development, creation of new avenues for economic growth, coping with emerging effects of climate change, social inclusion, and development of farmer-responsive governance.

11. The proposed project is consistent with the World Bank Country Partnership Framework (CPF) for Nepal FY19–23 discussed by the World Bank Board of Executive Directors on August 7, 2018 (Report No. 121029-NP), and extended to FY24 by the corresponding Performance and Learning Review (PLR).⁵ By directly supporting improved income generation, inclusion, and resilience, the proposed project is aligned with the priorities articulated in Focus Areas 2 and 3 of the PLR.⁶ Further, the proposed project directly supports the priorities articulated in the Country Climate and Development Report (2022)⁷ by supporting: (a) the Green, Inclusive, and Resilient Development (GRID) approach, which will include scaling up climate-smart agriculture (CSA) practices reaching the most marginalized and deprived communities in food insecure and disaster-affected districts; (b) human capital development for the nutrition security of poor and vulnerable people, particularly pregnant and nursing women and children below 2 years of age; and (c) federalism in building the capacity of municipal governments in planning, implementing, and monitoring the project.

⁵ Report No. 168048-NP, January 17, 2022, discussed by the World Bank Board on February 22, 2022.

⁶ It will contribute directly to three objectives under two focus areas: ‘Strengthened institutions for public sector management and service delivery’ (Objective 1.2) under the first focus area Public Institutions, and ‘Improved access to services and support for the well-being of the vulnerable groups’ (Objective 3.2) and ‘Increased resilience to health shocks, natural disasters, and climate change’ (Objective 3.3) under the third focus area, Inclusion and Resilience.

⁷ Nepal Country Climate and Development Report, September 2022. World Bank Group, Nepal Country Office.



12. The project is consistent with the country's Second Nationally Determined Contribution (SNDC;2021-2030), National Adaptation Plan (NAP;2021-2050) and Long-term Strategy for Net-zero Emission (LTS;2021-2050). The SNDC targets upgrading watershed health and vitality, increasing soil organic matter content, improving cattle shed for quality farm-yard manure production, and promoting and ensuring access to CSA, among other interventions. Nepal's NAP has outlined nine priority adaptation programs for the agriculture and food security sector and water resource conservation. Additionally, Nepal's LTS aspires to reach net-zero emission by 2045 where sustainable agriculture and land use management are taken as key elements. The project contributes to the NDC, NAP and LTS targets by supporting: (a) access to and promoting climate-resilient and improved seeds and breeds through farmers' field schools; (b) irrigation schemes including conservation of spring sheds; and (c) building the capacity of the local government in planning, implementing, and monitoring climate and nutrition smart agriculture activities/practices.

II. PROJECT DESCRIPTION

13. The project will be financed with a Global Agriculture Food Security Program (GAFSP) Trust Fund grant of US\$20 million, provided as an additional financing to the Food and Nutrition Security Enhancement Project (FANSEP) closing on June 30, 2024. As the ongoing project is under the safeguards policy and the Environment and Social Framework (ESF) will apply to the new financing, this scale-up is being processed as a new operation in line with operational guidelines. The Project Development Objective (PDO), project design, project components, and implementation arrangements will remain unchanged. FANSEP II will scale up best practices under FANSEP to 16 new rural municipalities (RMs) of erstwhile districts Dolakha, Sindhupalchok, Gorkha, Dhading, Saptari, Siraha, Dhanusha, and Mahottari. These RMs namely Bateswor, Janak Nandini, Samsi, Sonama, Chhinamasta, Mahadeva, Nawarajpur, Laxmipur Patari, Aarughat, Sahid Lakhan, Siddhalek, Galchi, Sunkoshi, Tirpurasundari, Melung, Baiteshwor were selected based on the food security and poverty ranking developed jointly by the World Bank and GoN. The project builds on the experience and lessons from the ongoing and past operations such as the Nepal Livestock Sector Innovation Project (NLSIP), Project for Commercialization and Trade (PACT), Agriculture Food Security Project (AFSP), and Rural Enterprise and Economic Project (REED). Lessons from FANSEP have shown that on-farm demonstrations are an effective means to disseminate new learnings and technology. Provision of small-scale irrigation helps substantially in improving productivity and resilience to water stress. Provision of improved breeds of livestock combined with agroforestry systems for on-farm availability of fodder and grasses have been well accepted by farmers. The principles of adult learning approach, based on the demonstrated success in FANSEP, will be intensified through farmer field schools (FFSs), nutrition field schools (NFSs), farm business schools (FBS), and targeted behavior change communication (BCC) through mother groups. The project will build the capacity of local municipalities to plan, implement, and monitor FFSs, FBSs, NFSs, and mother groups. Activities such as irrigation, breed improvement, improved feed management through on-farm cultivation of fodder and agroforestry systems, animal health improvement through vaccination, shed improvement, manure management for soil fertility improvement, use of alternate wetting and drying, and strategic rice intensification system are well aligned with the GRID agenda.



A. Project Development Objective

PDO Statement

14. The PDO is to enhance climate resilience, and improve agricultural productivity and nutrition practices of targeted smallholder farming communities in selected areas of Nepal.

PDO-Level Indicators

- (a) Farmers adopting improved climate-smart agricultural technology (disaggregated by gender)
- (b) Increased crop and livestock productivity by direct beneficiaries (disaggregated by crop and animal species)
- (c) Increased household income (disaggregated by farm and off-farm income, gender (female headed household)
- (d) Reduced food insecurity experience scale score of direct beneficiaries
- (e) Improved Minimum Dietary Diversity (disaggregated by women and children 6–24 months)

B. Project Components

15. **The following four interrelated components of the ongoing project will be maintained:** (A) Climate and Nutrition Smart Agricultural Technology Adaptation and Dissemination, (B) Income Generation and Diversification, (C) Improving Nutrition Security, and (D) Project Management, communication, and monitoring and evaluation (M&E).

Component A: Climate and Nutrition Smart Agricultural Technology Adaptation and Dissemination (US\$7.8 million)

16. **This component will focus on promotion of best practices and technologies** such as climate-resilient crop varieties and livestock breeds, climate-smart technology, and husbandry practices in the 16 new RMs. The interventions under Component A will be delivered through producer groups (PGs) formed under Component B.

Subcomponent A1: Technology Adaptation and Testing

17. **Through this subcomponent, the proposed project will support the implementation of 25 improved climate- and nutrition-sensitive technologies and associated practices** identified collaboratively with the Nepal Agricultural Research Council (NARC) in the project municipalities by FANSEP. Additionally, ready-to-roll out technologies and cultivars developed by NARC for the agro-ecological conditions similar to the project target areas, or the Consultative Group on International Agricultural Research, may be considered with priorities to technologies that enhance climate-resilient production systems and livelihoods. Key activities to be supported under this subcomponent will include: (a) on-farm demonstration of CSA technologies and practices; (b) provision of improved seeds and breeds that were validated in the local context in FANSEP; and (c) trainings relevant to such demonstrations and distributions.



Subcomponent A2: Technology Dissemination and Farmers' Skill Development

18. This component will implement activities that enable farmers to master the management skills (improved agriculture practices) to achieve climate resilience and mitigation. The activities will be implemented throughout the project area covering all 16 RMs. Key activities under this subcomponent will include: (a) conducting of 485 crop and livestock FFSs; (b) establishment of 16 artificial insemination (AI) units; (c) establishment of 8 goat multiplier herds; (d) establishment of 16 community-level fodder resource nurseries supporting plantations covering 320 ha; (e) promotion of community seed programs for improved seed replacement rate through establishment of 16 community-based seed production groups; (f) 325 crop promotion programs; and (g) 300 goat promotion programs, 120 dairy promotion programs, and 60 rural poultry promotion programs. Further, through this subcomponent, the project will support 400 small-scale irrigation schemes covering 1,200 ha,⁸ including conservation of intake sites (spring sheds) to capture and store runoff water and arrest soil erosion in project RMs, and provide mechanization support to 300 PGs across the project area, with prioritized access for women producers.

Component B: Income Generation and Diversification (US\$5.4 million)

19. This component will support selected PGs in diversifying their income generation capacity through critical business skills, productive assets and value-added activities, and market linkages.

Subcomponent B1: Strengthening Producer Groups (PG)

20. The subcomponent will form and mobilize 1,350 new PGs (725 crop and 625 livestock) and build their capacity and entrepreneurial skills. These groups will receive trainings in group dynamics, leadership, decision-making, problem solving, risk management, preparation of business plans, bookkeeping, crop planning, and simple operation and maintenance of farm equipment. Given the successful pilot in FANSEP, 32 new FBSs will be conducted.

Subcomponent B2: Building Market Linkages through Productive Alliances⁹

21. This subcomponent will consolidate links between producer organizations and buyers including micro, small, and medium enterprises; traders; and rural financial institutions (where feasible) through Productive Alliances by financing business plans to meet the goals of the agreement with buyers. The activities financed under this subcomponent are: (a) around 720 matching grant¹⁰ schemes for targeted beneficiaries to finance the business plans developed under Subcomponent B1; and (b) formation of 16 multi-stakeholders' dialogue platforms at the RM level. The matching grant schemes will be provided and implemented following the grant operating guidelines formulated under FANSEP. The eligibility criteria will include a financially and technically sound business plan including proposed activities; operational, environmental, and social risks and mitigation measures; potential to enhance beneficiaries' climate resilience and adaptation; and potential to achieve climate change mitigation (for example, introducing energy-efficient facilities). The dialogue platforms are expected to provide opportunities for the buyers, producers, and service providers to meet, interact, and explore business opportunities. In addition, around 32 critical infrastructures to support the strengthening of the Productive Alliances in the project

⁸ Most irrigation schemes supported cover less than 1 ha of land.

⁹ A Productive Alliance is defined as an agreement between a group of organized farmers and a buyer, for the provision of a certain good, in a specified quantity and quality.

¹⁰ Up to 15 percent contribution from the PGs, mostly in kind.



RMs such as collection centers, storage, markets, and processing and grading facilities will be established to strengthen the supply chain and reduce postharvest losses. The designs of these infrastructure will be based on climate-resilient approaches ensuring they do not generate negative externalities or generate potential adverse effects on the environment and public health.

Component C: Improving Nutrition Security (US\$4.8 million)

22. This component will support nutrition-related interventions that are expected to systemically address the underlying causes of malnutrition, through the following subcomponents:

Subcomponent C1: Institutional Capacity Strengthening

23. This subcomponent will engage in capacity building of 16 RMs to entrench, sustain, and advocate for improved nutrition and climate resilience outcomes in their communities. This subcomponent will provide capacity building for political leadership, bureaucracy, and/or program/technical leadership responsible for agriculture and livestock development and health and nutrition at the municipalities and for established ward- and local-level Nutrition and Food Security Steering Committees. Where ward- and local-level Nutrition and Food Security Steering Committees are not constituted, the project will advocate with the abovementioned stakeholders of the municipalities to constitute and make these committees functional. The subcomponent will provide support in the following areas: (a) orientation on the Government's current Multi-Sector Nutrition Plan (MSNP) II and MSNP III (pending approval of the Cabinet) through annual orientation sessions for stakeholders mentioned above; (b) advocacy and technical support for prioritization of a defined package of nutrition-related investments in annual work plans and budgets and securing resources from the Multi-Sectoral Nutrition Program to implement the same; and (c) selection of municipalities on a pilot basis to conduct a minimum service standards review for health posts/primary health care facilities to assess readiness for delivery of the prescribed of health and nutrition services and to advocate during annual stakeholder orientation sessions, with an evidence-based approach, for resources through conditional grants to ensure such services to communities.

Subcomponent C2: Nutrition Field School (NFS) and Home Nutrition Gardens (HNGs)

24. This subcomponent will support the newly constituted 650 nutrition groups from 16 RMs, with exclusive participation of women of reproductive age (preference will be given to pregnant and nursing women and mothers of children 0–2 years of age) and beneficiaries from schools, to (a) participate in at least 128 NFSs; (b) establish 650 HNGs; and (c) access 400 small grants. Each of these activities will be complemented with a strong social and behavior change communication package to improve the production and consumption of nutritious and diverse foods at the household level. The allocation of small grants will be based on demand and implemented as per small grant guidelines, but with contributions from the groups in kind only. Cash contributions will be sought only in cases where contribution in kind is not feasible. Associated technical support to establish and maintain these grants will be provided, where relevant. In addition to the crops and breed interventions of the ongoing project, the NFSs and HNGs will also promote local nutritious and neglected crops. The existing package of social and behavior change communication for improved maternal, infant, and young child nutrition behaviors on will be reviewed and updated to respond appropriately to the nuanced needs of the established nutrition groups. Where feasible, nutrition gardens will also be established in schools of participating communities.



Component D: Project management, communication, and M&E (US\$2 million)

25. This component will support monitoring and reporting of implementation progress leveraging the M&E and Project Management Information System (PMIS) developed by FANSEP. In addition, this component will support: (a) compliance with the World Bank's fiduciary and safeguard requirements; (b) interagency coordination; (c) experience sharing among beneficiary groups; (d) grievance management; (e) knowledge management and learning among project stakeholders; and (f) day-to-day operations of the Project Management Unit (PMU) and Project Cluster Units (PCUs). The manuals, strategies, and guidelines produced by the ongoing project for selection and award of matching and small grant schemes, implementation of FFSs, FBSs, and NFSs, livestock promotion programs (goat, dairy, and poultry), selection and award of mechanization support, and selection and construction of infrastructural activities such as collection centers, irrigation schemes, markets, and processing centers will be used by the project, with amendments, as needed.

C. Project Beneficiaries

26. The project will continue to support in the same geographical areas (the eight erstwhile FANSEP districts) that were heavily affected by the COVID-19 pandemic and supply chain disruptions as well as inflation of food prices. These districts remain a priority due to: (a) continued impact of post-earthquake losses; (b) climate change vulnerability ranking; (c) human development index ranking; (d) food security status; and (e) poverty status. The project will primarily target vulnerable (earthquake-affected, acutely food insecure, disadvantaged, marginalized, and women-headed) households as in FANSEP. The nutrition interventions will mainly target households with young children, adolescent girls, and pregnant and lactating women. The 16 new RMs will be selected based on the same vulnerability ranking and are either at the same level or close in ranking to the 16 RMs selected for FANSEP. The project will benefit 55,000 new direct beneficiaries from the 16 new RMs through scaling-up of best practices from FANSEP. Among the 55,000 project beneficiaries, 38,750 beneficiaries will receive direct interventions from Components A and B through the formation of 1,350 PGs, while the remaining 16,250 beneficiaries will constitute 650 nutrition groups receiving interventions under Component C. The project will continue supporting existing beneficiaries from FANSEP RMs for their sustainability through interventions such as strengthening of AI units, multiplier herds, and seed PGs. These PGs will be selected and supported based on their capacity to serve as resource centers for new project RMs and PGs to supply seeds and breeds. At least 65 percent of the direct beneficiaries are expected to be female. The beneficiary targeting methodology in the new municipalities will follow the set of criteria identified using a proxy means test by Development Impact Evaluation (DIME) in FANSEP.

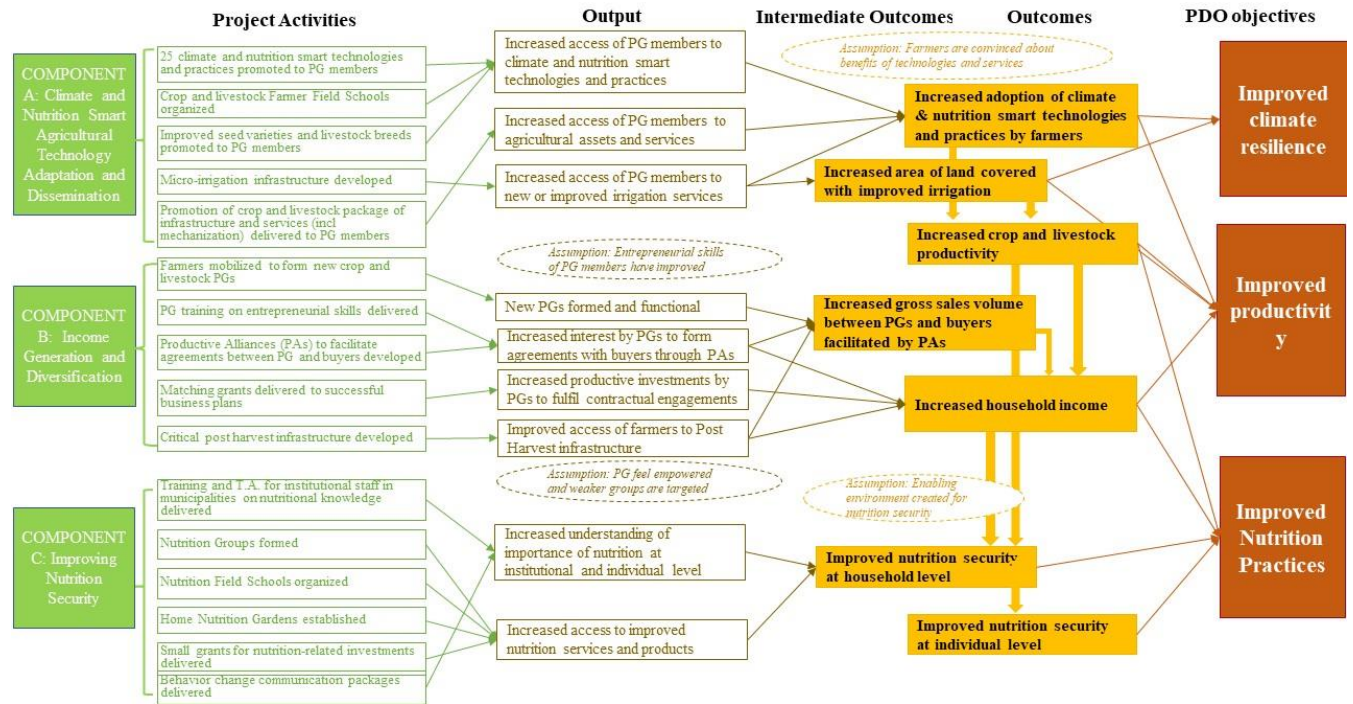
D. Theory of Change

27. The project's components are closely intertwined and have been designed to complement each other to address the key challenges related to poor food and nutrition security in Nepal caused by: (a) increased vulnerability to declining soil fertility, impacts of climate change, and pest and diseases; (b) low availability of good quality inputs and training on best practices to address the low agricultural productivity of smallholder farmers; (c) low levels of investment in productive assets, commercialization of agricultural output, and links with commercial buyers; and (d) low awareness, capacity, and sensitization of the importance of food and nutrition security.



Figure 1. Theory of Change

Challenges: Poor food and nutrition security in Nepal caused by (i) increased vulnerability to reducing soil fertility, climate change, (ii) low availability of good quality inputs and training on best practices to improve agricultural productivity, (iii) low investment in productive assets, low levels of commercialization, and poor market linkages, and (iv) low awareness, capacity and sensitization of nutrition



E. Rationale for Bank Involvement and Role of Partners

28. The project is financed by GAFSP, a multi-donor financing platform and the GoN has designated the World Bank as the supervising entity for this project, given its extensive country experience, strong working relationship with development partners. The World Bank has successfully provided support for investments in agriculture, rural development, food and nutrition security, and health sector projects and many other programs across various sectors such as hydropower, connectivity, health, and education in Nepal and can draw from its vast country, regional and global experience, in addition to the World Bank’s convening power. The World Bank’s technical support for project management, M&E, and partnership experience with different government agencies and other development partners continues to be instrumental in the country. The Food and Agriculture Organization (FAO) will continue to provide TA to this project because of its knowledge, experience, and technical expertise in the agriculture sector in Nepal and its successful engagement throughout AFSP and FANSEP, both funded by GAFSP. Other development partners supporting the government on food security and rural development in Nepal¹¹ have also contributed to and supported preparation of this project. The project will continue to ensure synergy and avoid duplication of work through the Donor Food Security Group, of which the World Bank is an active member.

¹¹ United Nations Children's Fund (UNICEF), Netherlands Development Organization(SNV), German Agency for International Cooperation (GIZ), Swiss Agency for Development and Cooperation (SDC), International Fund for Agricultural Development (IFAD)



F. Lessons Learned and Reflected in the Project Design

29. Lessons were drawn from ongoing projects such as the World Bank-financed NLSIP and REED, IFAD-funded Value Chain for Inclusive Transformation by IFAD, and Asian Development Bank (ADB)-funded Nuts and Fruits in Hilly Areas of Nepal (NAFHA) in addition to those from FANSEP. Lessons from NLSIP, REED, and NAFHA have demonstrated that TA and capacity building of grassroots organizations such as the farmer groups is key for their performance and sustainability. In the federal context, coordination among the three tiers of governments for service delivery to the smallholders engaging the private service providers such as agro-vets makes service delivery efficient. Where it is difficult for producers to obtain credit, as continues to be the case in Nepal, a well thought-out and targeted matching grant scheme can effectively assist small-scale producers to build their assets and increase their productivity.

30. The project will build on the achievements and lessons learned from FANSEP in Nepal. First, FFSs, for instance, were found to be a successful approach for disseminating new farming techniques, testing innovations, and integrating new ideas on good agriculture or animal husbandry practices. Moreover, the FFS has helped empower the local community, especially giving voice to female farmers. Second, farmer groups and women groups were found to be an effective platform to deliver entrepreneurial and business skills, nutrition education, and BCC interventions. FFS, introduced as innovative interventions was found to empower the groups to forge market linkages. Third, HNGs have been effective in engaging women groups in the production of vegetables high in micronutrients and establishing HNGs for increased availability of nutrient-rich foods at the household level. In addition, FANSEP also provides a template for effective coordination among agencies from three different ministries and building capacity of the GoN functionaries for implementation, monitoring, and training of agricultural and health frontline workers on agri- and food-based nutrition interventions.

III. IMPLEMENTATION ARRANGEMENTS

A. Institutional and Implementation Arrangements

31. The existing institutional and implementation arrangements for the ongoing project will be maintained for the proposed project. The Ministry of Agriculture and Livestock Development (MoALD) will remain the executing agency. At the central level, the project will include a Project Steering Committee chaired by Secretary, MoALD, to provide strategic oversight guidance and resolve project-related concerns. A Project Technical Coordination Committee, chaired by Joint Secretary Planning and Development Cooperation Coordination Division of MoALD, will continue to provide technical guidance and recommendations to the Project Steering Committee. The FANSEP PMU at the central level will continue to manage day-to-day project administration and management and provide oversight to cluster offices. Implementation will be carried out by the four Project Cluster Units created under FANSEP. Each cluster unit will be responsible for two project districts and RMs selected for project implementation. TA will be provided by the FAO for quality delivery of planned activities under each component. No additional implementing partners are contemplated for the proposed project at design. At the grassroots level, increased engagement of local technicians from municipalities in activities supported by FANSEP II is expected to promote links between beneficiaries and service providers. The project will build the capacity of municipality staff by engaging them in planning, implementation, and monitoring of FANSEP II activities and provision of tailor-made courses to build their capacity.



B. Results Monitoring and Evaluation Arrangements

32. The M&E system of FANSEP II will build upon the structures, results framework and capacities developed under the existing M&E system of FANSEP with upgrades and adaptations where needed. The PMIS developed and tested in FANSEP will continue to be used to report on the delivery of project outputs with continued capacity building of the staff to improve the quality of data collection. The M&E staff will also be supported in reporting project progress in quantitative and qualitative terms according to indicators in the Results Framework. All indicator labels, definitions, and measurements were made consistent with the World Bank and GAFSP M&E requirements. Second, the Results Framework proxies the baseline values of most outcome indicators in the 16 new RMs as the values of the control group in the endline survey of the FANSEP impact evaluation. The possibility of continuing the DIME engagement under FANSEP to monitor impact and assist the project in implementing impact surveys will be explored. In addition, within the first six months of project implementation, the project will collect baseline data for a sample of the potential beneficiaries during the beneficiary identification survey. Finally, the targets for most FANSEP II indicators are based on the current achievements of FANSEP and adjusted to the shorter time frame of FANSEP II. The Results Framework explains the definition, measurement, and target setting of each indicator in detail. Six-monthly implementation support reviews will continue to monitor progress and directly interact with the beneficiaries and service providers on the ground to collect information. The project will integrate gender and citizen engagement in the impact evaluation studies and will engage local beneficiaries in the midterm and final evaluations.

C. Sustainability

33. FANSEP II aspires to scale up best practices from FANSEP and sustain them. Sustainability of FANSEP-supported activities will be secured by (a) building institutional capacity of the local government and community institutions, (b) promoting technologies that are climate friendly yet within the capacity of the beneficiaries to implement, (c) strengthening community-based seed production system for seed availability, (d) linking farmers to market and input suppliers, and (e) developing business plans and guidelines for operating enterprises and seed processing and storage facilities. Project interventions will be planned in consultation with women consistent with the increased feminization of agriculture and uptake.

IV. PROJECT APPRAISAL SUMMARY

A. Technical, Economic and Financial Analysis (if applicable)

34. Technical. The project is designed to support several dimensions related to agriculture and rural institutions and services and enhance crop and livestock productivity, food security, and nutrition outcomes of the targeted households, keeping farmers' groups in the center of the project and paving the way for building climate resilience and safeguarding the livelihoods of the beneficiaries. It clearly identified the critical areas that need to be addressed to unlock the constraints to implement climate- and nutrition-smart agricultural practices in the targeted areas by: (a) promoting CSA practices and cultivars that are well suited to FANSEP target area (b) promoting strong, demand-based service delivery at the local level, (c) strengthening seed supply chain and postharvest needs such as storage and processing facilities, (d) linking farmers with markets and input suppliers; (e) supporting strong and vibrant nutrition-based food and nutrition security initiatives through careful selection of crops, vegetables, livestock



breeds (goat, dairy, and backyard poultry) through NFSs and FFs; and (f) supporting income-generating activities for women. For each income-generating group, the project will work with the beneficiaries to develop business and investment plans that are user friendly and further support alliance formation between the producers and buyers. The project will ensure that the technologies and innovations promoted are not complex and are well within the capacity of the beneficiaries to understand and implement. Technology adoption will be guided by the needs of women whose role in agriculture is increasing with male migration.

35. The operation is aligned with the goals of the Paris Agreement on both mitigation and adaptation.

36. Assessment and reduction of adaptation risks. Drought from increasing extreme temperatures and water scarcity and more intense rainfalls with increased risk for flooding and landslides are identified as main climate risks that are likely to affect the productive alliances in project RMs such as collection centers, storage, markets, processing and grading facilities, and project outcomes of improving agricultural productivity and production of nutritious food. The project design considers the drought, flooding, and landslide risks that threaten the outcomes of the project. Specifically, climate change risks and vulnerability to water scarcity and drought will be managed and mitigated through targeted adaptation measures, by combining structural, nature-based, and soft adaptation solutions. This includes the adoption of improved, CSA practices and technologies, such as the promotion of and access to climate-resilient and improved seeds and breeds through 485 crop and livestock farmers' field school (component A) and support for selected PGs in diversifying their income generation capacity and livelihoods through critical business skills, productive assets, and value-added activities (component B). Through CSA technology adaptation and skill development (component A), the development of PG business plans (component B), and improvement of nutrition security (component C), the project will build the capacity of farmers and institutions to strengthen their resilience to climate risks by facilitating an enabling environment for adoption of CSA practices and technologies. The project will promote 400 irrigation schemes including conservation of spring sheds, building capacity of the local government in planning, implementing, and monitoring climate- and nutrition-smart agricultural activities. The design and construction of the proposed infrastructures under component B will be based on climate-resilient approaches to reduce the degradation or destruction of those infrastructures. Therefore, the project adequately reduces the physical climate risks to the project outcomes, and the project's climate resilience and adaptation design considerations limit the exposure to a low level of residual risk.

37. Assessment and reduction of mitigation risks: The project supports activities that are neutral or encourage the country's progress toward low-carbon development. Under component A, the promotion of best practices and technologies such as climate-resilient crop varieties and livestock breeds, climate-smart technology, and husbandry practices in the 16 new RMs are on the Universally Aligned (UA) list and considered to be fully consistent with low-greenhouse gas (GHG) development pathways. Component A activities including livestock will promote intensification on existing productive areas, with no expansion into areas of high carbon stocks or high biodiversity. While herd sizes are expected to increase compared to the 'without project' scenario, the introduction of improved feeding practices, and improved on-farm cultivation of grass, forage crops and fodder trees/shrubs is expected to reduce methane emissions from digestion. In the context of vulnerable smallholder farmers, the promotion of livestock intensification under the project increases animal productivity, while demonstrably decreasing the GHG intensity of the milk and meat produced per animal. Under component B, support for selected PGs in diversifying their income generation capacity through critical business skills, productive assets and value-added activities,



and market linkages are on the UA list under the category of Economic Services (capacity building). The proposed business plans under MGs would include CSA among the eligibility criteria and will consider lower GHG emission paths. Similarly, under component C, support for improving nutrition security and related institutional capacity strengthening, nutrition field schools and home nutrition gardens are on the UA list under the category of Economic Services (capacity building, including agricultural extension). Thus, the project is aligned with Nepal's climate strategies and plans, and with the country's pathway towards climate-resilient development and low GHG emission.

Economic and Financial Analysis

38. The project's costs and benefits analysis has been done to quantify project benefits from different project interventions. Examples include investments in technology development/dissemination and adoption of improved technologies/management practices in crops, vegetables, potato, livestock (cattle, goat, and backyard poultry) farming, and HNG. Major sources of quantifiable benefits will come from incremental production of crops, vegetables, potato, and livestock (cattle/buffalo, goat, and backyard poultry) products as a result of adopting improved technology and management practices. Productivity growth will be gradual till the final year of the project. The project benefits were estimated at 2022/23 prices over 20 years, with 12 percent as the opportunity cost of capital (OCC) for financial analysis and 9 percent OCC for economic analysis. Financial analysis was done at the project level using market prices. For economic analysis of the project, transfer payments (taxes and subsidies) are deducted from financial prices. For the traded products—such as rice, maize, and wheat—market prices are considered to reflect economic prices. For non-traded products, a conversion factor of 0.91 is used and conversion factor of shadow price of labor (wage) including human and animal is considered to be 85 percent of the ongoing wage rate.

39. Benefits. Incremental project benefits, expected from diffusion of production management technologies from project interventions taken together, are quantified. The project-led agriculture benefits are quantified by using crop budgets for the project focus crops such as paddy, wheat, maize, millet, and potato with improved variety/seed quality and production technology based on farm models for project areas. Livestock benefits were quantified through appropriate activity budgets formulated for cattle/buffaloes (milk), goats (meat), and backyard poultry (eggs and meat) production specifically for the project area. Crop benefits under 'with' and 'without project' scenarios are quantified by enterprises and households and then aggregated. For full technology adopters, the incremental financial gross margin per hectare varied from NPR 68,944 crop production (irrigated) to NPR 614,304 for vegetables (combination of vegetables over summer, winter, and spring seasons). Incremental net benefits due to adoption and diffusion of crop technologies are estimated at NPR 262 million per year at full development.

40. The project interventions will cover 7,200 cattle/buffalo farmers, 9,800 goat farmers, and 2,500 backyard poultry farmers (with several overlaps). Breed improvement, feed management, and health care support will be comprehensively integrated to generate productivity impacts. Mixed farming is predominant in the project area. Based on the livestock ownership data in the project districts, rural households keep an average of 1 buffalo/cattle, 2 goats, and 10 poultry birds. With the project's support, the average number of buffalo/cattle will increase to 2, goats to 5, and poultry birds to 100. The projected livestock productivity increases over base productivity of milk is estimated to increase by about 40 percent, goat meat by 35 percent, and poultry eggs by 60 percent for the project beneficiaries at full development. Incremental net benefits from livestock interventions are projected at NPR 285 million per year at full development of project development impacts.



41. The project will support 128 households in establishing off-farm enterprises related to post-harvest facilities in the project districts. Combined net benefit of those enterprises by the end of the fifth year of project implementation is estimated to be NPR 98 million per year. About 19,300 food grain producing farmers will be exposed directly to these technology interventions. Crop productivity realized by the technology adopters in the project area is projected to modestly improve by 25 percent for cereals (paddy, maize, wheat, and lentil), 30 percent for potato, and 30 percent for vegetables. Similarly, 19,500 livestock producing households will benefit through an increase in livestock productivity of milk by about 25 percent and goat meat by 30 percent.

42. Returns on investment. Effective transfer, adoption, and diffusion of location-specific potential technologies covering agriculture crops, vegetables, livestock, and off-farm enterprises are expected to generate a financial internal rate of return (FIRR) ranging between 15.3 percent (cereal crop production) and 23.3 percent (backyard poultry production), with an average of 20.1 percent. Economic analysis of the project is done after adjusting the prices of inputs, outputs, and wages to represent real value to the society. The analysis shows that the economic internal rate of return (EIRR) will be 16.0 percent and net present value US\$15.91 million. This implies that returns on investment are attractive for investment.

43. Sensitivity analysis. The sensitivity analysis has been done to take into account the impact of increases in the cost of production of targeted commodities by 10 and 20 percent, shortfall of products by 10 and 20 percent, one-year and two-year delay in incremental income accrual, and 10 and 20 percent decrease in technology adoption rate. In all these scenarios, the EIRR was above 14 percent. The results show that the return on investments is highly sensitive to delays in accruing project benefits even by one year compared to decrease in project benefits, increase in project cost, and decrease in technology adoption rate.

44. GHG accounting. FANSEP-II's net carbon balance is estimated with the Ex-Ante Carbon-balance Tool (EX-ACT), developed by the FAO.¹² The net carbon balance refers to the net balance of tons of CO₂ equivalent (tCO₂e) of GHGs that would be emitted, or carbon sequestered, as a result of project interventions compared to a 'without project' scenario. For the proposed project, the GHG analysis considered activities along the various commodities (crop and livestock) targeted and the proposed improved crop and livestock management activities. The assessment shows that the project is a net carbon source of 1,336,048 tCO₂e over 20 years, or 66,820 tCO₂e per year. Gross emissions in the 'with project' scenario are 2,562,937 tCO₂e over 20 years. The increase stems from the increase in livestock heads compared to the 'without project' scenario. Although the project proposes to introduce improved livestock management practices, their positive effect would not outweigh emissions that would be caused by herd size increases.

B. Fiduciary

Financial Management

45. The FM arrangement of the ongoing project will apply to this project. The existing PMU of the ongoing project will be responsible for overall FM of the project, supported by the four Project Cluster Units (PCUs). The PMU and PCUs have been established under the ongoing project and are functioning well. The 16 RMs to be supported under this project will be managed by the existing PCUs for FANSEP—

¹² <http://www.fao.org/tc/exact/ex-act-home/en/>



each PCU will be responsible for FM of additional four rural municipalities. The funds flow is limited to the PMU and PCUs and will not flow to municipalities. Also, the PCUs' FM will be limited to expenditures for grants, procurement of seeds and equipment, minor works, and training to beneficiaries. The FM of the project will be based on the country systems, policies, and procedures. The additional project-specific control measures that are required are already included in the Project Implementation Manual (PIM) and Grant Operations Guidelines because the same activities of the ongoing project are being funded. However, a separately identifiable budget will be required to track the expenditures incurred under this project. Based on the reports provided by the PCUs, consolidated financial reports will be prepared by the PMU for this project. Financial reports will be submitted on a quarterly basis, no later than 45 days after the end of the quarter (period of three months) for this project. The external audit report for this project will be submitted within nine months from the end of the fiscal year. There are no overdue audits from the implementing agency. The existing human resources and FM arrangements are considered adequate for this project. Nevertheless, to ensure compliance to the applicable control measures as well as efficiency and effectiveness of the expenditures, financial monitoring on a quarterly basis needs to be ensured in line with the PIM and Grant Operations Guidelines. As in FANSEP, a financial management (FM) specialist is required for effective fiduciary management and its monitoring and reporting.

Procurement

46. The World Bank's Procurement Regulations for IPF Borrowers, July 2016 (revised November 2020), and the provisions stipulated in the Financing Agreement will be applicable for procurement activities under this project for activities to be financed by the trust fund. In addition, the project will also follow the Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants, dated October 15, 2006, and revised in January 2011 and July 2016. The procuring entities will be the PMU and already established four cluster offices of the PMU, to support the selected municipalities within the clusters. The project does not entail any complex, large-value contracts, and procurement activities will be limited to small-value works, goods, and consulting and non-consulting services. The four PCUs will carry out small-value procurement, under the overall guidance, supervision, and monitoring of the PMU. All major procurements, including selection of consulting firms and individual consultants and procurement of office equipment and vehicles required for the project, including for the PCUs, will be centralized in the PMU. As in FANSEP, the FAO will be selected on a single-source basis with a budget of upto US\$3.5 million to support the PMU in executing project activities. Procurement activities envisaged to be undertaken by the PCUs will be purchase of seeds, saplings, and simple machineries. Procurement of goods and works, which includes the construction of 32 critical infrastructures such as collection centers, storage, markets, and processing and grading facilities and small-scale irrigation schemes and conservation of spring sheds in the municipalities, will be undertaken by the beneficiaries under the grant proceeds managed by the PCUs and will use the community-driven development procedure as stated in Section VI, Clause 6.52 of the World Bank's Procurement Regulations. The PMU will assist the cluster offices in maintaining procurement records until the duration stated in the Financing Agreement. According to the requirement of the Procurement Regulations, a Project Procurement Strategy for Development (PPSD) has been developed. Based on the PPSD, a Procurement Plan for the initial 18 months of implementation has been prepared.

47. All the national competitive bidding processes would be subject to fulfillment of the Nepal-specific caveats as listed and agreed in the PPSD. The PMU will arrange, from time to time, training and orientation programs for staff involved in procurement initiation, review, and decision-making processes



to ensure effective procurement management. As in FANSEP, a procurment Specialist (PS) is required for effective procurement management of project and its monitoring and reporting.

C. Legal Operational Policies

| Legal Operational Policies | Triggered? |
|---|------------|
| Projects on International Waterways OP 7.50 | No |
| Projects in Disputed Area OP 7.60 | No |

D. Environmental and Social

48. The overall environmental and social Risk of FANSEP II is rated Moderate considering that the key activities supported are small-scale activities for improving and rehabilitating irrigation schemes, establishing marketing facilities, and setting up AI centers and goat multiplier herds for genetic improvement. The environmental impacts envisaged are related to management of solid waste, wastewater/effluents, air, soil hazard/degradation, use of pesticides/insecticides, overgrazing, water, noise, dust, and health and safety hazards an which are anticipated to be site-specific and reversible. The social risk is rated Moderate, given the risks of potential exclusion of the most vulnerable and marginalized households, including poor people and women, constraining them from reaping the project benefits of the project intervention. There is also a risk of wage discrimination against women workers. The sexual exploitation and abuse/sexual harassment (SEA/SH) rating of the project is assessed to be Moderate by using the SPJ SEA/SH Rating tool. Given that the project has identified children, young, and pregnant women as the prime targeted groups who will be directly involved in the project activities, some SEA/SH risks are anticipated.

49. FANSEP II aims to manage the potential environmental and social risks and impacts by preparing the required instruments and ensuring their effective implementation throughout the project life cycle. The Environmental and Social Management Framework (ESMF) is being prepared, which will build upon the existing ESMF of the ongoing project to reflect the requirements of the World Bank’s ESF and Environmental and Social Standards (ESS). The ESMF provides detailed procedures together with timelines, required budgets, and the responsible agencies for addressing and managing the associated environmental and social risks by preparing an Environmental and Social Management Plan, Environmental and Social Code of Practices, and other instruments as required and it will be consulted and disclosed before project implementation. In addition, the Stakeholder Engagement Plan (SEP), a stand-alone document, has been prepared and disclosed, which provides guidance on engaging project stakeholders in the preparation and implementation of the project. Labor Management Procedures will be prepared to manage potential risks and impacts of labor influx. The implementing agency, MoALD, will fully leverage impact management skills and arrangements of the ongoing project. The environmental and social performance of the client in the ongoing project has been rated Satisfactory. However, there are some challenges with the current capacity considering their unfamiliarity with the World Bank’s new ESF and relevant ESS which will need a dedicated capacity-building program. In addition, an Environmental and Social Commitment Plan (ESCP) has been prepared, agreed upon with the client, and disclosed on the



in-country website on May 24, 2023¹³. It was published in the World Bank website on July 26, 2023. It outlines the measures and actions that the borrower will require for ensuring compliance throughout the project life cycle.

50. Citizen and stakeholder engagement. Given the nature of the project, which aims to directly benefit 55,000 beneficiaries, the majority of whom will be women living in rural areas, citizen engagement is critical for successful implementation of the project activities. The project has prepared a SEP to ensure a participatory approach and ensure citizen engagement in all stages, from early preparation to implementation and completion. The project plans to engage several grassroots organizations such as FFS to replicate the successful learning of the ongoing project and NFS to ensure access to small grants schemes to establish HNGs. In the current Grievance Redressal Mechanism (GRM) of the FANSEP it was reported in the last implementation review mission that a total of 14 complaints were registered and all were resolved. Given that the existing GRM system is working well FANSEPII will retain it to enable project stakeholders and persons to seek redress when they feel aggrieved by project activities. The SEP requires consultations with the project stakeholders, including the ultimate beneficiaries of the project, at least once a year, where ultimate project beneficiaries will be invited to apprise them about the project activities and provide a platform for their feedback and complaints. All the project related feedback will be documented and considered while revising the project design and implementation modality. Similarly, the project related complaints will be referred to the project GRM for further processing. A beneficiary satisfaction survey will also be undertaken at midterm and near closure of the project to assess citizens' views on the services extended by the project.

V. GRIEVANCE REDRESS SERVICES

51. Grievance redress. Communities and individuals who believe that they are adversely affected by a project supported by the World Bank may submit complaints to existing project-level grievance mechanisms or the Bank's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project affected communities and individuals may submit their complaint to the Bank's independent Accountability Mechanism (AM). The AM houses the Inspection Panel, which determines whether harm occurred, or could occur, as a result of Bank non-compliance with its policies and procedures, and the Dispute Resolution Service, which provides communities and borrowers with the opportunity to address complaints through dispute resolution. Complaints may be submitted to the AM at any time after concerns have been brought directly to the attention of Bank Management and after Management has been given an opportunity to respond. For information on how to submit complaints to the Bank's Grievance Redress Service (GRS), please visit <http://www.worldbank.org/GRS>. For information on how to submit complaints to the Bank's Accountability Mechanism, please visit <https://accountability.worldbank.org>.

VI. KEY RISKS

52. The project's overall risk rating is Moderate. The Political and governance risk is the only one rated with Substantial residual risk.

¹³ <https://fansep.moald.gov.np/noticedetail/60/2023/88298700>



53. Political and governance risks are Substantial. A new coalition Government is in place at the federal and provincial levels. Given the short tenure of the coalitions in the past, this poses a risk to implementation. The federal system provides opportunities to decentralize development benefits and makes service delivery more effective and accountable. While the extent to which political risks can be mitigated through project-specific measures is limited, the World Bank will maintain continuity in policy dialogue with the new Government, and the project design includes specific actions to build public support through broad stakeholder participation, strategic communication, and outreach.



VII. RESULTS FRAMEWORK AND MONITORING

PDO Indicators by PDO Outcomes

| Baseline | Period 1 | Period 2 | Closing Period |
|--|----------|----------|----------------|
| Enhanced Climate Resilience | | | |
| Farmers adopting improved agricultural technology (Number) ^{CRI} | | | |
| May/2023 | Jun/2025 | Jun/2026 | Jun/2027 |
| 0 | 8000 | 17000 | 23625 |
| ➤Farmers adopting improved agricultural technology - Female (Number) ^{CRI} | | | |
| 0.00 | 5200 | 11050 | 15356 |
| ➤Farmers adopting improved agricultural technology - male (Number) ^{CRI} | | | |
| 0 | 2800 | 5950 | 8269 |
| Improved Agriculture Productivity | | | |
| Increased crop and livestock productivity by direct beneficiaries (disaggregated by crop and animal species)(GAFSP Tier 2 Outcome Indicator) (Percentage) | | | |
| May/2023 | Jun/2025 | Jun/2026 | Jun/2027 |
| 0% | BL+5% | BL+10% | BL+15% |
| ➤Crops (food grains) (Percentage) | | | |
| May/2023 | Jun/2025 | Jun/2026 | Jun/2027 |
| 0% | BL+5% | BL+10% | BL+15% |
| ➤Crops (vegetables) (Percentage) | | | |
| May/2023 | Jun/2025 | Jun/2026 | Jun/2027 |
| 0% | BL+5% | BL+15% | BL+25% |
| ➤Livestock (meat) (Percentage) | | | |
| May/2023 | Jun/2025 | Jun/2026 | Jun/2027 |
| 0% | BL+5% | BL+12% | BL+20% |
| ➤Livestock (milk) (Percentage) | | | |
| May/2023 | Jun/2025 | Jun/2026 | Jun/2027 |
| 0% | BL+5% | BL+10% | BL+15% |
| Increased Household income (farm and off-farm)(GAFSP Tier 1 Indicator, gender-disaggregated) (Percentage) | | | |



| | | | |
|--|----------|----------|----------|
| May/2023 | Jun/2025 | Jun/2026 | Jun/2027 |
| 0% | BL+5% | BL+10% | BL+15% |
| ➤ Female headed households (Percentage) | | | |
| May/2023 | Jun/2025 | Jun/2026 | Jun/2027 |
| 0% | BL+5% | BL+10% | BL+15% |
| Improved Nutrition Practices | | | |
| Reduced food insecurity experience scale score of direct beneficiaries (FIES) (GAFSP Tier 1 Indicator) (Percentage) | | | |
| May/2023 | Jun/2025 | Jun/2026 | Jun/2027 |
| 0% | 5% | 10% | 15% |
| Minimum Dietary Diversity for Women (MDD-W) (GAFSP Tier 1 Indicator) (Percentage) | | | |
| May/2023 | Jun/2025 | Jun/2026 | Jun/2027 |
| 0% | BL+5% | BL+15% | BL+25% |
| Minimum Dietary Diversity for Children (MDD-C) Children between 6 and 24 months (GAFSP Tier 1 Indicator) (Percentage) | | | |
| May/2023 | Jun/2025 | Jun/2026 | Jun/2027 |
| 0% | BL+5% | BL+15% | BL+25% |

Intermediate Indicators by Components

| Baseline | Period 1 | Period 2 | Closing Period |
|--|----------|----------|----------------|
| Component A: Climate and Nutrition Smart Agricultural Technology Adaptation and Dissemination | | | |
| Farmers receiving inputs or services on climate resilient or sustainable agriculture practices (GAFSP Tier 2 Output Indicator) (Number) | | | |
| May/2023 | Jun/2025 | Jun/2026 | Jun/2027 |
| 0 | 8,000 | 17,000 | 27,000 |
| Farmers reached with agricultural assets or services (Number) ^{CRI} | | | |
| May/2023 | Jun/2025 | Jun/2025 | Jun/2027 |
| 0 | 11000 | 22500 | 33750 |
| ➤ Farmers reached with agricultural assets or services - Female (Number) ^{CRI} | | | |
| 0.00 | 10400 | 14625 | 21938 |
| Land area provided with new/improved irrigation services (GAFSP Tier 2 Output Indicator) (Hectare(Ha)) | | | |
| May/2023 | Jun/2025 | Jun/2026 | Jun/2027 |
| 0 | 400 | 1000 | 1,200 |
| Component B: Income Generation and Diversification | | | |
| Producer-based organizations supported (GAFSP Tier 2 Output Indicator) (Number) | | | |



| | | | |
|--|----------|----------|----------|
| May/2023 | Jun/2025 | Jun/2026 | Jun/2027 |
| 0 | 540 | 1,100 | 1,350 |
| Number of subprojects (business plans) submitted by the producer groups (Number) | | | |
| May/2023 | Jun/2025 | Jun/2026 | Jun/2027 |
| 0 | 375 | 750 | 1000 |
| Number of sub-projects (business plans) financed by the project on a matching grant basis (Number) | | | |
| May/2023 | Jun/2025 | Jun/2026 | Jun/2027 |
| 0 | 275 | 550 | 720 |
| Increased Net farm income (Percentage) | | | |
| May/2023 | Jun/2025 | Jun/2026 | Jun/2027 |
| 0% | BL+5% | BL+12% | BL+20% |
| Processing, storage and market facilities constructed and/or rehabilitated (GAFSP Tier 2 Output Indicator) (Number) | | | |
| May/2023 | Jun/2025 | Jun/2026 | Jun/2027 |
| 0 | 16 | 32 | 32 |
| Component C: Improving Nutrition Security | | | |
| People receiving improved nutrition services and products (GAFSP Tier 2 Output Indicator) (Number) | | | |
| May/2023 | Jun/2025 | Jun/2026 | Jun/2027 |
| 0 | 7,000 | 14,500 | 16,250 |
| Improved Household Dietary diversity score including nursing mothers and children under two years (1000 day mother target) (Percentage) | | | |
| May/2023 | Jun/2025 | Jun/2026 | Jun/2027 |
| 0% | BL+5% | BL+12% | BL+20% |
| Number of small grant-financed subprojects (business plans) (Number) | | | |
| May/2023 | Jun/2025 | Jun/2026 | Jun/2027 |
| 0 | 150 | 300 | 400 |
| Component D: Project management, communication, and M&E | | | |
| Persons receiving capacity development support, gender-disaggregated (GAFSP Tier 2 Output Indicator) (Number) | | | |
| May/2023 | Jun/2025 | Jun/2026 | Jun/2027 |
| 0 | 200 | 500 | 700 |
| > Persons receiving capacity development support, female (Number) | | | |
| May/2023 | Jun/2025 | Jun/2026 | Jun/2027 |
| 0 | 100 | 250 | 350 |
| Beneficiary satisfaction rate with relevance, timeliness and effectiveness of services provided by the project (Percentage) | | | |
| May/2023 | Jun/2025 | Jun/2026 | Jun/2027 |



| 0% | 10% | 35% | 70% |
|--|----------|----------|----------|
| Grievances registered addressed within the deadline set by the project GRM (Percentage) | | | |
| May/2023 | Jun/2025 | Jun/2026 | Jun/2027 |
| 0% | 75% | 80% | 90% |
| Periodic reports submitted on time (Number) | | | |
| May/2023 | Jun/2025 | Jun/2026 | Jun/2027 |
| 0 | 2 | 4 | 6 |



ANNEX 1: Implementation Arrangements and Support Plan

COUNTRY: Nepal

Food and Nutrition Security Enhancement Project II

Project Institutional and Implementation Arrangements

1. **The implementation arrangements will follow the existing arrangements for the ongoing FANSEP.** The MoALD will be the executing ministry and will work in coordination of line agencies to implement the project. At the central level, the project will include (a) the existing FANSEP Steering Committee, strengthened by a representative of the Ministry of Foreign Affairs and General Administration (MoFAGA) and Ministry of Health and Population (MOHP), to provide strategic oversight and guidance, (b) a Technical Coordination Committee to provide technical guidance and recommendations to the Steering Committee, and (c) a PMU for day-to-day project administration and management. At the decentralized level, the project will have PCUs in each of the targeted municipality clusters to ensure smooth activity implementation, monitoring, and coordination at the local level. For the implementation of specific interventions, the project will collaborate closely with NARC, specialized technical departments (Department of Agriculture, Department of Livestock Services, Department of Irrigation, Department of Health Services, Department of Food Technology and Quality Control, and so on), and other relevant public agencies and NGOs. All requisite short- or long-term consultants will be appointed to support the project units at various levels.

Project Management Unit

2. **The PMU will be headed by a gazetted Class 1 officer, designated as Project Director, joint secretary level of the agriculture service, deputed from the MoALD.** The Project Director would be operationally and managerially in charge of the organization structure established at the central, provincial, and ward levels and for implementing the project. The Project Director will have the authority to make decisions related to project administration and FM. There will be three positions of gazetted Class 2 officers designated as Senior Planning Officer, Senior Agriculture Officer, and Senior M&E Officer. These officers will also be deputed from the MoALD for the entire project period (undersecretary level position of the agriculture service). There will be four technical officers (gazetted Class 3 officers with two from crop science and one each from livestock and agri-economics background) to assist in the smooth functioning of the project's management, along with an Accounts Officer, an accountant and an administrative assistant deputed as core staff as per the GoN regulation. Computer operators, office secretary, office assistants, and drivers will be hired for the project period on service contracts.

Project Cluster Units (PCUs)

3. **In all four project municipality clusters, existing FANSEP PCUs designated by the MoALD will continue to coordinate municipal-level project activities with line agencies and other partners.** Each PCU will be headed by a gazetted Class 2 officer, designated as cluster chief (Senior Agriculture Officer), undersecretary level of the agriculture service, deputed from the MoALD. There will be two positions of



gazetted Class 3 officers designated as Agriculture Officers in each PCU. Similarly, there will be three assistant-level staff in each PCU: one accountant and two junior technicians. All these staff will also be deputed from the MoALD for the entire project period. The PCUs will also provide technical backstopping for implementation at the ward/field level and follow-up progress reporting. There will be additional technical staff (technical officers and technicians for the project duration) at the PCU in implementation of the project activities. The technical staff to be posted at the PCU will be hired through the project. Some of the project interventions envisaged by the project, such as matching grants, will be implemented and facilitated by the PCU. Furthermore, the PCU will be responsible for (a) coordinating and implementing the project activities at the municipal level, (b) encouraging participation of farmers' organizations (farmer groups and farmer cooperatives) and NGO federation and other relevant stakeholders, (c) facilitating planning and inter-agency coordination, (d) assisting in the selection of project sites and beneficiaries and participatory monitoring (ensuring involvement of different stakeholders such as civil society organizations and the media as part of the team), (e) organizing public hearings, media briefings/media trips, and stakeholder monitoring activities, and (f) ensuring appropriate governance and accountability, including through management of a suitable grievance redressal system. The PCUs will also coordinate with and support the RM-level Food and Nutrition Security Committees.

Project Staff for Implementation Support

4. **To support implementation activities at the farm level, the project will hire two kinds of staff from the FAO-TA: technicians (crop and livestock) and project facilitators (nutrition).** The technicians and project facilitators will devote most of their time to implementing field-level activities under the guidance of the PCUs. These staff will be hired only for the lifetime of the project and positioned at the relevant project RMs. Hiring this cadre of staff will enhance the capacity of implementing agencies—by providing both an adequate number of staff to handle the increased workflow and the relevant skills mix to execute the technical tasks—to adequately support and backstop project activities at the farm level. In village areas, within the wards, the technicians and project facilitators will mobilize farmers/nutrition groups and coordinate with respective RMs and will provide technical support activities that would principally include crop/livestock programs, grants, field schools (crop, livestock, farm business, and nutrition), technology demonstrations, farm water management, and management of group/community productive assets. These staff will be hired from local service providers through the FAO as in FANSEP, and where applicable existing local service providers and staff will continue to work on FANSEP II from FANSEP.

FAO Implementation Support

5. **The GoN has identified the FAO as the sole source of TA to FANSEP II, building on the successful collaboration under the AFSP and FANSEP.** The cost for TA service from the FAO is around US\$3.5 million. TA from the FAO is geared toward improving project performance, incorporating best practices, and documenting lessons learned. Four specific areas have been identified for the FAO TA based on its comparative advantage and experience: (a) support for the further development of the extension services and dissemination of improved technology packages through the FFS, (b) development of market links for the targeted smallholder farmers, (c) support for the rollout of NFFs, and (d) quality assurance. The TA



activities are designed to strengthen the capacities of the public service providers and targeted beneficiaries of the project and enhance the effectiveness of project interventions.

6. **The FFS, FBS, and NFS approaches will be modified to suit the targeted areas in terms of biophysical and socioeconomic characteristics, working within the framework of the new federal extension.** Capacity development will target farmers, PGs, and cooperatives. Relevant technical guidelines and training of trainers manuals from FANSEP will be used with modifications, where needed. This will also encompass TA support for the implementation of the farmer-led micro-irrigation investments that will include assessing the feasibility and suitability of the small-scale irrigation kits for different agro-ecological sites and providing capacity building on using the technologies and operation and maintenance. Capacity development will include training on land husbandry under irrigated production using the FFS approach.

7. **In terms of establishing market links, TA from the FAO will be extended to strengthen farmer organizations** to improve their 'Farming as a Business' skills and help them build knowledge and acumen to make their farm operations more profitable. This entails support for organizational management, business planning, and market-led production decisions. Specific emphasis will be given to building women leadership skills. In addition, TA support will be provided for value chain development strategies, including market exploration, and strengthening of contract negotiations. Building farmers' business and investment planning skills will also ease the implementation of farmer co-financing modalities of physical assets and small-scale market infrastructure, including collection, storage, and processing facilities as proposed under Component B.

8. **TA will also be provided for the implementation of interventions related to nutrition improvement at the household level**, including the scaling-up of improved kitchen garden models, introduction of backyard poultry, and establishment of NFSs. Building on ongoing efforts, the TA will thus support the practical application of dietary guidelines in conjunction with the Department of Health and DFTQC, promoting nutrition education and creating menus based on the locally available seasonal food items. The TA aims to increase dietary diversity and the coping mechanisms for food-deficit periods through promoting new ways of preserving and processing nutrition-dense food. Project management support will be provided for implementation and monitoring of nutrition outcomes at the household level. With respect to quality assurance, the FAO is expected to support needs assessment (HR gaps and training needs), development and integration of monitoring and reporting systems, and other technical support services as requested.

Financial Management

9. **FM systems and capacity.** The project will benefit from the established FM systems, existing FM capacity, and experience gained from the ongoing project, as this project is funding similar activities. The current staffing structure of the PMU with the Finance Officer, and accountant, supported by an FM consultant will be continued for the project. The PMU will be responsible for overall FM, including coordination and monitoring of the PCUs. An accountant deployed in each of the PCUs will be responsible for FM of the PCUs' expenditures. The established FM systems, existing structure, and capacity are considered adequate, including for financial monitoring being emphasized by the World Bank.



10. **Planning and budgeting.** This project will follow the Government's planning and budgeting procedure. The PMU will prepare the overall budget and work program based on inputs from the respective PCUs. The budget will be proposed through the Line Ministry Budget Information System, which ensures the detailed basis of required activities and nature of expenditures for budget preparation. The budget will be provided to the PMU and PCUs for their respective expenditures. Implementation of these budgets and work programs will be monitored by the PMU and reported on a quarterly basis through the interim unaudited financial reports (IUFRs). As the budget for this project is being proposed under the same budget code of the ongoing project, it has been agreed to a budget under separately identifiable budget heads for this project's activities to ensure separate identification of the project's expenditures.

11. **Funds flow.** The funds flow will be limited to the PMU and PCUs as the cost centers. Municipalities will not receive any funds. Payment for expenditures related to the municipalities will be done by the PCUs. In addition to using the government treasury, payments can also be made from the Designated Account(DA) with advance provided by the World Bank (see below on Disbursement for details). However, DA cannot be used for payment of advances, and only for payment of incurred expenditures. Direct payment to United Nations (UN) agencies can also be made from the World Bank through UN commitment based on the memorandum of understanding (MOU)/contract between the PMU and the concerned UN agency.

12. **The Government's Financial Procedures law and regulation will be followed for overall funds management.** Roles and responsibilities for fund management are clearly described in the regulation, based on which FM staff/consultants (both at the central and PCU level) will help ensure that the project funds are effectively managed. The PCU's funds flow management will be monitored by the PMU.

13. **Accounting, financial reporting, and internal controls.** The Government's cash basis accounting system will be followed. Accounting information is maintained in the Computerized Government Accounting System (CGAS) by the PMU and PCUs. The IUFRs, with consolidated information from all the PCUs, will be prepared by the PMU and submitted to the World Bank by 45 days from the end of each quarter, that is, three months. The IUFRs will follow the same format as the ongoing project. The IUFR for this project will be separate from the IUFR of the ongoing project. Thus, two sets of consolidated financial reports (one for the ongoing project and one for this project) will be required. All the required accounts related to the World Bank's disbursement, including accounts for the DA and grant, will be maintained by the PMU. The internal control process of the Government will be applied, including internal audit. According to the Government policy, emphasis will be placed on ensuring that internal audits are conducted regularly, at least on a six-monthly basis. Additional controls required based on the project needs are already included in the PIM, which will also be applicable to this project. Regular monitoring is required to ensure compliance with the applicable control measures as well as efficiency and effectiveness of the project expenditures. The FM staff/consultants hired for the project will help ensure timely and quality accounting, financial reporting, internal controls, and financial monitoring.

14. **For the sub-grants, the municipalities will be involved in the selection and certification process according to Government policy while the funds flow will be limited to the PCUs.** There will be reporting of sub-grant expenditures to the PMU, based on which documentation of expenditure would be done

with the World Bank by the PMU. The details are included in the Grant Operations Manual, including the required records to be maintained by the beneficiaries and reported to the respective PCUs/PMU. The Grant Operations Manual also include details of the monitoring mechanism for sub-grants. The sub-grants payment will be made in the bank account of the respective beneficiaries.

15. **External audit.** The project financial statements, including the Statement of Expenditures and DA statements, will be audited by the Office of the Auditor General (OAG). The external audit report for each year of project implementation will be submitted to the World Bank within nine months from the end of each fiscal year. To avert delays in audit report submission, the PMU will coordinate with the OAG by May of each year to ensure that the project’s audit (including the PCUs’ expenditures) is scheduled on time. There is no overdue audit report from the MoALD.

16. **Supervision plan.** Project implementation progress will be closely monitored by the PMU and World Bank. Key fiduciary FM work includes (a) implementation support to the project, including participation in the reviews and informing the task team of FM risks, issues, and required mitigating measures, and (b) review of financial/audit reports and preparing summaries of such reports for further action as required.

Disbursements

17. **Disbursement under the proposed grant will be made as indicated in table 1.1, which shows the percentage of financing for different categories of expenditures under the project.** The GAFSP grant of US\$20 million is allocated as US\$16.50 million for investment funding and upto US\$3.5 million for TA service from the FAO. Government financing will be a parallel financing to cover (a) government staff cost, (b) some of the monitoring cost including travel and allowance of government staff, and (c) incremental operating costs other than those covered by the incremental operating costs definition in the Grant Agreement.

Table 1.1. Disbursement under the Proposed Funding

| Category | Amount of the Grant Allocated (US\$) | Percentage of Expenditures to Be Financed (Inclusive of taxes) |
|--|--------------------------------------|--|
| (1) Goods, works, non-consulting services, consultants’ services, training and workshops, and incremental operating cost | 14,820,000 | 100 |
| (2) Matching Grants Subcomponent B2 | 3,500,000 | 100 |
| (3) Small grants Subcomponent C2 | 1,680,000 | 100 |
| Total Amount | 20,000,000 | |

Disbursement Arrangements

18. **The disbursement arrangement of the ongoing project will apply to this project. The disbursement from the World Bank will be based on Statement of Expenditures.** The reimbursements to the Government treasury can be done directly from the World Bank as required. To facilitate



disbursement, segregated DA in U.S. dollars will be opened at the Nepal Rastra Bank. The DA will be operated under joint signatures of the designated officials of the PMU. An advance not exceeding the threshold specified in the Disbursement Letter will be provided in the DA, which can be replenished as per the need. The reimbursement to government treasury can be done from the World Bank as required. Direct payments to various suppliers, contractors, and service providers can also be made from the DA as required. Direct payments to various suppliers, contractors, and service providers can also be made as required. For reimbursement and direct payment from the World Bank, minimum application value will be specified in the Disbursement and Financial Information Letter. The World Bank can also make payments to the concerned UN agency against UN commitment based on the project's MOU/contract with the agency. The disbursement with the World Bank will be managed by the PMU, including for the PCUs. There will be no transfer of the World Bank funds to the PCUs. Based on the reports received from the PCUs, the PMU will reimburse the PCUs' expenditure amounts to the Government treasury (through DA or direct reimbursement from the World Bank) and manage direct payments for the PCUs, if required.

Procurement

19. **The PMU will be responsible for overall procurement management of the project and will be responsible for managing the Systematic Tracking of Exchanges in Procurement (STEP) tool.** The four established PCUs will carry out small-value procurements, under the overall guidance, supervision, and monitoring of the PMU. The PMU, however, shall ensure all records on STEP are up-to-date including the procurements undertaken by the PCUs. All major procurements, including selection of consulting firms and individual consultants and procurement of office equipment, vehicles, and so on, will be centralized in the PMU. The PCUs' procurement will be limited to small procurements, that is, seeds and saplings. Procurement of goods and works, to be undertaken by the beneficiaries under the grant proceeds managed by the PCUs using the community-driven development procedure, as stated in Section VI, Clause 6.52 of the World Bank's Procurement Regulations. The Project Operation Manual/Grant Operation Manual will detail the procurement process of such activities.

Environmental and Social Risk Management

20. **The project's environmental and social risk is rated Moderate.** SEA/SH-related risks of the project are assessed to be low using the World Bank's SPPJ HD tool, considering that the project does not involve large construction works and influx of workers to the host communities is not expected.

21. **An ESMF is being prepared to provide guidance for management of environmental and social risks and impacts.** This new ESMF builds on the ESMF of FANSEP from GAFSP, which is currently in the last year of implementation, and includes experiences and lessons learned from the earlier project that helps ensure adequate environmental and social risk management for the new project. Furthermore, the framework is being prepared as per the World Bank's ESF and ESS applicable to this project and additional environmental and social safeguards instruments, which will be applied and implemented throughout the project life. The project triggers ESS1, ESS2, ESS3, ESS4, ESS6, ESS5, ESS7, and ESS10 (ESF 2018).

22. **It will also identify the national requirements and procedures for preparation and approval of Environmental Assessments (Brief Environmental Study/ Initial Environmental Examination/**



Environmental Impact Assessment) complying with Environmental Protection Act (2019) and Environmental Protection Rule (2020) as a legal precondition for agriculture sector investment projects. A draft SEP has been prepared and disclosed. Draft stand-alone Labor Management Procedures and the Resettlement Policy Framework as part of the ESMF are also being prepared. In addition, an ESCP has been prepared and jointly agreed and disclosed. The ESCP outlines the measures and actions that the borrower will be required to ensure compliance over the course of the project. The ESMF will also feature a dedicated capacity-building strategy for all three tiers of the government on environmental and social risk management for the project. To strengthen institutional capacities for better planning, preparation, and monitoring of environmental and social risk, the framework will also earmark the required budget support at all levels. The PMU will be the main focal point for the ESMF implementation. An environmental and social safeguard specialist will be assigned to the PMU to ensure that the due diligence processes set forth through the ESCP and all project-specific instruments on environmental and social monitoring and reporting are conducted and implemented accordingly. Cluster offices will hire or assign an environmental and social specialist to carry out all the activities specified in the ESMF.

Citizen Engagement

23. **Given the nature of the project, which aims to provide direct benefits to women living in rural areas, citizen engagement will be instrumental during implementation of the project activities.** As envisaged in the SEP, the project will adopt a participatory approach and ensure active citizen engagement in all stages, from early preparation to implementation and completion of the project activities by bringing together several grassroots organizations such as FFSs, NFSs, and mothers' groups. The project will have a functioning GRM, which is a continuation of the existing GRM of FANSEP and it will be made available to all project stakeholders and persons to seek redress when they feel aggrieved by project activities. Beneficiary satisfaction surveys will also be undertaken at midterm and near closure of the project implementation to assess citizens' views on the services extended by the project.

Gender

24. **FANSEP received the gender tag** by identifying a clear results chain with gender gaps to be addressed in the areas of women's access to agricultural technology and extension services, ownership over agricultural assets, lack of voice and decision-making in economic benefits accruing from project activities such as grant support for income generation, and barriers in participation and capacity. The implementation of FANSEP shows progressive results in closing these gaps and meeting the respective targets: increase of farmers adopting improved agricultural technologies (progress: 79 percent of the 32194 are women, the target was 65 percent); farmers reached with agricultural assets with females (progress: 71 percent of the 37,009 are female); and training participants (regular and FFS) (Progress: 72 percent are female).

25. **This proposed project will continue to address the gender gaps identified in FANSEP.** The proposed actions in this project are to increase income generation especially for female-headed households, increase the adoption of agricultural technologies (65 percent of the targeted farmers to be women), improve the diet of pregnant and nursing women, provide capacity support and direct benefits, and improve access to technology dissemination and agricultural assets/services on climate resilient or



sustainable agricultural practices (65 percent of the targeted 55,000 beneficiaries). In addition, the Gender Strategy and Action Plan that was prepared by FANSEP will continue to be implemented by this project and further updated to reflect new focus areas and targets. .

Monitoring and Evaluation

26. **The existing M&E system of FANSEP will be strengthened and implemented to track progress continuously.** The PMIS will be upgraded and put in place at the PMU level. The project will further build the existing capacity of the PMU to use the PMIS and be able to produce reports at agreed intervals. Progress toward achieving the specific milestones will be tracked as stipulated in the Results Framework. Furthermore, the PMU, with inputs from the PCUs, will produce Implementation Progress Reports per quarter. Data needed for impact evaluation purposes will be collected in project and non-project areas by a third party including the necessary baseline, midterm, and impact evaluation activities. In addition, the project M&E function will include periodic beneficiary assessments to track the project's progress and ensure a systematic approach to citizen engagement. The M&E system will also allow for specific studies to be commissioned to complement data gathered from the regular monitoring where needed. The PIM will detail the organizational and technical setup that will govern the project's M&E procedures. A midterm evaluation will be conducted halfway through the project life cycle and an Implementation Completion and Results Report no later than six months after project completion. The project will ensure that gender considerations and citizen engagement are fully integrated in impact evaluation studies and engage local beneficiaries to take part in the midterm and final evaluations. The Monitoring and Evaluation plan is presented below.



Monitoring & Evaluation Plan: PDO Indicators

| Indicator Name | Definition/Description | Frequency | Data source | Methodology for Data Collection | Responsibility for Data Collection |
|---|---|-----------|--------------------------------------|--|------------------------------------|
| Farmers adopting improved agricultural technology (disaggregated by gender) | This indicator is defined as the number of farmers (members of crop or livestock PGs supported by the project) who have adopted an improved agricultural technology promoted by FANSEP-II | Annual | Household Survey Report, PMIS Report | The adoption number is measured as the product of (i) the share of PG members adopting at least one improved technology (measured in the sample covered by the household survey) and (ii) the number of PG members provided with access to improved agricultural technologies (from the PMIS) | External Survey Firm, TA/PMU |
| Increased crop and animal productivity by direct beneficiaries | The indicator is defined as improvements in production per ha or animal resulting from improvements in production practices through FANSEP-II interventions. | Annual | Household Survey Report | Crop and livestock production are measured as the ratio of production (kg, MT, L) over the size of the land area or animal herd. Productivity for a composite group of agricultural products is measured as the weighted average of the productivity of the individual crops or animals, where each weight is based on the share of land/output allocated to that crop. | External Survey Firm/PMU |
| Crops (food grains) | Food grains include rice, maize, and wheat. | | | | |
| Crops (vegetables) | Vegetables include potato, tomato, cauliflower, bitter gourd, cucumber, bottle gourd, sponge gourd, pumpkin, okra, peas and beans, cabbage, radish, carrot, and brinjal. | | | | |
| Livestock (meat) | Livestock meat includes goat meat | | | | |
| Livestock (milk) | Milk includes cow and buffalo milk. | | | | |
| Increased Household income (farm and off-farm) | This indicator is defined as the improvement in household net income through FANSEP-II interventions. Household income is calculated as the sum of the net revenues (income minus total costs) from all sources of livelihood activities of the household including the imputed value of the household's self-cultivated and self-consumed crops. Both farm and off-farm income sources are included as per the GAFSP M&E requirements. | Annual | Household Survey Report | The value of the household's self-cultivated and self-consumed crops will be imputed by multiplying the amount of crop consumed by the average sale price of same crop at household/RM/district levels, with a preference for data points at the lowest available level. For crop income and livestock income, costs of production such as cost of inputs, labor, and veterinary services were subtracted from the total sales revenue of crops and livestock. | External Survey Firm/PMU |
| Increased Household income of female | This indicator is defined as the improvement in household net income through FANSEP-II | | | | |



| | | | | | |
|---|---|--------|-------------------------|--|--------------------------|
| headed households | interventions, for female headed households. | | | | |
| Reduced Food Insecurity Experience Scale by direct beneficiaries (FIES) | This indicator measures the percentage of households that experienced food insecurity at moderate and severe levels during the 12 months prior to data collection. The questions refer to the experiences of the individual respondent or of the respondent's household as a whole. | Annual | Household Survey Report | The FIES indicator based on 12-month recall period is the indicator recommended by FAO and GAFSP M&E guidelines; where the longer period allows to capture seasonality. The indicator is based on an estimation of the probability that each household belongs to a specific category of food insecurity severity (moderate and severe), as determined by the household's position on the scale. Data for this indicator need to be collected from a representative sample of FANSEP-II beneficiaries households. | External Survey Firm/PMU |
| Improved Minimum Dietary Diversity for pregnant and nursing women | The Minimum Dietary Diversity (MDD) for Women is a dichotomous indicator of whether or not women 15–49 years have consumed at least 5 out of 10 defined food groups the previous day or night. | Annual | Household Survey Report | Data are gathered from a representative sample of project households by administering a questionnaire to female respondents 15–49 years of age. Respondents are asked to recall the food groups that they consumed over the previous 24 hours using open recall. The indicator is then calculated as share of woman who meet MDD in numerator, divided by total number of women aged 15–49 years. Improved MDD for woman is defined as the percentage change in MDD levels between baseline and reporting year. | External Survey Firm/PMU |
| Improved Minimum Dietary Diversity for children between 6-24 months | The MDD for children represents the percentage of children 6–23 months of age who consumed foods and beverages from at least five out of eight defined food groups during the previous day or night. | Annual | Household Survey Report | Data are gathered from a representative sample of project households by administering a questionnaire to the child's caregiver. Respondents are asked to indicate whether or not their child consumed any food over the previous 24 hours from each of the eight food groups. The indicator is then calculated as share of children who meet MDD in numerator, divided by total number of children aged 6-23. Improved MDD for children is defined as the percentage change in MDD levels between baseline and reporting year. | External Survey Firm/PMU |

Monitoring & Evaluation Plan: Intermediate Results Indicators

| Indicator Name | Definition/Description | Frequency | Datasource | Methodology for Data Collection | Responsibility for Data Collection |
|--|---|-----------|--|---|------------------------------------|
| Farmers receiving inputs or services on climate resilient or | This indicator measures the number of farmers who have received inputs or services on resilient or sustainable agriculture practices by the | Annual | Progress reports, annual reports, PMIS | The (unique) beneficiaries who received inputs/services on resilient or sustainable agriculture practices from FANSEP-II will be captured from the PMIS. As part of the data entry and report | TA/PMU |



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| sustainable agriculture practices | FANSEP-II. | | Report | generation process in the PMIS, inputs or services received by beneficiaries will be categorized according to whether they are climate resilient or sustainable agriculture practices. | |
| Farmers reached with agricultural assets/ services | This indicator measures the number of farmers who were provided with agricultural assets or services as a result of FANSEP-II support. Assets include property, biological assets, farm and processing equipment, and so on. Services include research, extension, training, education, information and communication technologies (ICTs), production-related services (for example, soil testing, animal health/veterinary services), phytosanitary and food safety, agricultural marketing support services, access to farm and postharvest machinery and storage facilities, employment, irrigation and drainage, and finance. | Annual | Progress reports, PMIS Report | The (unique) beneficiaries who received agricultural assets/services from FANSEP-II will be captured from the PMIS. | TA/PMU |
| Farmers reached with agricultural assets or services - Female | | | | | |
| The land area provided with new/improved irrigation services | This indicator measures the total land area (ha) that has benefited from the project's investments in new or improved irrigation services by the FANSEP-II. Improved irrigation services may include: (i) area provided with new irrigation (ha); and (ii) area provided with improved irrigation (ha). Irrigation services refer to the better delivery of water to arable land, including better timing, quantity, quality, and cost-effectiveness for the water users. New irrigation services refer to the provision of irrigation services in an area that has not had these services before. Improved irrigation services refer to the upgrading, rehabilitation, and/or modernization of irrigation services in an area with existing irrigation services. | Annual | Progress reports, PMIS Report | When the irrigation scheme completion report is submitted by the groups supported by FANSEP-II, this indicator will be captured and entered into PMIS . | TA/PMU |
| Producer-based organizations | This indicator measures the number of relevant associations, whether or not formally registered, | Annual | Progress reports, PMIS | The producer organizations are established or strengthened to enhance agricultural, livestock, fishery production, processing, or | TA/PMU |



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| supported (number) | that are either established through or strengthened by the FANSEP-II project. | | Report | marketing, and provide services to their members. The number is counted as the number of producer organizations receiving at least one intervention (inputs, assets or services) from FANSEP-II. | |
| Number of subprojects (business plans) submitted by the producer groups | This indicator measures the number of business plans submitted by producer groups under the matching grant scheme. | Annual | Progress reports, PMIS Report | The number of subprojects will be measured as the number of producer groups that have submitted matching grant scheme as each producer group can submit only one matching grant at a time. The data will be obtained from the PMIS. | TA/PMU |
| Number of subprojects (business plans) financed by the project on a matching grant basis | This indicator measures the number of subprojects completed under the MG scheme. | Annual | Progress reports, annual reports, PMIS Reports, | Data will be gathered from the field and updated in PMIS on a regular basis | TA/PMU |
| Increased Net farm income | This indicator measures the net farm income (total revenue- total cost) for beneficiaries receiving matching grants | Annual | household Survey Report | Data will be gathered from a representative sample of members of the producer groups that are recipients of matching grants by administrating a questionnaire | External Survey Firm, TA/PMU |
| Processing, storage, and market facilities constructed and/or rehabilitated | This indicator is defined as the number of both handling/processing/storage facilities and marketing facilities constructed or rehabilitated by the FANSEP-II project. Storage facilities include structures used for mid-to long-term storage or preservation of produce such as post-harvest handling centers, collection centers, markets, agro-processing, storage, quality control and other marketing related facilities. Market facilities are the structures used to sell produce, such as marketplaces and shading structures. Processing facilities include equipment and machinery that are used for the transformation of agricultural produce (such as mills, hullers, shellers, extractors, and slaughterhouses for livestock) where value is added. | Annual | Progress reports, PMIS Report, Geo-referencing | This indicator measures the number of facilities constructed or rehabilitated by the FANSEP-II project. Data will be gathered from the field after the completion of such infrastructure and updated in PMIS on a regular basis. | TA/PMU |
| Persons who have received improved nutrition services and products | This indicator is defined as the number of people with access to a basic package of nutrition services as a result of FANSEP-II project support. The basic package of nutrition services includes, among other things, provision of home nutrition garden, nutrition field school, small grant, or | Annual | Progress reports, annual report, PMIS Report | Data will be gathered from the field through field level staffs about the delivery of nutrient interventions and updated in PMIS on a regular basis. | TA/PMU |



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| | community nutrition education programs. | | | | |
| Improved Household dietary diversity score including nursing mothers and children under two years) | The Household Dietary Diversity Score (HDDS) is a population-level indicator that is used as a proxy measure of household food access. | Annual | Survey Report | The HDDS will be calculated based on WHO norms for 10 food groups. The measurement will come through sample survey among all beneficiary HHs of the project receiving nutrition related interventions. | External Survey Firm/PMU |
| Number of small grant-financed subprojects (business plans) | This indicator measures the number of subprojects completed under the small grant scheme | Annual | Progress reports, annual reports, PMIS Reports, | Data will be gathered from the field and updated in PMIS on a regular basis. | TA/PMU |
| Persons receiving capacity development support, gender-disaggregated | This indicator counts the number of persons who received technical assistance and capacity development activities at the institutional level through the FANSEP project. | Annual | Progress reports, annual reports, PMIS Report | This indicator counts both the capacity development activities to technical staff for project delivery (e.g., training of trainers) and activities to enhance institutional capacities of project-related institutions. The capacity development activities will include not only formal training but all other types of tools such as on-the-job training, coaching, mentoring, exposure visit, exchange of good practice, peer to peer learning, etc. However, this indicator will not include trainings provided to people receiving direct benefits. | TA/PMU |
| Beneficiary satisfaction rate with relevance, timeliness and effectiveness of services provided by the project | Number of surveyed beneficiaries satisfied with services provided by the project as a proportion of surveyed target beneficiaries | Bi-Annual | Survey Report | | TA/PMU |
| Grievances registered addressed within the deadline set by the project GRM | The indicator measures the proportion of grievances received by the GRM system, set up by the project, and addressed within the standard period set up by the GRM system. | Annual | Progress reports, annual reports, PMIS Report | The data will come from the GRM system. | TA/PMU |
| Periodic reports submitted on time | The periodic report includes semi-annual and annual reports progress reports for mission, and survey reports including beneficiary surveys. | Semiannual and | Progress reports, annual reports, survey reports, PMIS Report | This indicator counts the number of periodic reports submitted in due time. | TA/PMU |