

**Government of Nepal**

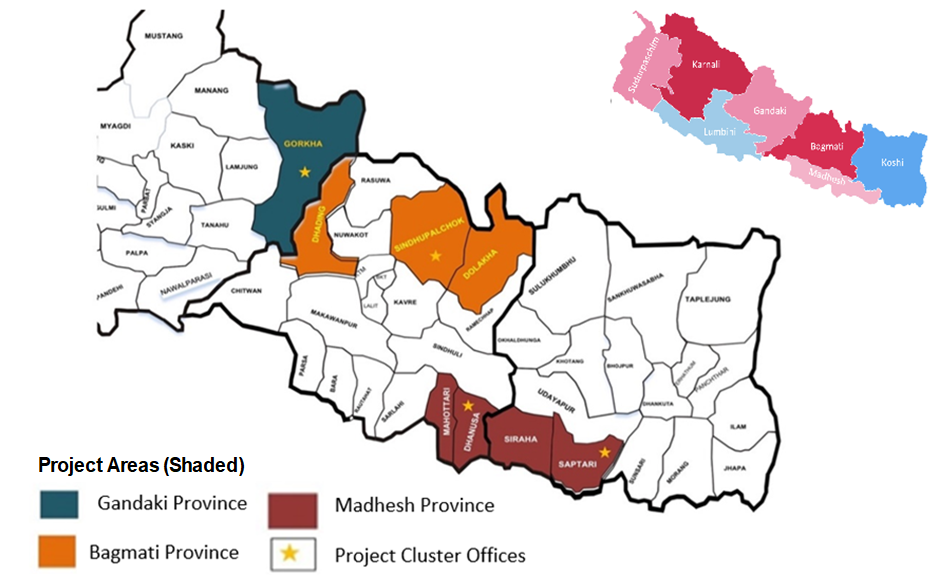
**Ministry of Agriculture and Livestock Development**

**Food and Nutrition Security Enhancement Project II (FANSEP II)**

**GAFSP Grant No.: TF0C1798**

**Project ID: P181087**

**MONITORING AND EVALUATION STRATEGY**

****

**Project Management Unit**

**Hariharbhawan, Lalitpur**

**April 2025**

**Acronyms anD Abbreviation**

|  |  |
| --- | --- |
| AI | Artificial Insemination |
| BCC | Behavior Change Communication |
| CSA | Climate Smart Agriculture |
| DAGs | Disadvantaged Groups |
| DoA | Department of Agriculture |
| DoLS | Department of Livestock Services |
| DP | Development Partner |
| FANSEP II | Food and Nutrition Security Enhancement Project II |
| FAO | Food and Agriculture Organization of the United Nations |
| FBS | Farm Business School |
| FCHV | Female Community Health Volunteer |
| FFS | Farmer Field School |
| FGDs | Focus Group Discussion |
| GAFSP | Global Agriculture and Food Security Programme |
| GEMS | Geo-enabled Monitoring System |
| GoN | Government of Nepal |
| HH | Household |
| HNG | Home Nutrition Garden |
| ICT | Information Communication Technology |
| IEC | Information Education Communication |
| LMBIS | Line Ministry Budget Information System |
| M&E | Monitoring and Evaluation |
| MDAC | Ministerial Development Action Committee |
| MGs | Matching Grants |
| MH | Multiplier Herd |
| MoALD | Ministry of Agriculture and Livestock Development |
| MoF | Ministry of Finance |
| MSNP | Multi-Sector Nutrition Plan |
| NARC | Nepal Agricultural Research Council |
| NFS | Nutrition Field School |
| NGs | Nutrition Groups |
| NoL | No objection Letter |
| NPC | National Planning Commission |
| NSB | National Seed Board |
| OPMCM | Office of the Prime Minister and Council of Ministers |
| PAD | Project Appraisal Document |
| PCR | Project Completion Report |
| PCU | Project Cluster Unit  PD Project Director |
| PDO | Project Development Objective |
|  |  |
| PGs | Producer Groups |
| PIM | Project Implementation Manual |
| PMIS | Project Management Information System |
| PMU | Project Management Unit |
| PSC | Project Steering Committee |
| RM | Rural Municipality |
| SC | Steering Committee |
| SG | Small Grant |
| TA | Technical Assistance |
| TCC | Technical Coordination Committee |
| TL | Team Leader |
| ToC | Theory of Change |
| ToF | Training of Facilitators |
| ToT | Training of Trainers |
| UN | United Nations |
| USD | United States Dollar |
| UTF | Unilateral Trust Fund |
| WB | World Bank |

**Glossary**

|  |  |
| --- | --- |
| Annual Outcome Survey (AoS) | The survey conducted by a qualified, experienced, and independent third party hired by the PMU in mid time of the project interventions to capture all PDO indicators and some intermediate indicators like (increased net farm income, improved household dietary diversity score). The AOS covers the treatment group only and the survey is meant for updating the RF of the project and collecting some other relevant information. |
| Baseline Survey | Baseline survey in FANSEP II is a statistical survey to cover treatment and comparison households to establish ‘with and without project’ and ‘before and after project’ bases for counterfactual analysis of project impacts. The baseline survey of FANSEP II will be conducted by a qualified, experienced, and independent third party hired by the PMU. It will comprehensively cover both the treatment and comparison groups. |
| Comparison Group for FANSEP II | Eligible HHs from which none of the members joined FANSEP II groups constitute the comparison group. |
| Counterfactual | What would have happened to the project beneficiaries if the project had not taken place? |
| Eligible Household | HH that meets the criteria to be eligible for FANSEP II intervention, selected from beneficiary survey of FANSEP II |
| Endline Survey | Endline survey in FANSEP II will be the panel survey (sample HHs would be same as that of baseline) and will be conducted by a qualified, experienced, and independent third party hired by the PMU. It will be conducted at the end of project. |
| Evaluation | Evaluation is a systematic and purposeful undertaking carried out by internal or external evaluators to appraise relevance, effectiveness, efficiency, impacts as well as sustainability generated by the policies, plans, programs, and projects under/after implementation. |
| Household (HH) | A person or group of people operating as one economic unit, usually having a common arrangement for the preparation and consumption of food and sharing the same kitchen. |
| Household head | The most knowledgeable person of all the household members and one who takes decisions in the household. |
| Interventions | Intervention refers to activities related to distribution of inputs, assets, services, construction and operation of infrastructures, providing training and capacity building support and other activities implemented to achieve the objective of the project. |
| Matching Grants | Grants Provided under Component B. Selected PGs are eligible for this grant and project covers up to 85% of total costs (maximum NPR 600,000 per MG scheme), with at least 15% contributed by beneficiaries. The grant aims to promote income generation and diversification among PGs. |
| Monitoring | Monitoring is the process of keeping track by management at different levels of hierarchy (PMU, PCU, WB, MoALD, FAO and other agency entrusted by the project management) on a continuous or periodic basis, of the inputs and resources meant for the implementation of projects are being properly delivered; and the verification of whether the project activities are being implemented and where the intended outputs achieved as per the plan and schedule. |
| Nutrition Groups (NGs) | Nutrition group means a group of around 25 members, mostly pregnant and lactating women, formed by the FANSEP II project (under component C), members that belong to eligible HHs and are eligible for receiving nutrition related interventions (from component C of the project). |
| Producer groups (PGs) | Producer group means a group of around 25 members formed by the FANSEP II project (under component B), members that belong to eligible HHs and are eligible for receiving crop and livestock related interventions (from component A and B of the project). |
| Project | A project is a collection of interdependent and coordinated activities geared towards achieving the objective of a plan or policy within a predetermined budget and time schedule. In this document, Project refers to Food and Nutrition Security Enhancement Project II (FANSEP II). |
| Small Grants | Grants Provided under Component C. Selected NGs are eligible for this grant and the project covers up to 85% of total costs (maximum NPR 500,000 per GG scheme), with at least 15% contributed by beneficiaries. The grant aims to promote dietary diversity and nutrition security among NGs. |
| Treatment Group for FANSEP II | Treatment group consists of individuals who are subjected to the FANSEP II intervention(s). These are the members of Producer Groups (PGs) and Nutrition Groups (NGs). |

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# 1. Project Description

## 1.1 Background

Food and Nutrition Security Enhancement Project II (FANSEP II) is designed to enhance climate resilience, improve agricultural productivity and nutrition practices of targeted smallholder communities in selected areas of Nepal. It will increase the resilience and reduce the environmental footprint of production by mainstreaming Climate Smart Agriculture (CSA) practices through project activities.

The Ministry of Agriculture and Livestock Development acts as the implementing agency for the project. The project is implemented in the same eight districts of FANSEP. FANSEP II will scale up the best practices under FANSEP to 16 new rural municipalities (two municipalities in each district), as shown below:

**Table 1: Project Area**

| **Cluster** | **Province** | **District** | **Rural Municipality** |
| --- | --- | --- | --- |
| Gorkha | Gandaki | Gorkha | Aarughat |
| Sahid Lakhan |
| Bagmati | Dhading | Siddhalek |
| Galchhi |
| Sindhupalchok | Bagmati | Sindhupalchok | Sunkoshi |
| Tirpurasundari |
| Dolakha | Melung |
| Baiteshwor |
| Saptari | Madhesh | Saptari | Chhinamasta |
| Mahadeva |
| Siraha | Nawarajpur |
| Laxmipur Patari |
| Dhanusha | Madhesh | Dhanusha | Bateshwor |
| Janak Nandini |
| Mahottari | Samsi |
| Sonama |

## 1.2 Project Beneficiaries

The project will benefit 55,000 new direct beneficiaries from the 16 RMs (Rural Municipalities) 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 (Producer Groups), while the remaining 16,250 beneficiaries will constitute 650 nutrition groups receiving interventions under Component C.

## 1.3 Project Development Objective and Components

The main objective of the Project (PDO) is to enhance climate resilience, and improve agricultural productivity and nutrition practices of targeted smallholder farming communities in selected areas of Nepal to be achieved through the following components (Table 2):

**Table 2: Project component**

| **Components** | **Description** |
| --- | --- |
| **Component A: Climate and Nutrition Smart Agricultural Technology Adaptation and Dissemination (US$7.8 million)** | **This component will focus on promotion of the 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. The component has the following two sub-components.   * ***Subcomponent A1: Technology Adaptation and Testing:*** Through this subcomponent, the proposed project will support the implementation of improved climate- and nutrition-sensitive technologies and associated practices. 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) training relevant to such demonstrations and distributions. * ***Subcomponent A2: Technology Dissemination and Farmers’ Skill Development:*** This component will implement activities that enable farmers to master the management skills (improved agriculture practices) to achieve climate resilience and mitigation. Key activities under this subcomponent will include: (a) conducting of crop and livestock FFSs; (b) establishment of artificial insemination (AI) units; (c) establishment of goat multiplier herds; (d) establishment of community-level fodder resource nurseries supporting plantations; (e) promotion of community seed programs for improved seed replacement rate through establishment of community-based seed production groups; (f) crop and livestock (Goat, rural poultry and Dairy) promotion programs; (g) support small-scale irrigation schemes. |
| **Component B: Income Generation and Diversification (US$5.4 million)** | 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. Component B comprises the following two sub-components.   * ***Subcomponent B1: Strengthening Producer Groups (PG):*** 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 training in group dynamics, leadership, decision-making, problem solving, risk management, preparation of business plans, bookkeeping, crop planning, simple operation and maintenance of farm equipment, and conduction of farm business schools (FBSs) * ***Subcomponent B2: Building Market Linkages through Productive Alliances:*** 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 key activities under this subcomponent are: (a) matching grant schemes for targeted beneficiaries to finance the business plans developed under Subcomponent B1; (b) formation of multi-stakeholders’ dialogue platforms at the RM level; and (c) construction and/or rehabilitation of critical infrastructures (such as collection centers, storage, markets, and processing and grading facilities) |
| **Component C: Improving Nutrition Security (US$4.8 million)** | 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:*** 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. * ***Subcomponent C2: Nutrition Field School (NFS) and Home Nutrition Gardens (HNGs):*** 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 Nutrition Field Schools (NFSs); (b) establish Home Nutrition Gardens (HNGs); and (c) access small grants. 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. Where feasible, nutrition gardens will also be established in schools of participating communities. |
| **Component D: Project management, communication, and M&E (US$4 million)** | **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 FANSEP for selection and award of matching and small grant schemes, implementation of FFSs, FBSs, and NFSs, livestock promotion programs, 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. |

## 1.4 Project Cost and Financing

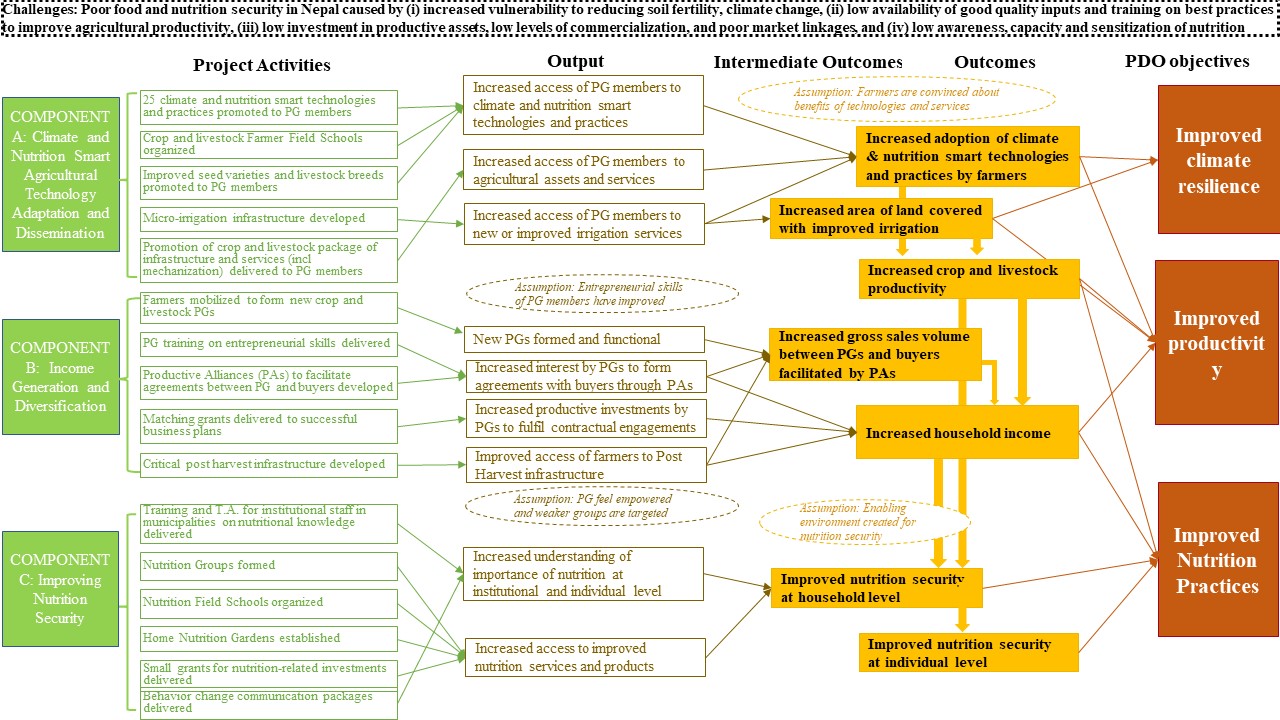
The overall cost for the FANSEP II project amounts to 22 million US dollars. Of this total, 20 million US dollars will be provided by GAFSP, while the Government of Nepal contributes 2 million US dollars as counterpart funding. Summary cost of FANSEP II by component and source of funding are resented in Table 3.

**Table 3: Project costs by component and source of funding**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***Project Components*** | ***Total Project Cost (US$)*** | ***Counterpart Funding (US$)*** | ***GAFSP Financing (US$)*** | ***% GAFSP***  ***Financing*** |
| Component A: Climate and Nutrition Smart Agricultural Technology Adaptation and Dissemination | 7,800,000.00 | - | 7,800,000.00 | 100% |
| Component B: Income Generation and Diversification | 5,400,000.00 | - | 5,400,000.00 | 100% |
| Component C: Improving Nutrition Security | 4,800,000.00 | - | 4,800,000.00 | 100% |
| Component D: Project management, communication, and M&E | 4,000,000.00 | 2,000,000.00 | 2,000,000.00 | 50% |
| ***Total*** | ***22,000,000.00*** | ***2,000,000.00*** | ***20,000,000.00*** | ***90.91%*** |

## 1.5 Theory of Change

**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**

# 2. Monitoring and Evaluation Strategy

## 2.1 Introduction to Monitoring and Evaluation

***"Although monitoring and evaluation are usually discussed in tandem, they serve distinct yet complementary functions. Therefore, despite their distinct roles, M&E processes in practice overlap and need to function as an integrated system"***

Monitoring and evaluation are separate but closely connected activities. Monitoring is generally defined as a continuing activity that involves the collection of data on a regular, ongoing basis in order to track inputs, outputs, outcomes and impact while the project is being executed.

*Monitoring can be defined as “a continuing function that uses systematic collection of data on specified indicators to provide management and the main stakeholders of an ongoing development intervention with indications of the extent of progress and achievement of objectives and progress in the use of allocated funds”. Thus, monitoring embodies the regular tracking of inputs, activities, outputs, outcomes and impacts of development activities at the project, programme, sector and national levels.*

Evaluation, on the other hand, may use monitoring data, but is carried out at distinct and discreet moments of time to determine the worth or significance of a development activity, policy or program. Taken together, they form a powerful instrument for planning the future on the basis of what can be shown to work and what does not.

To summarize, the basic principle is that monitoring is an ongoing activity and evaluation is periodic, carried out at specific times during the project cycle (annual, mid-term, terminal) or indeed after the completion of the project (impact evaluation).

A good M&E system should, in principle, be integrated into all stages of a project or program cycle, from identification through the evaluation. At each stage, it should seek to answer the question, “Are we on track?” At the end, it should answer the question, “Did we achieve what we wanted to achieve?”

**Objectives of Monitoring and Evaluation (M&E)**

Monitoring and Evaluation (M&E) has long been recognized as a vital aspect of development projects generally and of agriculture and rural development (ARD) projects in particular. Continued efforts are required to improve the use of M&E as a management tool in project work.

The implementation of monitoring and evaluation processes is a very important step in project success and sustainability. A robust monitoring and evaluation system is necessary to monitor, collect, and document project data and accurately report on project achievements and impacts on beneficiaries.

Moreover, M&E information is important for external stakeholders who expect results and impact of the intervention on beneficiaries. Availing of M&E information therefore improves trust, especially of donors towards project managers and implementers.

M&E function serves as an early warning system for likely problems which create an avenue for corrective action. In such cases, M&E provides the foundation for improved decision making. It also helps to track progress during implementation and measure success.

Effective monitoring and evaluation systems are also a source of knowledge capital for scalability. They enable organizations to establish knowledge base for project team leaning and future scalability in other projects by disclosing what works, what does not work, why it does not work, what strategies to use, what outcomes are expected from each strategy, etc. In this regard, the M&E system promotes organizational learning, stakeholder access to information and improvement in beneficiary welfare.

## 2.2 Monitoring, Evaluation and Reporting Arrangements in FANSEP II

***"*** ***There is no “best” model of what a M&E system should look like. While perceptions as to the role and function of M&E may vary, their place as key elements of the project cycle among development agencies is incontrovertible. Having the capacity to track results and to use that knowledge to learn what does and what does not work – or how to make things work better – makes M&E a powerful tool for improving development processes and outcomes"***

**Figure 2: Key areas of M & E system in FANSEP II**

The objectives of the FANSEP II M&E strategy are to measure input, output, outcome and impact indicators to provide project staff and stakeholders with regular information on project implementation and output; identify potential problems; and determine to what extent the project is achieving its development objectives. As an integral part of project implementation, the M&E strategy is designed to provide timely and reliable results for management to facilitate informed decision making.

Monitoring and evaluation of FANSEP II, thus, primarily focuses on the collection, analysis and reporting of the PDO and intermediate indicators (refer Section 2.2.1 for a full description of these indicators). In addition, M & E also captures other outputs and outcomes of the project intervention, mostly through the PMIS (Section 2.2.2 and 2.3), and other instrument like GEMS (Section 2.4), FGDs etc. The reporting of processes, activities, outcomes, and results to the ministry or concerned agency (supervising entity, FAO) will be done on a periodic basis (Section 2.2.4). Therefore, key features of the FANSEP II M&E strategy will include:

(i) A baseline on which to assess progress on common RF indicators;

(ii) A regular reporting of progress including quarterly, semi-annual and annual report, implementation status reports/mission report and other report as per the requirement;

(iii) An independent evaluation of project implementation in the second year (Annual outcome survey) and at project completion (Endline survey) as well as any other analysis, reviews, assessments, surveys, and evaluations required to better analyze the impact of the project;

(iv) Interactive, dynamic, user friendly, reasonable and strong Project management Information System (PMIS) that captures inputs, processes, outputs and some outcomes; and

(f) Clear and effective mechanism for grievance redress, including a system for receiving, recording, and addressing complaints and using them for course corrections as required.

### 2.2.1 Results Framework indicators (PDO and intermediate) and their measurement methodology

The PDO indicators and intermediate indicators as well as their M&E arrangements (such as data sources, collection methodologies and responsibilities) is described below**.** The year wise cumulative target of PDO indicators and intermediate indicators of FANSEP II are presented in ***Annex-1.*** The ***ToC (Figure 1)*** and Results Framework ***(Annex 1)*** will be key guiding documents for the project M&E. In the case of restructuring of Results Framework, the project M&E system will be re-adjusted to reflect changes.

**Indicator Reference Sheet for FANSEP II (Definition, Measurement Methodologies)**

**PDO : 1 Farmers adopting improved agricultural technologyCRI**

* **Definition:** 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.

* Number of adopters HHs = The number of HHs that have started using the specific technology (crop or livestock; according to the purpose of measuring adoption- crop or livestock)
* The total number of specific households surveyed refers to those households whose members participated in a crop group under FANSEP II, for the purpose of measuring adoption of crop-related technologies.
* The total number of specific households surveyed refers to those households whose members participated in a livestock group under FANSEP II, for the purpose of measuring adoption of livestock-related technologies.
* **Data collection method**
* 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 (tracked through PMIS)[[1]](#footnote-1)

***Table 4: Crop related improved technology for the provision of this indicator (including but not limited to) are:***

| **S.N.** | **Technologies and practices** | **Key Features/Evidence** |
| --- | --- | --- |
| **A** | **Technologies validated by NARC in FANSEP working areas that will be scaled up in FANSEP II** | |
| **1** | **Wheat varieties** |  |
| 1.1 | Zinc Gahu-1  and Zinc Gahu-2 | Bio-fortified with Zinc, Yield-2-5.7 ton/ha, Recommended for Terai and Inner Terai. |
| 1.2 | Wk-3164  and WK-316 | Bio-fortified with Zinc, early maturity, rust resistance, and Yield 2-4.5 ton/ha. Recommended for Mid to high Hills (1000-2290 m) |
| **2** | **Maize varieties** |  |
| 2.1 | Rampur hybrid-10 F1 | Can withstand high temperature, large size cob the leaves remain green until corn ripe. Yield- 8.05 ton/h. Recommended for Terai, inner Terai and River basin up to 700m. |
| **3** | **Lentil varieties** |  |
| 3.1 | Khajura Masuro-3 | Tolerance to *Stempyllium* blight, and wilt disease. Low disease and pest infestation and late maturity. Yield -1.5 ton/ha. Recommended for Terai, inner Terai, and River basin up to 1700m. |
| **4** | **Potato varieties** |  |
| 4.1 | Kufri Jyoti | Tolerance to blight, resistance to viruses 'x' and 'Y', less infected by Potato Tuber Moth, late blight resistance and low cost of production, and higher income in Siraha and Saptari, Yield - 25 ton/ha. Recommended for High Hill. |
| 4.2 | Khumal Ujjowl | Late blight resistance, low cost of production, and higher income in Siraha and Saptari can tolerate burnt disease, as well as X and Y viruses. Yield - 25 ton/ha. Recommended for Mid Hill, High Hill. |
| **B** | **Climate-smart agriculture technologies and improved practices recommended by NARC and used in FANSEP, will be continued in FANSEP II** | |
| **5.** | **Wheat varieties** |  |
| 5.1 | Bheriganga  **⃰** | Short duration and resistant to leaf rust and moderately susceptible to yellow rust, good Yield- 5.7 ton/ha. Recommended for High Hill and Mid Hill. |
| 5.2 | BL-4341 **⃰** | Drought tolerant to some extent, Yield- 2.7 ton/ha. Recommended for Terai and Inner Terai. |
| 5.3 | Gautam | Tolerant to high temperature and hot wind, resistant to H*elminthosporium* leaf blight, leaf rust, yellow rust, and moderately resistant to Loose smut. Yield- 3.45 ton/ha. Recommended for Terai. |
| 5.4 | Bijaya | Resistant to major disease (Leaf, Stem rust), Moderately susceptible to yellow rust and foliar blight). Tolerant to post-anthesis heat stress. Yield-4.45 ton/ha. Recommended for Terai. |
| 5.5 | Banganga | Grown in irrigated, partially irrigated, and rain-fed conditions. Yield -3.42 ton/ha. Recommended in Irrigated and partially irrigated land of Terai. |
| 5.6 | NL-971 | Resistant to major disease (Leaf rust and yellow rust, HLB, Brown rust, yellow rust, and leaf blight), Tolerant to post-anthesis heat stress. Yield-4.53 ton/ha. Recommended for Terai. |
| 5.7 | Swargadwari | The plant remains green till the late stage, flag leaf wide pointed. Yield-2.99 ton/ha. Recommended for partially irrigated land of Mid-Hill, High Hills. |
| 5.8 | Munal | Resistance to yellow, brown, and black rust and kernel bunt, can tolerate slightly cold and drought conditions. Yield- 4.9 ton/ha. Recommended for Mid-Hills and High-Hills. |
| 5.9 | Dhaulagiri | Resistant to Yellow and Black rust and low infection of leaf blight. Sterility tolerant and can withstand hot weather. Yield- 3.6-4.9 ton/ha. Recommended for Mid and High-Hills |
| **6** | **Rice varieties** (**Rainy season)** | |
| 6.1 | Bahuguni Dhan- 2 **⃰** | Drought and submergence tolerance. Yield-4 ton/ha, recommended for Terai and inner Terai. |
| 6.2 | Swarna Sub-1 **⃰** | Drought and submergence tolerance, and blast resistance, yield -4.5 ton/ha. Recommended for Terai, inner Terai, and mid Hills. |
| 6.3 | Hardinath-3 **⃰** | Drought tolerance, and blast resistance, Yield- 4.5 ton/ha. Recommended for Terai and inner Terai. |
| 6.4 | Sukha Dhan-3 | Tolerant to stem borer and Brown plant hopper, moderately resistant to Bacterial Leaf Blight, Neck/Blast. suitable for rain-fed conditions, and drought tolerance. Yield-2.5 - 3.6 ton/ha. Recommended for Terai, inner Terai, and Mid-Hill up to 500 m. |
| 6.5 | Sawa Mansuli | Preferred by most farmers, recommended in Terai, inner Terai. Yield 5-6 ton/ha. |
| 6.6 | Khumal-4 | Recommended for Kathmandu valley and mid-hill region with a similar climate at an altitude of 3000 -4500 feet. Yield-6.3 ton/ha. |
| 6.7 | Khumal Basmati-16 | Successfully grown in upland, rain-fed to irrigated, and normal and late planted conditions. It can tolerate medium-type stresses like drought and heat radiation, etc. Yield 4.2 ton/ha, Recommended for mid Hills |
| 6.8 | Machapuchre - 3 | Mid to high mountains (Lumle, Ghandruk, and Chomrong regions) with a cool climate at an altitude of 1400 m to 2000m). Yield-4.9 ton/ha |
|  | **Spring Rice varieties** | |
| 6.9 | Chaite-5 | Field resistant to BLB (Bacterial leaf blight), blast, and major pests of rice. Yield-4.6 ton/ha, Recommended for inner Terai and Terai and river basin up to 700m. |
| 6.10 | Hardinath Hybrid-1, F 1 | Suitable for both spring and rainy seasons, Yield -6.47 ton/ha. Recommended for Terai, Inner Terai. |
| 6.11 | Hardinath1 | This variety is resistant to blast, blight disease, and insect resistance to brown hopper and borer. Recommended for Terai and Inner Terai, and river basin up to 800 m |
| **7** | **Maize varieties** |  |
| 7.1 | Rampur composite | Withstand white disease, stay green trait. Yield - 5.45 ton/ha. Recommended for Terai, inner Terai, River basin, and mid-Hills. |
| 7.2 | Manakamana-6 | Used for barbeque, boiled, fry, flour, maize grit, mush. Yield - 5.34 ton/ha. Recommended for Hills. |
| 7.3 | Ganesh -1 | Tolerance to leaf blight (*Helminthosporium turcicum*), even in the maturity period plant remains green which can be used as a good feed for animals. Yield-4 ton/ha, Recommended for high Hills. |
| 7.4 | Arun -2 | Can withstand dry and hot (380), is suitable for barbeque, recommended variety for baby corn, flour, and mush. Yield- 2.2 ton/ha. Recommended for Terai and mid Hills. |
| 7.5 | Manakamana-3 | Can withstand leaf burnt and rotten disease, used for barbeque, and fry. Can be intercropped with finger millet, even in the maturity stage, the plant leaves remain green, with less incidence of blight disease. Yield-5.5 ton/ha. Recommended for mid Hills from 1000-1700m. |
| **8** | **Lentil varieties** |  |
| 8.1 | Shradda Kalo Masuro **⃰** | Bio-fortified with Zinc, and Iron. Yield-1.208 ton/ha. Resistant to *Fusarium* wilt and *Stemphyllium* blight disease. Suitable for both rainfed upland and lowland conditions. Tolerant to green aphids. Recommended for Terai, inner Terai, and River basin up to 1700m. |
| 8.2 | Khajura Masuro-2 | Tolerance to *Stempyllium* blight, and wilt disease. Yield-1.204 ton/ha. Recommended for Terai, inner Terai, and River basin up to 1700m. |
| 8.3 | Shikhar | Yield - 3.5 ton/ha. Recommended for Terai, inner Terai, and Mid Hills. |
| 8.4 | Shital | Yield-1.1 ton/ha. Recommended for Terai and Mid Hills. |
| 8.5 | Shimal | Yield-4.1 ton/ha. Recommended for Terai, Inner Terai, and Mid Hills. |
| **9** | **Potato** |  |
| 9.1 | Janakdev | Resistant to Blight disease and tolerable to Wart, recommended to High Hill, Terai, Mid Hill. Yield- 23 ton/ha. |
| 9.2 | Cardinal | Yield: 18 - 30 ton/ha, cultivated from Terai to hill (100 - 4000 m), Can be stored for a longer period |
| 9.3 | Rosita | Tasty, does not melt while cooking, and is preferred by the majority of farmers of Nepal. Can be stored for a longer period. Yield-10 - 14 ton/ha. Recommended for Mid-Hill, High Hill can be cultivated from Mid-Hill to eastern High Hill (1600 – 3500 m). |
| 9.4 | Desire | Resistance to warts, and early maturity, are recommended for High Hill, Terai, and Mid Hill. Yield-15 - 20 ton/ha. |
| 9.5 | MS 42.3 | Less incidence of blight, and Excellent taste so preferred by most farmers of Nepal,  Premium market price can be cultivated from terai to hill (100-1600 m). Yield- 10 - 24 ton/ha. |
| **10** | **Mung bean varieties** |  |
| 10.1 | Partigya | Yield-1.12 ton/ha at Mahottari. Recommended for Terai, Inner Terai, and Mid Hill. |
| 10.2 | Pratikshya | Suitable for pulses and spiced fried lentils as a Savory. Recommended for Terai and Mid Hills. Yield- 0.686 ton/ha |
| **11** | **Integrated pest Management in crops (using botanical, bio-pesticides)** | **A. Botanical pesticide**  1. **Using Sweet flag ⃰**-*Acorus calamus* rhizome power @ 3 gm/kg during storage protected potato from potato tuber moth  2. Jhol-Mal for vegetable production and cereal crop production.  **B. Biological Pesticides**  *BT, NPV, Metarhizium, Trichoderma, Bacilius etc.*  **C. Other pest control methods ⃰**  Using cure lure, methyl eugenol at 40 cm height for cucumber. |
| **12** | **Mulching practices in crop production** using straw, compost, plant leaf, and plastic | 1. Increased the organic matter in the soil.  2. Act as soil cover to maintain soil moisture.  3. Reduced soil exposure so that there is less carbon emission from the soil.  4. Minimized the use of weedicide.  5. Increased crop yield- Potato yield 21 ton/ha at Benighat Rorang, Dhading high hill condition. |
| **13** | **Using poly-house/poly-tunnel** | 1. Farmers can cultivate crops throughout the year even in adverse climatic conditions like cold, frost, and rain.  2. The av. income inside the poly house is higher than open field (For tomatoes, income from open field-NPR 42623.21/Ropani and from tunnel farming i.e. Rs 134279.90/Ropani. (Khadka and Adhikari, 2021)[[2]](#footnote-2)  3. The BCR is higher in poly-house farming (2.28) compared to open field (2.06). (Khadka and Adhikari, 2021). |
| **C.** | **Technologies promoted by other World Bank-funded projects and other projects will be disseminated in FANSEP II (New interventions in FANSEP II)** | |
| **14** | **Crop intensification-Legumes intercropping, mixed cropping, catch crop promotion** | 1. Higher profits due to increased yield and reduced cost. 2. Use of residual moisture for sowing, allowed 15 days early sowing to avoid terminal heat in late winter. Residues helped to retain soil moisture. 3. Reduced GHG emissions by reducing fuel and energy use.  4. Fallow land from March to July (about 90 to 100 days) in a Rice-wheat cropping system utilized for catch crops like mung bean production. |
| **15** | **Conservation agriculture (Zero/ Minimum tillage, mulching) in crops** | 1. Maintained soil moisture due to less disturbance and wheat sowing timely.  2. Increased soil organic matter due to high carbon storage in soil.  3. Reduced the use of fuels as compared to normal farming for tillage operation.  4. Reduced the production cost |
| **16** | **Use of leaf color Chart in rice, wheat, and maize** | 1. Optimum N fertilizer application, reduced disease and pest incidence, and emission of nitrous oxide gas.  2. Proper use of fertilizer increases crop productivity. and minimized crop loss from lodging. |
| **17** | **Micro Irrigation (drip and sprinkle irrigation) in vegetables** | 1. Efficient water use, minimize loss.  2. Minimum weed infestation, reduced the use of weedicides, and reduced the emission of greenhouse gases  3. Increased productivity of high-value crops (vegetables) |
| **18** | **Rainwater harvesting, wastewater collection and use** | 1. Water available to cultivate high-value (vegetable) crops during dry periods. 2. Reduced soil erosion.  3. Year-round crop cultivation of crops helps in carbon sequestering and reduces GHG emissions. 3. Increased and secure vegetable production, income, and food security |

***Table 5: Livestock Related technologies (including but not limited to) are:***

| **S.N.** | **Technologies and practices** | **Key features/ Evidence** |
| --- | --- | --- |
| **A** | **Technologies validated by NARC in FANSEP working areas that will be scaled up in FANSEP II** | |
| 1 | **Urea Molasses Mineral Block (UMMB) feeding in goat and dairy animals** | Feeding 50 gm UMMB/day/goat gives the highest average daily weight gain (ADG) and 300 gm/day/lactating animal increases milk production significantly. |
| 2 | **Use of Ivermectin to control internal and external parasites of goat** | Use of 1ml Ivermectin/33 kg of body weight in every 3 month results highest level of performance in goat. |
| 3 | **Practice of rearing crossbred Boer goat at farmers' field condition** | 50% blood level of Boer goat performs better than the higher blood level at farmers’ field condition. |
| **B.** | **Climate-smart Livestock technologies and improved practices recommended by NARC and used in FANSEP, will continue in FANSEP II** | |
| 4 | **Inclusion of legumes with other green forages in feeding livestock for better performance** | Balanced use of green grasses and fodders with legumes forage yields higher production. |
| 5 | **Teat dipping with the Povidone Iodine solution to prevent mastitis** | Use of Povidone Iodine solution (mixture of 0.5% Povidone Iodine and Glycerine in the ratio of 9:1.) in dipping the teats after each milking helps to prevent mastitis in dairy animals. |
| 6 | **Castration of bucks around three months of their age** | Castrating bucks at the age of around 3 months is the best practice considering animal welfare, quality of meat, body weight gain and possible risks associated with late castration. |
| 7 | **Vaccination against Peste des Petits Ruminants (PPR) disease in goat** | Vaccination against the PPR disease helps to prevent its outbreak and increases the productivity and profit in goat farming. |
| 8 | **Vaccination against Foot and Mouth Disease (FMD), Haemorrhagic Septicaemia (HS) and Black Quarter (BQ) in dairy animals and goat** | Vaccination against FMD, HS and BQ diseases helps to prevent its outbreak and increases productivity and profit in dairy animals and goat farming. |
| 9 | **Vaccination against New Castle Disease (NCD) in chicken** | Vaccination against the NCD helps to prevent its outbreak and increases productivity and profit in poultry farming. |
| 10 | **Use of artificial insemination (AI) technique in animal breeding.** | AI helps to upgrade animals and improve productivity; cheaper and efficient technique also helps to reduce the unwanted higher number of livestock. |
| 11 | **Improvement of animal shed with manure and urine management** | Improved shed with manure and urine management helps for better animal welfare, improves productivity and ensures smart livestock farming. |
| 12 | **Stall feeding practices in livestock farming** | Stall feeding by practicing cut and carry systemhelps to protect the environment and reduces the chances of spreading infectious diseases and unwanted mating. |
| **C.** | **Technologies promoted by other World Bank-funded projects and other projects will be disseminated in FANSEP II (New intervention in FANSEP II)** | |
| 13 | **Feeding goats with additional concentrate during the breeding season (flushing)** | Increases the chances of multiple ovulations, conception and embryo implantation rate which can result in a higher twinning percentage. |

* **Measurement unit:** Number of farmers
* **Disaggregation:** This indicator will be disaggregated by gender: Farmers adopting improved agricultural technology (of which male and female).
* **Data Collection Responsibility:** Adoption rate (share of PG members adopting at least one improved technology) will be captured through HH survey by an independent survey firm procured by the project. Interviews will typically be conducted face-to-face, but they may also be conducted over the phone if a face-to-face interview is not possible. Updating the PMIS will be the responsibility of PMU/PCU/FAO-TA.
* **Sources of data:** Household Survey Report and PMIS Report
* **Frequency of data collection:** Annual (At baseline, Annual Outcome Survey and endline).
* **Sample:** A stratified random sample from the members of the producer group (crop or livestock) supported by the project

In addition to the adoption rate calculated from the survey, the adoption rates of specific Climate-Smart Agriculture (CSA) technologies under various interventions will be captured regularly as:

* Adoption of CSA technology demonstrated in FFS: The adoption rate will be calculated from number of beneficiaries who attended field schools and field days and number of farmers who have adopted the technology promoted in the following season (s).

|  |  |  |  |
| --- | --- | --- | --- |
| CSA Technology | Farmers reached with disseminated technologies (A) | Farmers who adopted the technologies (B) | Adoption/Uptake (%) (B/A\*100) |
| ….. |  |  |  |

* Similarly, the adoption of CSA technologies from other interventions will be calculated based on the number of farmers who continue using the CSA technology after the intervention, compared to the total number of farmers who participated in that intervention.
* Likewise, households adopting home nutrition gardens refer to those HHs that have maintained their HNGs in accordance with the recommended nutrition practices and technologies promoted by the project.

**PDO 2: Increased crop and animal productivity by direct beneficiaries (GAFSP Tier 2 Outcome indicators)**

* **Definition**
  + The indicator is defined as improvements in production per ha or per animal resulting from improvements in production practices through FANSEP-II interventions.
  + Crop yield is a commonly used indicator of land productivity. Crop yield for any particular crop can be calculated as a measure of crop production weight (in kg or tons) per area of land under cultivation (in hectares). Area under cultivation is defined as “the area that corresponds to the total sown area, including the ruined areas (e.g., due to natural disasters)”. It is area under planted, not area under harvest.
* **Data collection method**
  + 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 or herd.
  + Crop Productivity is a measure of the output per unit of area of land under cultivation during the year.
  + ***Calculation: Productivity (MT/ha) = Yield in MT/Area under cultivation (hectare)***
  + If X1, X2, and X3 represent the area P1, P2 and P3 represents the productivity of rice, wheat and maize, respectively, then the weighted food grain yield will be calculated as:
  + In addition to the productivity measured by periodic surveys, productivity related information will be captured on regular basis in PMIS as well to serve the triangulation purpose for data collected through surveys. For this purpose, PMU will share the lists of beneficiaries (selected at random from all crop beneficiaries) to be considered for measuring productivity. The field level technicians will collect productivity measurements through crop cut surveys or interview to the sampled households. The guidelines for the crop cutting exercise will be prepared by FAO TA and finalized by PMU. There would be different modules for tracking crop productivity related information in PMIS.
  + A similar arrangement would be in PMIS for tracking livestock productivity. The field level technicians will collect productivity measurements of meat and milk from the households shared by PMU. The guidelines for measuring productivity of meat and milk will be prepared by FAO TA and finalized by PMU. There would be different modules for tracking livestock productivity related information in PMIS.
* Measurement unit: Kg/hectare or ton/hectares for crop (food grain and vegetable) productivity, Kg/animal for meat productivity, Litre/milking animal/lactation for milk productivity
* **Disaggregation:** This indicator will be disaggregated by type of agricultural commodity (Food grain, vegetable, meat and milk)
  + Food grains include Paddy (main paddy, spring paddy), maize (spring/winter maize, summer maize), and wheat.
  + Vegetables include potato, tomato, cauliflower, bitter gourd, cucumber, bottle gourd, sponge gourd, pumpkin, okra, peas and beans, cabbage, radish, carrot, and brinjal.
  + Livestock meat includes goat meat.
  + Milk includes cow and buffalo milk.
* **Data Collection Responsibility:** An independent survey firm procured by the project. Interviews will be conducted face-to-face. Updating the PMIS will be the responsibility of PMU/PCU/FAO-TA.
* **Sources of data:** Household Survey and PMIS Report.
* **Frequency of data collection:** The productivity from the survey will be collected at baseline, annual outcome survey and project completion time (endline).
* **Sample:** 
  + Crop (food grains and vegetables) productivity will be reported only for FANSEP II beneficiaries that are part of a crop producer group, selected randomly
  + Meat productivity will be reported only for FANSEP II beneficiaries that are part of goat sub-group within the livestock group, selected randomly (taking weighted average by herd size of castrated and uncastrated buck, meant for meat purpose[[3]](#footnote-3)).
  + Milk productivity will be reported only for FANSEP II beneficiaries that are part of dairy sub-group within the livestock group, selected randomly (taking weighted average of cow and buffalo milk considering herd size).
* To survey actual loss due to pests on natural infestation or by applying chemicals, FAO’s methodology for damage and losses assessment in agriculture 2020 will be used.

**PDO 3: Increased Household income (farm and off-farm) (GAFSP Tier 1 Indicator)**

* **Definition.** 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 in household income.
* **Data collection method**
  + Data for this indicator needs to be collected from a representative sample of project households (from all groups). To ensure the change can be attributed to the project alone, data collection from representative samples of comparison group will also be captured.
  + 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 needs to be subtracted from the total sales revenue of crops and livestock.
* **Measurement unit: NPR/Household**
* **Disaggregation:** This indicator will be disaggregated by gender of the HH head (male headed household and female headed household) and by farm and off farm income.
* **Data Collection Responsibility:** An independent survey firm procured by the project. Interviews will be conducted face-to-face.
* **Sources of data:** Household Survey
* **Frequency of data collection:** The income will be collected at baseline, annual outcome survey and project completion time (endline).
* **Sample:** Income indicator will be reported for all types of FANSEP II beneficiaries.

**PDO 4: Reduced Food Insecurity Experience Scale by direct beneficiaries (FIES) (GAFSP Tier 1 Indicator)[[4]](#footnote-4)**

* **Definition**
  + The 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. In FANSEP II, FIES will be collected from the respondent household as a whole.
  + The severity of the experience of food insecurity is defined as a measurable latent trait (a characteristic that is not directly observable, but can be measured indirectly, for example by taking into account behavioral and psychological experiences, in this case around food insecurity). This is one of the indicators to track progress on SDG2. 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.
  + The inability to access food results in a series of experiences and conditions that are common across cultures and socio-economic contexts. The FIES global indicator for measuring food insecurity (access) is calculated from answers to a set of eight questions that covers a range of severity of food insecurity. The questions are as follows:

**Table 6: The Eight FIES items by domain of the theoretical construct of food insecurity and assumed level of severity**

| **FIES order of items** | **Standard Level** | **Scale items** | **Assumed severity of food insecurity** |
| --- | --- | --- | --- |
| 1 | Worried | Felt anxiety about having enough food at any time during the previous 12 months (this time period applies to all 8 scale items) | Mild |
| 2 | Healthy | Not able to eat healthy and nutritious food because of lack of money or other resources to get food | Mild |
| 3 | Few foods | Consumed a diet based on only few kinds of foods because of lack of money or other resources to get food | Mild |
| 4 | Skipped | Did not eat breakfast, lunch or dinner [or skipped a meal] because there was not enough money or other resources to get food to get food? | Moderate |
| 5 | Ate less | Ate less than they thought they should because of lack of money or other resources to get food | Moderate |
| 6 | Ran out | Household ran out of food because of lack of money or other resources to get food | Moderate |
| 7 | Hungry | Felt hungry but didn’t eat because there was not enough money or other resources for food | Severe (hunger) |
| 8 | Whole day | Went without eating for a whole day | Severe (hunger) |

Source: Ballard et al., 2013[[5]](#footnote-5); Cafiero et al., 2018[[6]](#footnote-6).

* **Data collection method:** Data for this indicator needs to be collected from a representative sample of project households (from all groups). To ensure the change can be attributed to the project alone, data collection from representative samples of comparison group will also be captured.
* 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 needs to be collected from a representative sample of FANSEP-II beneficiary households.
* User-friendly approach to FIES data analysis developed by FAO ([**https://fies.shinyapps.io/ExtendedApp/**](https://fies.shinyapps.io/ExtendedApp/)**)** will be used for data analysis.
* **Measurement unit:** Percent
* **Disaggregation:** This indicator will be disaggregated by gendered household type: Male headed household and female headed household
* **Data Collection Responsibility:** An independent survey firm procured by the project. Interviews will be conducted face-to-face.
* **Sources of data:** Household Survey
* **Frequency of data collection:** The FIES will be collected at baseline, annual outcome surveys and project completion time (endline).
* **Sample:** FIES indicator will be reported for all types of FANSEP II beneficiaries.

**PDO 5: Improved Minimum Dietary Diversity for pregnant and nursing women (GAFSP Tier 1 Indicator)**

* **Definition:** 
  + The Minimum Dietary Diversity (MDD) for women is a dichotomous indicator of whether or not women of ***defined group*** have consumed at least 5 out of 10 defined food groups in the previous 24 hours (day or night).
* **Methodology:**
* Data is gathered from a representative sample of project households by administrating a questionnaire to pregnant and nursing women (if pregnant and nursing women not available, female of age group 15-49 years will constitute a sample) of that households. Respondents are asked to recall the food groups that they consumed over the previous 24 hours using either a list-based method (which asks about consumption of each of the 10 food groups in order), or an **open recall** (where respondents recall all foods they ate during the previous day and the enumerator determines to which food groups these foods belong). Although the MDD for Women (MDD-W) guidelines present both recall methods, they recommend the use of the open-recall method (FAO & FHI, 2016). The indicator is then calculated as share of woman ***(of defined group)*** who meet MDD in numerator, divided by total number of women of defined group surveyed. Improved MDD for woman is defined as the percentage change in MDD levels between baseline and reporting year. The 10 food groups required for the MDD-W are:

|  |
| --- |
| 1. Grains, white roots and tubers, and plantains |
| 2. Pulses (beans, peas and lentils) |
| 3. Nuts and seeds |
| 4. Dairy |
| 5. Meat, poultry and fish |
| 6. Eggs |
| 7. Dark green leafy vegetables |
| 8.Other vitamin A-rich fruits and vegetables |
| 9. Other vegetables |
| 10. Other fruits |

* The enumerators should record the information shared by respondents on which food groups did they consume in the last 24 hours, and then assess whether the respondent did, or did not, consume foods within each food group. The total number of food groups consumed is summed and all food groups are equally weighted. The population-level indicator is calculated based on the following formula:

* **Measurement unit:** Percent
* **Disaggregation:** This indicator will be disaggregated by type of the women: (1) MDD for all women of reproductive age (including the pregnant and nursing women), (2) MDD for pregnant and nursing women, and (3) MDD for WRA (excluding the pregnant and nursing women).
* **Data Collection Responsibility:** An independent survey firm hired by the project. Interviews will be conducted face-to-face.
* **Sources of data:** Household Survey Report
* **Frequency of data collection:** The MDD-W will be collected at baseline, annual outcome surveys and project completion time (endline).
* **Sample:** MDD-W indicator will be reported for all types of FANSEP II beneficiaries (Crop, Livestock and Nutriotion). However, data will also be disaggragated to HHs related to nutrition groups of FANSEP and HHs related to other groups (Crop and Livestock).

Notes: The tool must be adapted to include culturally relevant examples of foods for each of the 10 food groups. Enumerators must be properly trained to correctly categorize meals containing a mix of different food groups, and to record only food groups where more than 15 grams of a food in that group was consumed, in order to exclude nutritionally less relevant foods used as condiments or seasonings from the total score. More details to be found on (FAO and FHI, 2016[[7]](#footnote-7); FAO, 2021[[8]](#footnote-8)).

**PDO 6: Improved Minimum Dietary Diversity for Children (MDD-C) between 6-23 months (GAFSP Tier 1 Indicator)**

* **Definition.** The minimum dietary diversity (MDD) score for children 6-23 months old is a population-level indicator designed by the World Health Organization (WHO) to assess diet diversity among children 6-23 months old, as part of infant and young child feeding practices.­­
* **Methodology:** Data for this indicator will be gathered from a representative sample of project households by administrating a questionnaire to the child’s primary caregiver. Open recall method will be used for collecting food diversity date. The child’s caregiver of the eligible child aged 6-23 months (between Age in days ≥183 AND A­ge in days <730) of the sample household will be asked about everything that the child ate over the previous 24 hours (yesterday during the day or the night), whether at home or somewhere else. If more than one child of age 6-23 months is present in the household, the nutrition recall of youngest child will be taken. By probing, enumerators will have recorded everything he/she ate after waking up till bedtime. If a mixed dish is mentioned, the main ingredients in that dish will be recorded. When the respondent has recalled all meals, the prescribed food group (as listed in Table below) will be filled, by marking 1 if any item belonging to the prescribed food group matched with the food, he/she consumed.

The eight food groups for MDD-C are:

| 1. Breastmilk | 5. Flesh foods (meat, fish, poultry and organ meats) |
| --- | --- |
| 2. Grains, white roots and tubers, and plantains | 6. Eggs |
| 3. Legumes and Nuts (beans, peas, lentils, nuts and seeds) | 7. Vitamin A-rich fruits and vegetables |
| 4. Dairy Products (milk, infant formula, yogurt, cheese) | 8. Other fruits and vegetables |

The total number of food groups consumed is summed. The population-level indicator is calculated based on the following formula[[9]](#footnote-9):

|  |  |  |
| --- | --- | --- |
| MDD (Children) = | Age in days ≥183 AND Age in days < 730 AND Food  group score ≥5 | × 100 |
| Age in days ≥183 AND Age in days <730 |

* **Measurement unit: Percent**
* **Data Collection Responsibility:** An independent survey firm hired by the project will carry out data collection. Interviews will be conducted face-to-face.
* **Sources of data:** Household Survey
* **Frequency of data collection:** The MDD-C will be collected at baseline, annual outcome survey and project completion time (endline).
* **Sample:** MDD-C indicator will be reported for all types of FANSEP II beneficiaries.

**Table 7: Comparing food groups for the infant and young child feeding MDD indicator and the MDD-W indicator**

| Food group subdivisions | Ten food groups in MDD-Wa | Eight food groups in MDD-Cb |
| --- | --- | --- |
| A. Foods made from grains | 1. Grains, white roots and tubers, and plantains | 2. Grains, white roots and tubers, and plantains |
| B. White roots and tubers and plantains |
| C. Pulses (beans, peas and lentils) | 2. Pulses (beans, peas and lentils) | 3. Legumes and Nuts (beans, peas, lentils, nuts and seeds) |
| D. Nuts and seeds | 3. Nuts and seeds |
| E. Milk | 4. Dairy | 4. Dairy Products (milk, infant formula, yogurt, cheese) |
| F. Dairy Foods |
| G. Organ meat | 5. Meat, poultry and fish | 5. Flesh foods (meat, fish, poultry and organ meats) |
| H. Red flesh meat from mammals |
| I. Processed meat |
| J. Poultry and other white meats |
| K. Fish and seafood |
| L. Eggs | 6. Eggs | 6. Eggs |
| M. Dark green leafy vegetables | 7. Dark green leafy vegetables | 7. Vitamin A-rich fruits and vegetables |
| N. Vitamin A-rich vegetables or roots | 8. Other vitamin A-rich fruits and vegetables |
| O. Vitamin A-rich fruits |
| P. Other vegetables | 9. Other vegetables | 8. Other fruits and vegetables |
| Q. Other fruits | 10. Other fruits |
|  |  | 1. Breastmilk |

Source: aFAO 2021; bWHO & UNICEF, 2021[[10]](#footnote-10).

**Intermediate Results Indicators**

**Component A: Climate and Nutrition Smart Agricultural Technology Adaptation and Dissemination**

**IR A.1. Farmers receiving inputs or services on climate resilient or sustainable agriculture practices (GAFSP Tier 2 Output Indicator)**

* **Definition.**
* This indicator measures the number of farmers who have received inputs or services on resilient or sustainable agriculture practices by the FANSEP-II. Climate resilient or sustainable agriculture are practices and interventions defined as consistent with each Supervising Entity’s climate definitions, including climate smart agriculture (as per the FAO definition[[11]](#footnote-11)) and climate resilience related elements in agroecology (as per FAO’s 10 elements[[12]](#footnote-12)).
* This includes a broad range of climate resilient/climate risk management technologies and practice that are promoted with the explicit objective of reducing risk and minimizing the severity of climate change. Examples include interventions related to: i) develop and introduce management practices or techniques more resilient to climate change in farming system, plant breeding, animal feeding, good husbandry practices, animal health and livestock breeding; ii) raise awareness of risks on climate change or/and benefits of adaptation, iii) recover degraded areas for crop production through innovative management practices and soil management practices that control soil erosion; iv) introduce crops or crop mix more suited to climate change, including drought and flood resistant varieties, short-duration varieties, adjustment of sowing time; diversification, use of perennial varieties, agroforestry; v) change watershed, wetland and irrigation management systems and practices to reduce vulnerability; vi) incorporate risks in irrigation/water management planning to reduce climate risks; vii) change management practices or techniques to reduce vulnerability to climate change in animal health service, pasture management, fodder production and storage practices, viii) restore or maintain environmental services, and ix) increase farmers’ access to climate services (including weather and climate advisory service, early warning systems) and benefitting from weather-based crop insurance or index-based insurance, and so on.
* This also includes a broad range of climate mitigation technologies that minimize emission intensities relative to other alternatives (while preventing leakage of emissions elsewhere). Examples include low- or no-till practices; restoration of organic soils and degraded lands; efficient nitrogen fertilizer use; practices that promote methane reduction; agroforestry; introduction/expansion of perennials; practices that promote greater resource use efficiency (e.g., drip irrigation).
* This also includes a list of CSA practice and technologies in both crop and livestock that work on both climate adaptation and mitigation.
* **Data collection method:**
  + Data for this indicator will be collected from a representative sample of project households that have members of the producer group (crop or livestock) supported by the project
  + PMIS will generate unique IDs for each beneficiaries of FANSEP II. Same beneficiary receiving more than one inputs or services on climate resilient or sustainable agriculture practices will be counted as one. The unique beneficiaries who have received inputs/services on resilient or sustainable agriculture practices from FANSEP-II will be captured from the project management information system (PMIS). As part of the data entry and 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.
* **Measurement unit:** Farmers
* **Data Collection Responsibility:** PMU/PCU/FAO-TA to FANSEP II
* **Sources of data:** Progress reports, PMIS Report
* **Frequency of data collection:** Data will be gathered from the field and updated in PMIS on a regular basis, reporting will be done every six months and annually.
* **Disaggregation:** by gender

**IR A.2. Farmers reached with agricultural assets/ servicesCRI**

* **Definition.** 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.
* **Data collection method:**
* PMIS will generate unique IDs for each beneficiaries of FANSEP-II. Same beneficiary receiving more than one agricultural assets or services will be counted as one. The unique beneficiaries who have received agricultural assets/ services from FANSEP-II will be captured from PMIS.
* **Measurement unit:** Number/percentage
* **Data Collection Responsibility:** PMU/PCU/FAO-TA to FANSEP II
* **Sources of data:** Progress reports, PMIS Report
* **Frequency of data collection:** PMIS data will be collected and updated regularly, reporting will be done every six months and annually.
* **Disaggregation:** This indicator will be disaggregated by gender

**IR A.3. The land area provided with new/improved irrigation services (GAFSP Tier 2 Output Indicator)**

* **Definition.** This indicator measures the number of hectares[[13]](#footnote-13) served by existing or new irrigation services that are either constructed or rehabilitated with FANSEP II support during the reporting period. ***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. *Rehabilitation* involves irrigation infrastructure that already existed, where the FANSEP II investment led to improved or restored and/or efficiency.
* **Data collection method:** Direct measurement; activity records. When the irrigation scheme completion report is submitted by the groups supported by FANSEP-II, this indicator will be captured and entered into PMIS. Also, geo referencing in the possible locations will be captured from GEMS where the irrigation infrastructures are built.
* **Measurement unit:** Hectare
* **Data Collection Responsibility:** PMU/PCU/FAO-TA to FANSEP II
* **Sources of data:** Progress reports, PMIS Report, GIS mapping of target sites
* **Frequency of data collection:** Data collection and updating in PMIS will be conducted regularly. Reporting period will be at six month and annual basis.

**Component B: Income Generation and Diversification**

**IR.B.1 Producer-based organizations supported (GAFSP Tier 2 Output Indicator)**

* **Definition.** This indicator measures the number of relevant associations, whether or not formally registered, that are either established through or strengthened by the FANSEP-II project.
* **Data collection method:**
  + The producer organizations are established or strengthened to enhance agricultural, livestock, fishery production, processing, or marketing, and provide services to their members. The number is counted as the unique number (same organization receiving more than one intervention is counted as one) of producer organizations receiving at least one intervention (inputs, assets or services) from FANSEP-II.
* **Measurement unit:** Number of organizations
* **Data Collection Responsibility:** PMU/PCU/FAO-TA to FANSEP II
* **Sources of data:** Progress reports, PMIS Report
* **Frequency of data collection:** PMIS data will be collected and updated regularly, reporting will be done every six months and annually
* **Sample:** This indicator will be reported for producer groups (crop and livestock groups)
* **Disaggregation:** This indicator will be disaggregated by group type (Crop and Livestock)

**IR.B.2. Number of subprojects (business plans) submitted by the producer groups**

* **Definition.** This indicator measures the number of business plans submitted by producer groups under the matching grant scheme.
* **Data collection method:** 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. Data will be gathered from the field and updated in PMIS on a regular basis.
* **Measurement unit:** Number of MG schemes
* **Data Collection Responsibility:** PMU/PCU/FAO-TA to FANSEP II
* **Sources of data:** Progress reports, PMIS Report
* **Frequency of data collection:** Data will be gathered from the field and updated in PMIS on a regular basis, reporting will be done every six months and annually.
* **Sample:** This will be acomplete enumeration of number of producer groups that have submitted matching grant proposals under component B.
* **Disaggregation:** This indicator will be disaggregated by group type (Crop and Livestock) and type of the business interventions through matching grant.

**IR.B.3. Number of subprojects (business plans) financed by the project on a matching grant basis**

* **Definition.** This indicator measures the number of business plans financed by the project to the producer groups under the matching grant scheme.
* **Data collection method:** The number of subprojects will be measured as the number of producer groups that have awarded and completed matching grant scheme. The data will be obtained from the PMIS. Basic infromation of completed subprojects under matching grant schemes will also be collected in GEMS and GEMS will be integrated in PMIS.
* **Measurement unit:** Number of MG schemes
* **Data Collection Responsibility:** PMU/PCU/FAO-TA to FANSEP II
* **Sources of data:** Progress reports, PMIS Report
* **Frequency of data collection:** Data will be gathered from the field and updated in PMIS on a regular basis, reporting will be done every six months and annually.
* **Sample:** This will be acomplete enumeration of number of producer groups those are receipient of matching grant schemes under component B.
* **Disaggregation:** This indicator will be disaggregated by group type (Crop and Livestock) and type of business interventions through matching grant.

**IR.B.4. Increased Net farm income**

* **Definition:** This indicator measures the household net farm income (total revenue- total cost) for beneficiaries receiving matching grant. This indicator will be measured as percent change in agricultural income.
* **Data collection method:** Data will be gathered from a representative sample of members of the producer groups that are recipients of matching grants by administrating a questionnaire. Calculation:

* Household net farm income = Total revenue during a year– total costs for that year
* Total revenue includes the total volume of production of the agricultural product (crop, milk, eggs, meat, live animal, fish) multiplied with their respective prices.
* The total cost refers to the complete sum of all expenses (including the labour contributed through HH member) incurred in the process of agricultural production during that year
* Average net farm income = Household net farm income/number of households
* **Measurement unit:** Percent
* **Data Collection Responsibility:** An independent survey firm procured by the project. Interviews will be conducted face-to-face.
* **Sources of data:** Survey Report
* **Frequency of data collection:** This data will be collected at baseline, annual outcome survey and project completion time (endline).
* **Sample:** Random sample will be selected from the producer groups that are receipient of matching grant schemes under component B. The members of selected PGs will then be selected randomly for the purpose of HH survey.
* **Disaggregation:** This indicator will be disaggregated by group type, type of the MG schemes/target crop and Gender of beneficiary farmer.

**IR.B.5. Processing, storage and market facilities constructed and/or rehabilitated (GAFSP Tier 2 Output Indicator)**

* **Definition:** 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 slaughterslabs/houses for livestock) where value is added.
* **Data collection method:** 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 comstruction/rehabilitation of such infrastructure and updated in PMIS on a regular basis.
* **Measurement unit:** Number of facilities[[14]](#footnote-14).
* **Data Collection Responsibility:** PMU/PCU/FAO-TA to FANSEP II
* **Sources of data:** Progress reports, PMIS Report, Geo-referencing through GEMS
* **Frequency of data collection:** Data will be gathered from the field and updated in PMIS on a regular basis, reporting will be done every six months and annually. Basic infromation of completed intrastructure will be collected by using related PMIS form(s) or through GEMS and GEMS will be integrated in PMIS.
* **Disaggregation:** This indicator will be disaggregated by type of structure, by cluster, RM and district.

**Component C: Improving Nutrition Security**

**IR.C.1 Persons who have received improved nutrition services and products**

* **Definition:** 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, provision of package support for establishment and operationalization of home nutrition garden, nutrition field school, small grant, or community nutrition education programs.
* **Data collection method:**
  + 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.
  + To avoid double counting, same person who have been provided with more than one type of services and products under the component C of the project are counted as one.
* **Measurement unit:** Persons
* **Data Collection Responsibility:** PMU/PCU/FAO-TA to FANSEP II
* **Sources of data:** Progress reports, annual report, PMIS Report
* **Frequency of data collection:** Date collection and updating in PMIS will be generated regularly. Reporting period will be at six month and annual basis.
* **Sample:** This indicator will be reported for member of nutrition group only.
* **Disaggregation:** by gender

**IR.C.2. Improved Household dietary diversity score including nursing mothers and children under two years)**

* **Definition:** The Household Dietary Diversity Score (HDDS) is a population-level indicator that is used as a proxy measure of household food access. Household dietary diversity can be described as the number of food groups consumed by a household over a given reference period. A more diversified household diet is correlated with caloric and protein adequacy, percentage of protein from animal sources, and household income. The HDDS indicator provides a glimpse of a household's ability to access food as well as its socioeconomic status based on the previous 24 hours.
* **Data collection method:** The HDDS will be calculated based on 12 food groups. The measurement will come through sample survey among all beneficiary HHs of the project receiving nutrition related interventions. Information on household food consumption should be collected using the previous 24- hours as a reference period (24-hour recall)[[15]](#footnote-15).
* Data for the HDDS indicator is collected by asking the respondent a series of yes or no questions. These questions should be asked of the person who is responsible for food preparation, or if that person is unavailable, of another adult who was present and ate in the household the previous day. The questions refer to the household as a whole, not any single member of the household. The respondent should be instructed to include the food groups consumed by household members in the home or prepared in the home for consumption by household members outside the home (e.g., at lunchtime in the fields.) As a general rule, foods consumed outside the home that were not prepared in the home should not be included. While this may result in an underestimation of the dietary diversity of individual family members (who may, for example, purchase food in the street), HDDS is designed to reflect household dietary diversity, on average, among all members. Including food purchased and consumed outside the household by individual members may lead to overestimating HDDS overall.

The following 12 food groups are used to calculate the HDDS indicator:

A. Cereals

B. Root and tubers

C. Vegetables

D. Fruits

E. Meat, poultry, offal

F. Eggs

G. Fish and seafood

H. Pulses/legumes/nuts

I. Milk and milk products

J. Oil/fats

K. Sugar/honey

L. Miscellaneous

Each food group is assigned a score of 1 (if consumed over the previous 24 hours) or 0 (if not consumed in the last 24 hours). The household score will range from 0 to 12 and is equal to the total number of food groups consumed by the household:

**HDDS = Sum (A + B + C + D + E + F + G + H + I + J + K + L)**

The average household dietary diversity score for the population of study can be calculated as follows:

**Sum (HDDS) / Total number of households surveyed**

*For detail about the measurement, one can refer Swindale & Bilinsky, 2006****[[16]](#footnote-16)****; FAO, 2011[[17]](#footnote-17).*

* **Measurement unit:** Score
* **Data Collection Responsibility:** External survey Firm hired through the project. Interviews will be conducted face-to-face.
* **Sources of data:** Survey Report
* **Frequency of data collection:** The HDDS will be collected at baseline, annual outcome survey and project completion time (endline)
* **Sample:** Random samples will be selected from all the beneficiaries HHS receiving FANSEP II interventions (Crop, Livestock and Nutrition). During analysis, disaggregated HDDS will be reported (e.g. HDDS for HHs under Nutrient component, under Crop and Livestock components). For counterfactual, HDDS of comparison HHs will also be collected.

**IR.C.3. Number of small grant-financed subprojects (business plans)**

* **Definition.** This indicator measures the number of business plans financed by the project to the nutrition groups under the Small grant scheme.
* **Data collection method:** The number of subprojects will be measured as the number of nutrition groups that have awarded and completed small grant scheme. The same nutrition group will receive more than one small grant scheme during the project period. The data will be obtained from the PMIS. To the possible extent, basic infromation of completed subprojects under small grant schemes will be collected by using PMIS form(s) or through GEMS and GEMS will be integrated in PMIS.
* **Measurement unit:** Number of SG schemes
* **Data Collection Responsibility:** PMU/PCU/FAO-TA to FANSEP II
* **Sources of data:** Progress reports, PMIS Report
* **Frequency of data collection:** Data will be gathered from the field and updated in PMIS on a regular basis, reporting will be done every six months and annually.
* **Sample:** This will be acomplete enumeration of number of nutrition/mother groups that are receipient of small grant schemes under component C.
* **Disaggregation:** This indicator will be disaggregated by group type and type of the business.

**Component D: Project management, communication, and M&E**

**IR.D.1 Persons receiving capacity development support (GAFSP Tier 2 Output Indicator)**

* **Definition:** This indicator counts the number of persons who received technical assistance and capacity development activities at the institutional level through the FANSEP project.
* **Data collection method:** 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.
* **Measurement unit:** Persons
* **Data Collection Responsibility:** PMU/PCU/FAO-TA to FANSEP II
* **Sources of data:** Progress reports, annual reports, PMIS Report
* **Frequency of data collection:** Data will be gathered from the field and updated in PMIS on a regular basis, reporting will be done quarterly, six monthly and annually.
* **Disaggregation:** by gender.

**IR.D.2 Beneficiary satisfaction rate with relevance, timeliness and effectiveness of services provided by the project**

* **Definition:** Number of surveyed beneficiaries satisfied with services provided by the project as a proportion of surveyed target beneficiaries.
* **Data collection method:** The data for this indicator will be collected through the survey by administrating questionnaire to the beneficiaries receiving project intervention, selected randomly. There will be few additional questions related to the indicator in regular surveys (Annual Outcome and Endline) of the project.
* **Measurement unit:** Percent
* **Data Collection Responsibility:** External survey Firm hired through the project. Interviews will typically be conducted face-to-face, but they may also be conducted over the phone if a face-to-face interview is not possible.
* **Sources of data:** Survey Report
* **Frequency of data collection and reporting:** Through annual outcome survey (second year) and Endline survey (third year).
* **Sample:** Same sample for those used in annual outcome survey and Endline survey, but information related to this indicator will be selected from the beneficiaries that have already received project intervention (crop, livestock and nutrition).
* **Disaggregation:** This indicator will be disaggregated by gender, and by component.

**IR.D.3 Grievances registered addressed within the deadline set by the project GRM**

* **Definition:** 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
* **Data collection method:** The data will come from the GRM system
* **Measurement unit:** Percent
* **Data Collection Responsibility:** PMU/PCU/FAO-TA to FANSEP II
* **Sources of data:** Progress reports, annual reports, PMIS Report
* **Frequency of data collection:** Grievances registered and recorded in the field and offices will be updated in PMIS on a regular basis, reporting will be done quarterly, six monthly and annually.

**IR.D.4 Periodic reports submitted on time**

* **Definition:** The periodic report includes semi-annual and annual report submitted to the world bank.
* **Data collection method:** This indicator counts the number of periodic reports submitted in due time. Periodic report includes Mission Report/ Six monthly progress report, GAFSP Report, Annual Report, Project Completion Report
* Measurement unit: Number
* Sources of data: Project M&E through regular progress report
* Frequency of reporting: on six month and annual basis.

**Additional Indicators to be captured but not mentioned in the PAD**

**Indicator name: Food Consumption Score (FCS)**

* **Definition.** Food Consumption Score (FCS) is a score calculated using the frequency of consumption of different food groups consumed by a household during the 7 days before the survey, which is then weighted according to the relative nutritional value of the consumed food groups. The FCS is also able to capture both Dietary Diversity and Food Frequency.
* **Methodology:** The food consumption groups include starches, pulses, vegetables, fruit, meat, dairy, fats, and sugar. If these groups are surveyed in a disaggregated fashion, the consumption frequencies of the different foods in the groups are summed, with the maximum value for the groups capped at 7. The formula, based on these groups, with the standard weights, is: FCS = (starches\*2) + (pulses\*3) + vegetables + fruit + (meat\*4)+ (dairy\*4) + (fats\*0.5)+ (sugar\*0.5). WFP advises a recall of 7 days to ensure both good time coverage and “reliability" of respondent’s memory
* **Measurement unit:** Weighted sum of frequency of household consumption, a continuous variable with a possible range of 0 to 112
* **Sources of data:** Household Survey
* **Frequency of data collection:** At a minimum, data will be collected at baseline, Annual outcome survey and project completion time (endline).
* **Data Collection Responsibility:** External survey Firm hired through the project. Interviews will typically be conducted face-to-face.
* **Sources of data:** Household Survey

**Data collection method:** The data for this indicator will be collected through the survey by administrating questionnaire to the beneficiaries receiving project intervention, selected randomly.

## 2.2.2 Monitoring and Evaluation arrangement of input, output and outcomes of major activities under different components and subcomponents

The FANSEP monitoring and evaluation system will not only concentrate on the PDO and intermediate indicators outlined in the section 2.2.1, but will also prioritize the tracking, collection, analysis, documentation of project data and deliver accurate reports regarding the progress, achievements, and its impact on beneficiaries, specifically concerning the key activities associated with each component and subcomponent detailed below.

**Table 8: Key activities and input, output and outcomes measurement methodology**

| **Component, Subcomponents and Activities** | | **[[18]](#footnote-18)Project target[[19]](#footnote-19)** | | **Output/outcomes to be measured** | | **Data Source** |
| --- | --- | --- | --- | --- | --- | --- |
| **Unit** | **Quantity** |
| **Component A: Component A: Climate and Nutrition Smart Agricultural Technology Adaptation and Dissemination** | | | | | | |
| ***Subcomponent A1: Technology Adaptation and Testing*** | | | | | | |
| **1** | **On-farm demonstrations of CSA technologies and practices in crop and livestock** | | | | |  |
| 1.1 | Demonstration on Crop related validated CSA and improved technologies | Number | 395 |  Number of demonstration established, number of beneficiaries (disaggregated), number of group covered, number of technologies tested/disseminated, crops and varieties covered, replication outsides the group, adoption rate, productivity | | PMIS Report, Progress Report, Survey Report |
| 1.2 | Demonstration on livestock related validated CSA and improved technologies | Number | 362 |  Number of demonstration established, number of beneficiaries (disaggregated), number of group covered, number of technologies tested/disseminated, number and breeds of animals covered, replication outsides the group, adoption rate, productivity, cost effectiveness of technology | | PMIS Report, Progress Report, Survey Report |
| 1.3 | Demonstration on livestock shed improvement and FYM management | Number | 375 |  Number of demonstrations, number of beneficiaries (disaggregated), number of groups covered, number of shed improved and manure managed, number of animals covered, adoption rate, replication outsides the group, adoption rate | | PMIS Report, Progress Report, Survey Report |
| **2** | **Distribution of foundation seeds for SPGs** | | | | |  |
| 2.1 | Rice | MT | 15 |  Amount of seed distributed (crop and variety wise), number of beneficiaries (disaggregated) reached, number of group covered, Area covered by the distributed seeds, production (disaggregated by certified seed, Label Seed and other), Income from the selling the product (certified seed, Label Seed and other), seed at stock for future used (certified seed, Label Seed and other), Number of SPGs kinked to Digitally Enabled Seed Information System-2.0 (DESIS-2.0) and Digitally Enabled Seed Management System (DESES), transaction made…, number of SPGs with seed production and selling license | | PMIS Report, Progress Report, Survey Report |
| 2.2 | Maize | MT | 6 |
| 2.3 | Wheat | MT | 39 |
| 2.4 | Distribution of potato (pre-basic seed tubers) | Number | 78000 |
| **3** | **Distribution of improved seeds to farmers** | | | | |  |
| 3.1 | Rice | MT | 100 |  Amount of seed distributed (crop and variety wise), number of beneficiaries (disaggregated), number of group covered, Area covered by the improved seed (ha), Yield, Income from the sale of the product | | PMIS Report, Progress Report, Survey Report |
| 3.2 | Spring rice | MT | 26 |
| 3.3 | Maize | MT | 34 |
| 3.4 | Wheat | MT | 390 |
| 3.5 | Lentil | MT | 20 |
| 3.6 | Potato (basic seed) | MT | 345 |
| 3.7 | Crop cutting | Nos | 8000 |
| **4** | **Strengthening advisory services and skill development** |  |  |  | |  |
| 4.1 | Forage resource center and nursery management training to farmers | Number | 8 |  Number of participants (disaggregated), Participants Knowledge gain from training (Pre and post-test), number of participants that applied the knowledge/skills in the field | | PMIS Report, Progress Report |
| 4.2 | Cluster level training on Seed production and management training; Farm machinery operation and maintenance; Agriculture and Livestock Insurance (3 days) | Number | 12 |
| 4.3 | Training for technicians on AI (2 weeks) | Number | 2 |
| 4.4 | Refresher training for technicians on AI (1 week) | Number | 4 |
| 4.5 | Seed production training to representatives of Seed Producer Groups (SPGs) | Number | 12 |
| 4.6 | ToF/ToT/Refresher training to technicians and facilitators on FFS (Crop & Livestock)/FBS/NFS | Number | As per approved program of PMU/PCUs and FAO-TA |  Number of participants (disaggregated), Participants Knowledge gain from training (Pre and post-test), number of FFS/FBS/NFS facilitated after the training | | PMIS Report, Progress Report |
|  |  |  |  |  | |  |
|   **Subcomponent A2: Technology dissemination and farmer skills development** | | | | | | |
| **5** |   **Farmers Field School (FFS) in crops & Livestock and Adoption Support Programs** | | | | |  |
| 5.1 | Establishing FFSs (crops, potatoes, vegetable) | Number | 325 |  Number of FFS established and accomplished, number of producer groups covered by FFS, number of participants in FFS (disaggregated), start and end date, facilitator/co-facilitator in the FFS, knowledge increased of the participants(Pre-test-Post-test) | | PMIS Report, Progress Report |
| 5.2 | Establishing FFSs (goat, poultry, dairy) | Number | 160 |  knowledge increased of the participants(Pre-test-Post-test), number of farmer field days celebrated, and number of persons attended the field days (disaggregated), number of technologies tested/demonstrated, result of the comparative trial, effectiveness/Satisfaction level, adoption rate of best practices/technology under FFS, farmers’ area on which they have adopted the best practices covered under FFS, productivity of the crop/livestock | |
| 5.3 | Farm machineries and equipment support to groups for drudgery reduction and resilience (female, Marginalized and DAGs) | Number | 100 |  Number of groups coveredऽ number beneficiaries reached (disaggregated), type and number of assets supported, time and cost saved, increased in cropping area, Increased in yield, increased in income | | PMIS Report, Progress Report |
| 5.4 | Emergency plant protection support programs | times | 48 |  Number of groups covered number beneficiaries reached (disaggregated), input supported, Area of crop protection with PPSP (ha), yield (ton) protection, income protection from loss (NPR) | | Activity completion report, FGDs, GEMS, PMIS |
| 5.5 | Animal health camps in collaboration with project RMs (Support for veterinary medicines, vaccines and other logistics) | Number | 32 |  Inputs distributed, Number of animals (including poultry) examined, number of animals (including poultry) treated, numbers of animals castrated, number of beneficiaries (disintegrated) covered | | Activity completion report, FGDs, GEMS, PMIS |
| **6** | **Seed and Breed Improvement Programs** | | | | |  |
| 6.1 | Establishing/strengthening AI Units in project rural municipalities for breed improvement | Number | 16 |  Total number of AI centre established/strengthened, number of AI centres operational, number of animal inseminated, number of services/animals, number of straws/conception, number of animals conceived, number of calves born from AI, total HHs served | | PMIS Report, Progress Report, FGDs, |
| 6.2 | Follow up support programs for established new AI units in new RMs | Number | 32 |
| 6.3 | Strengthening of existing AI units in project rural municipalities of **FANSEP** | Number | 33 |
| 6.4 | Establishment of famer managed Boer goat multiplier herds/units ( **in new RMS**) | Number | 16 |  Number of multiplier herds strengthened, number of 100% pure Boer Bucks distributed to multiplier herds, number of does served, number of 50% Boer bucks produced and sold out. | | MH completion report, Progress Report, PMIS/GEMS, |
| 6.5 | Follow up support to established farmer managed Boer goat multiplier herds/units **( in new RMs)** | Number | 16 |   number of goats insured, number of local does served, number of 50% Boer breed buck/Doe produced through multiplier herds, average birth weight of the cross-breed kids, average twining percentage, average weight of bucks at 3 months, 6 months and 12 months (kg/buck), the number of 50% Boer bucks purchased and distributed through approved programs by PCUs from FANSEP's multiplier herd, number of 50% Boer bucks/Does sold, income from selling of crossbreed bucks. | |
| 6.6 | Follow up support to established farmer managed Boer goat multiplier herds/units **(in existing FANSEP RMs)** | Number | 45 | number of goats insured, number of local does served, number of 50% Boer breed buck/Doe produced through multiplier herds, average birth weight of the cross-breed kids, average twining percentage, average weight of bucks at 3 months, 6 months and 12 months (kg/buck), the number of 50% Boer bucks purchased and distributed through approved programs by PCUs from FANSEP's multiplier herd, number of 50% Boer bucks/Does sold, income from selling of crossbreed bucks. | |
| 6.7 | Establish forage resource centers with nursery at community level (including follow up support) | Number | 16 |  Number of forage nursery established, numbers of sapling/sets produced, sale of saplings/sets to PCUs programs, Sale of saplings/sets to outside of PCUs, total amount earned from selling saplings/sets | | Activity completion report, GEMS, PMIS |
| 6.8 | Support to existing (FANSEP RMs) and New (FANSEP II RMs) Seed Producer groups for seed production support (field inspection, seed sampling, lab test, tagging and bagging with technical backstopping and quality assurances and control through SQCC/central agriculture lab/ provincial seed labs) | Number of SPGs | 24 |   ***Related to activity 3 under subcomponent A.2 "***distribution of improved seeds to farmers", so similar indicators: | | PMIS Report, Progress Report, Survey Report |
|  Number of seed production groups established and supported, amount of seed distributed (crop and variety wise), number of beneficiaries (disaggregated), number of group covered, Area covered by the seeds (ha), Yield, Income from the selling the seed, amount stored for next season, No. of seed technician visit for inspection of standing crops, number of times the seeds tested in the laboratory | |
| 6.9 | Distribution of seasonal forage seeds/sets/saplings for wider adoption in dairy and goat PGs | Times | 36 |  Amount of seasonal forage and vegetable seeds/sets distributed, number of groups supported with seasonal seeds/sets, recipient of Seed/sets (Gender disaggregated), area covered by Seed/Sets, production | | PMIS Report, Progress Report |
| 6.1 | Distribution of seasonal vegetable seeds for PGs | Times | 18 |
| **7** | **Provision of promotion programs (Crops and Livestock)** | | | | |  |
| 7.1 | Crop Production Promotion program | Number | 325 |  Number of promotion program implemented (disaggregation by type-rice, wheat, maize….), number of producer groups covered, number of beneficiaries reached (disaggregated), assets and services provided, | | Area covered by the crop (ha) |
|  Area covered by the interventions (by crop, by irrigation if any), production, consumption, income, number of technologies disseminated, adoption rate of disseminated technologies | | Yield (ton) |
|  | |  |
| 7.2 | Goat production promotion program | Number | 300 |  Number of promotion program implemented (disaggregation by type-Goat, Dairy, Poultry), number of groups covered, number of beneficiaries reached (disaggregated), inputs supported, increased herd size of animal, production, income | | PMIS Report, Progress Report, Survey Report |
| 7.3 | Follow up support to goat production promotion program | Number | 300 |
| 7.4 | Dairy production promotion program | Number | 120 |
| 7.5 | Follow up support to dairy production promotion program | Number | 120 |
| 7.6 | Rural poultry promotion program | Number | 60 |
| 7.7 | Follow up support to rural poultry promotion program | Number | 60 |
| 8 | **Support for Climate resilient small irrigation** | | | | |  |
| 8.1 | Support for small irrigation programs (general scheme) | Number | 395 |  Number of small irrigation schemes, number of groups covered, number of beneficiaries reached (disaggregated), infrastructures constructed/rehabilitated, assets supported, increased irrigated area, changes in cropping pattern, increased cropping intensity, increase in yield, income | | PMIS Report, Progress Report |
| 8.2 | Establishment of Deep boring/tubewell in new RMs | Number | 5 |
| 8.3 | Follow up support for Deep boring/tubewell in new RMs | Number | 5 |
| 8.4 | Follow up support for Deep boring/tubewell in existing RMs | Number | 8 |
|   Component B: Income Generation and Diversification | | | | | | |
|   Sub-component B1: Strengthening Producer Groups (PGs) | | | | | | |
| 1 | **Organizing & capacity strengthening of PGs in crops and livestock** |  |  |  | |  |
| 1.1 | Formation and organization of PGs | Number | 1350 |  Number of Producers groups (PGs) formed, Number of Producers groups (PGs) registered, Number of Producer groups (PGs) with bank account, Number of Producer groups (PGs) with PAN number, Number of PGs conducting regular monthly meeting, Number of PGs that practicing monthly saving, Total saving amounts of PGs up to the reporting period, Use of saving fund by area of investment | | PMIS Report, Progress Report |
| 1.3 | Implementation of Farm Business School (FBS) | Number | 32 |  Number of FBS established and accomplished, Number of Producer groups covered, Number of beneficiaries participated & graduated through FBS (disaggregated) number of farmer field days celebrated and number of persons attended the field days (disaggregated), Start and end date, Facilitator/co-facilitator, | | PMIS Report, Progress Report |
|  Participants Knowledge gained from FBS (Pre and post-test) group coverage; number of PGs started to keep farm records after graduation from FBS | |
| 1.4 | Providing training on gender mainstreaming (RM level) (2 days) | Number | 40 |  Number of events (training/interaction program/workshops etc.) conducted, number of groups covered, number of persons attended the event by gender disaggregation, Participants Knowledge gained from training (Pre and post-test result), effectiveness | | PMIS Report, Progress Report |
| 1.5 | Providing district level training to PGs representatives on preparation of simple business plan, ESMF and entrepreneurship development (3 days) | Number | 48 |
| 1.6 | Cluster Level interaction program for Productive Alliances among PGs, financial institutes, buyers, suppliers and stakeholders |  | 12 |
| 1.7 | Orientation program to PGs about PAs (RM level) (1 day) | Number | 48 |
|   **Sub-component B2: Market linkages through productive alliances** | | | | | | |
| **2** |   **Establishing a multi-stakeholder dialogue platform among key actors in value chains** | | | | |  |
| 2.1 | Orientation and Formation of RM level multi-stakeholder dialogue platform (involving key actors of value chain) | Number | 16 |  Number of MSDP formed, Members of MSDP by gender disaggregation, Number of meetings held, | | PMIS Report, Progress Report |
| 2.2 | Meeting of RM level multi-stakeholder dialogue platform | times | 96 |
| **3** |   **Financing simple BPs through the MGs** | | | | |  |
| 3.1 | Provision of matching grant to fund BPs | Number | 720 |  Process: Number of MG application received, Number of MGs selected for Field verification, number of MGs recommended from field verification, number of MGs awarded, number of MGs financed and accomplished, | | PMIS Report, Progress Report |
|  Coverage: beneficiaries reached through MGs (Gender disaggregated), types/categories under MGs support | |
| 3.2 | Field verification for screening of matching grants | times | 720 |  Cost sharing: total cost of the business plan, amount financed by project, cost shared by PGs and other institution), | | PMIS Report, Progress Report |
| 3.3 | Formation of project cluster level selection committee for selection of business plans | Number | 4 |  Assets/services provided, Area covered/increased, herd size covered/increased, irrigated area increased, commodity produced through MGs support, household consumption of commodity produced, Income from sale of marketable surplus, satisfaction rate of MGs scheme, baseline income of groups before MG from the same commodity chosen for MG application and income from MG activities completion(This will be mentioned in the application form of each MG). | |
| 3.4 | Interaction program with Producers Groups | Number | 52 |  Number of events (training/interaction program/workshops /orientation etc.) conducted, number of groups covered, number of persons attended in the event by gender disaggregated data, Participants Knowledge gained from training (Pre and post-test result) | | PMIS Report, Progress Report |
| 3.5 | Cluster level technical session of PCUs with field level technicians and project facilitators | Number | 72 |
| 3.6 | Orientation on E & S safeguards and compliance with project staffs (PMU & PCUs) | Number | 1 |
| 3.7 | Refresher workshop on E & S risk management and their compliance monitoring process with project staffs (PMU & PCUs) | Number | 2 |
| 3.8 | Cluster level training on E & S, ESMF and compliance to field technicians (2 days) | Number | 8 |
| 3.9 | Orientation on ESMF to beneficiaries of the matching and small grant and other project activities (RM level) (1 day) | Events | 48 |
| 3.11 | Periodic Stakeholder consultation on E & S in project areas | Events | 8 |
| 3.12 | Cluster level training to field level technicians on occupational health and safety (2 days) | Events | 4 |
| 3.13 | E & S risk and compliance monitoring reporting interaction with Field Level technicians ( 1 day) | Events | 16 |
| 3.1 | RM level orientation program on GRM mechanism to famers/technicians | Events | 32 |
| **4** | **Development of Critical market infrastructure** | | | | |  |
| 4.1 | Support to village markets, collection centers, Hat Bazar infrastructure rehabilitation/improvement | Number | 16 |  Number of infrastructures constructed and/or rehabilitated, number of infrastructures that are operational, management of infrastructures, cost involved (Project cost, cost shared by grantees, other source), number of PGs formed from FANSEP II that are nearby (within 30 minutes walking distance) of the constructed/rehabilitated the infrastructures | | PMIS Report, Progress Report |
| 4.2 | Support to establish handling and processing structures | Number | 16 |  Transaction volume and value of major commodities, product diversification and value addition | | PMIS Report, Progress Report |
| 4.3 | Capacity building for rehabilitated market staffs, PGs, relevant stakeholders, etc. (O&M, overall market management (RM level) (1 day) | Number | 24 |  Number of events conducted, number of groups covered, number of persons attended in the event (disaggregated) | | PMIS Report, Progress Report |
| 4.4 | Knowledge sharing and exposure trips for field level staffs | Number | 12 |
| **Component C: Improving Nutrition Security** | | | | | | |
| **Sub-component C 1: Institutional capacity strengthening** | | | | |  |  |
| 1 | **Institutional capacity building and strengthening** |  |  |  | |  |
| 1.1 | Prepare and Publish training modules of officials for roles in MSNP III | Number | 1 | * Number of training modules published | | Progress Report |
| 1.2 | Municipality level interaction program for capacity strengthening of local food and nutrition security committee (1 day  ) | Events | 80 |  Number of events (training/interaction program/workshops etc.) conducted, number of groups covered, number of persons attended the event, Participants Knowledge gained from training (Pre and post-test), effectiveness | | PMIS Report, Progress Report |
| 1.3 | Training to public outreach services for understanding of local nutrition impact pathways and to delineate respective roles and responsibilities (women’s group, mother’s group, influencers/change agents, FCHVs, social mobilizers, Junior Technicians) (RM level) (1 day ) | Events | 112 |
| 1.4 | Training/orientation to local school teachers on importance of locally produced seasonal foods, vegetables, fruits and animal products consumption (RM level) (1 day) | Number | 156 |
| 1.5 | Orientation to school students on importance of locally produced seasonal foods, vegetables, fruits and animal products consumption (1 day) | Number | 156 |
| 1.6 | Training on improvement of local food recipes for mother groups representatives and women (RM level) (1 day, demonstration included) | Number | 96 |
| 1.7 | Participation on RM level agriculture & nutrition related fair/exhibition | Number | 40 |  Number of fair and exhibition supported, people participated | |  |
| **Sub-component C 2: Nutrition Field Schools and Home Nutrition Garden** | | | | | | |
| **2** | **Nutrition Field School (NFS)** |  |  |  | |  |
| 2.1 | Establish NFSs (first year ) | Number | 128 |  Number of NFS established and accomplished, number of nutrition groups covered by NFS, number of participants in NFS (disaggregated), Start and end date, Facilitator/co-facilitator, number of FCHV engaged in NFS, number of special classes facilitated by health workers in NFS, number and type of Recipe demonstrated in NFS | | PMIS, Event completion report, Progress report, FGDs, GEMS, Survey Report |
| 2.2 | Follow up program of NFS (second year) | Number | 128 |  Participant's knowledge gained in % (Pretest- middle test- posttest), number of field days celebrated, and number of persons attended the field days (disaggregated), number of technologies tested/demonstrated, adoption rate of best practices/technology under NFS, number of children enrolled in anthropometric measurement/ growth monitoring and their growth status, number of children linked/connected to government health facility for regular growth monitoring, effectiveness of NFS | |
| 2.3 | Support to project implemented RMs for providing child anthropometrics assessment tools (child height/length board and weighing scale ) | Number | 16 |  | |
| 2.4 | Providing small grants support for | Number | 400 |   Process: Number of Small grant application received, Number of SGs selected for Field verification, number of SGs recommended from field verification, number of GGs awarded, number of SGs financed and accomplished, | | PMIS, Progress report, FGDs, Survey Report |
|   Coverage: beneficiaries reached through SGs (disaggregated), types/categories under SGs support | |
|   Cost sharing: total cost of the SG, amount financed by project, cost shared by NGs and other institution), | |
| 2.5 | Field verification for screening of small grants | Number | 400 |  Assets/services provided, benefit from operation of SGs (area covered/increased, herd size covered/increased, commodity produced through SGs support, time saved, drudgery reduced), household consumption of commodity produced, Income from sale of marketable surplus, satisfaction rate of SGs scheme | |
| 2.7 | Broadcast nutrition related materials (Radio/TV/FM) at central level | Number | 36 |   Number of beneficiaries reached through nutrition education and BCC messages, effectiveness of program | | PMIS, Progress Report |
| 2.8 | Broadcast nutrition related materials at local level (from PCUs) | Number | 144 |
| 2.9 | Support program for local campaigns for PMU and PCUs (World Food Day, Breast Feeding Week, Nutrition Day etc.) | Event | 48 |  Number of fairs and exhibition supported, people participated | | PMIS Report, Progress Report |
| **3** | **Home Nutrition Garden (HNG) Support** |  |  |  | |  |
| 3.1 | Formation/strengthening existing groups targeting pregnant/nursing 1000-day mothers for establishing HNG | Groups | 650 |   Number of Nutrition groups (NGs) formed, Number of Nutrition groups (NGs) registered, Number of Nutrition groups (NGs) with bank account, Number of Nutrition groups (NGs) with PAN number, Number of NGs conducting regular monthly meeting, Number of NGs that practicing monthly saving, Total saving amounts of NGs up to the reporting period, Use of saving fund by area of investment | | PMIS Report, Progress Report |
| 3.3 | HNG support to health mothers/nutrition groups | Groups | 650 |   Number of HNGs established, Number of Nutrition Groups covered, number of beneficiaries benefitted/reached through HNG package program, assets and services provided, Production, consumption and income generated, number of chicks produced through hatching of eggs by local hen, effectiveness of HNG support (package) program at group level | | Project Progress report, FGDs, PMIS Report, Survey Report |
| 3.4 | HNG follow-up support health mothers/nutrition groups | Groups | 650 |
| 3.5 | Seasonal vegetable seed support to HNGs (year 3 support for HNGs established at first year) | Groups | 650 |
| 3.7 | Assist local secondary schools to establish HNGs | No | 96 |

### 2.2.3 Impact Evaluation

**2.2.3.1 Understanding Evaluation**

***"Without evaluation, there is no learning; without learning, there is no progress"***

Evaluation can be defined as “the process of determining the worth or significance of a development activity, policy or program to determine the relevance of objectives, the efficacy of design and implementation, the efficiency or resource use, and the sustainability of results. An evaluation should (enable) the incorporation of lessons learned into the decision-making process of both partner and donor.”

***Clarity about what to monitor and evaluate***

*Crucially important for an effective M&E system is the choice of what to track, document and analyze, and who should be involved in this. Concepts for deciding what to monitor and evaluate are: relevance, cost effectiveness, efficiency, results-orientation, and sustainability of the system. A common mistake in M&E is to gather too much information. This complicates analysis and creates delays, resulting in confusion and non-timely action or no corrective action at all being taken. Keywords here are simplicity and manageability. When choosing indicators, the starting point should be the question, “Is this proposed indicator measurable?” Choosing the right indicators is critical, but M&E is much more than simply selecting a set of pertinent indicators; it also involves the identification and strengthening of data systems to ensure that indicators can be captured in a timely and reliable fashion.*

Evaluation is seen as a separate function but linked to monitoring. Monitoring and evaluation are parallel and complementary activities. Evaluation is also an important accountability tool. Evaluation is a powerful tool for learning about what works, what does not, and the reasons why.

Impact evaluation focuses on the outcomes and impacts of government activities.

**2.2.3.2 Impact Evaluation (IE) Design for FANSEP II**

***"There is no one design that fits all IE. The best design will depend on what is being evaluated; the purpose of the evaluation; budget, time, and data constraints; and the time horizon."***

The primary purpose of an IE is to estimate the magnitude and distribution of changes in outcome and impact indicators among different segments of the target population and to assess the extent to which these changes can be attributed to the interventions being evaluated. In other words, is there convincing evidence that the intervention being evaluated has contributed to its intended objectives?

***Impact Evaluation Model of FANSEP II: Summary***

* *No RCT or Control groups in FANSEP-II*
* *Only* ***comparison group*** *and* ***treatment group***
* *Impact evaluation mainly consist of* ***Baseline and Edline survey****, but for updating RF and measuring other key progresses, annual outcome survey (AOS) will be conducted.*

The central impact evaluation (IE) question is, thus, what would have happened to those receiving the intervention if they had not in fact received the program. Since we cannot observe this group both with and without intervention, the key challenge is to develop a ***counterfactual***-that is, a group which is as similar as possible (in observable and unobservable dimensions) to those receiving the intervention. This comparison allows for the establishment of definitive causality-attributing observed changes in welfare to the program, while removing confounding factors.

In the counterfactual analysis, the outcomes of the intervention are compared with the outcomes that would have been achieved if the intervention had not been implemented. The method of counterfactual impact evaluation allows to identify which part of the observed actual improvement (e.g. increase in income) is attributable to the impact of the intervention (since such improvement might occur not only due to the intervention but also due to other factors, e.g. overall economic growth).

In order to identify the outcomes of FANSEP II that would have been achieved in the absence of the intervention, treatment and comparison groups will be formed. The outcomes achieved by the comparison group allow to identify the outcomes that would have been achieved by the treatment group without the intervention. The individuals selected for both groups (treatment and comparison) will be similar, except for their participation in the intervention, due to which the treatment group is expected to achieve better outcomes.

|  |  |  |  |
| --- | --- | --- | --- |
|  | T1  Start of project (baseline) | T2  Project intervention (2024/25-2026/27) | T3  End of project  (2027) |
| **Project/Treatment group** | **P1** |  | **P2** |
| **Comparison Group** | **C1** | **×** | **C2** |

The comparison of T3 and T1 for comparison group represents the ***counterfactual***—what would have happened to the project beneficiaries if the project had not taken place. Both groups will be surveyed at the start of the project (T1) and again after project implementation (T3). Any statistically significant difference between the two groups on impact variables in T3 is indicative of a potential project impact.

Two important design elements for the estimation of project impacts are: a carefully selected control (or comparison) group and pre-and post-intervention comparison of the two groups. The first element is essential for the formulation of a logically sound counterfactual, ensuring the two groups have the same distribution of observed and unobserved characteristics at the start of the project. This ensures that post-intervention differences in impact scores are not due to initial differences (selection bias) in the characteristics of the two groups.

Treatment group consists of the individuals who will be subjected to the FANSEP II intervention.

Comparison group includes individuals who have very similar characteristics to those of the individuals in the treatment group, only they did not experience the impact of the intervention. For FANSEP II, Eligible HHs from which none of the members joined FANSEP II groups constitute the comparison group.

* **Gain scores** are defined as: the pre-project/post-project difference in scores on the impact indicator ***(single difference)***. When a control group is used the gain score is the difference in the pre-project/post-project change for the project and comparison groups ***(double difference)***.

**2.2.3.3 Baseline, Annual Outcome, and Endline Surveys**

Independent firms will be hired from PMU to conduct surveys required for project evaluation, including establishing a baseline and designing the end-of-project evaluation. At mid-term, an independent firm will carry out an annual outcome survey.

**Baseline survey**

Baseline surveys are statistical survey to cover representative project and non-project locations to establish ‘with and without project’ and ‘before and after project’ bases for counterfactual analysis of project impacts. Baseline data are required for two purposes.

* First, they are needed to provide the programme designers (planners) and implementers (managers) with as accurate and detailed a picture of the current status of the population in the target area as possible. This information is used to identify the needs of the intended beneficiary groups and to orient the project design toward satisfying them. These data are therefore needed before the start of the project or programme, during the project preparation phase.
* The second purpose of baseline data is to provide the initial values of indicators to be monitored throughout the life of the project or programme. It is crucial that the initial measurements for these indicators are obtained at the earliest opportunity, ideally prior to the commencement of the project, but no later than one year after the project began.

FANSEP II baseline survey will be conducted to meet the second purpose. It will be ensured that the baseline survey sample includes a comparison group of non-beneficiaries against which the project beneficiaries can be compared. Thus,

* The baseline survey of FANSEP II will be comprehensive survey that covers both comparison and treatment group.
* The sample size would be 2500 HHs (1750 HHs from treatment groups and 750 HHs from comparison groups). Samples will be stratified based on types of groups/subgroups of FANSEP II.
* Data of March-April 2023 to March-April 2024 will be collected on a recall basis.
* Qualified, experienced and Independent third party will be hired by the project to conduct the survey.
* Indicators to be captured: *All PDO indicators, Increased Net farm income, Improved Household dietary diversity score, Food Consumption Score (FCS), and other relevant information*

**Annual Outcome Survey (AOS)**

Considering that the program implementation has been delayed, the project will conduct only one AOS for *year 2 (2025-26).* All PDO indicators, Increased Net farm income, Improved Household dietary diversity score, Food Consumption Score (FCS) will be captured from AOS. The AOS will cover the treatment group only and the survey is meant for updating the RF of the project and collecting some other relevant information. AOS will be conducted by qualified, experienced independent third party. Data from March-April 2025 to March-April 2026 will be captured through the AOS.

**Endline Survey**

***"Panel surveys are powerful but difficult analytical tools"***

Endline survey will be the panel survey (sample HHs would be same as that of baseline). In addition to the baseline households, it may be necessary to incorporate additional households depending on the prevailing scenario to enhance geographical coverage and statistical robustness.

* Endline survey of FANSEP II will be comprehensive survey that covers both comparison and treatment group.
* Sample size would be 2500 HHs or more, stratified based on types of groups/subgroups of FANSEP II.
* Data of March-April 2026 to March-April 2027 will be collected on recall basis.
* Qualified, experienced and Independent third party will be hired by the project to conduct the end line survey.
* Indicators to be captured: *All PDO indicators, Increased Net farm income, Improved Household dietary diversity score, Food Consumption Score (FCS), and other relevant information.*

### 2.2.4 M&E Reporting, Dissemination and Utilization Plan

***"M&E can only be useful if it answers the question why has there been success or failure"***

Throughout the duration of the project, the M&E system should generate timely reports on project progress, sounding alarms where necessary, and providing project management with the necessary information to help keep the project running as smoothly as possible. In the end, sufficient information should have been accumulated for an evaluation to be conducted to inform the appropriate stakeholders on whether the project had achieved its expected objectives and to highlight any unexpected outcomes. This is what should happen – in principle.

Monitoring and evaluation reports for FANSEP II will be prepared at different intervals to measure the implementation statuses of projects as well as to ensure that a project is completed and results achieved within stipulated timeframe. The table below provides an overview of the reporting mechanisms for FANSEP II, detailing the timeline and associated responsibilities.

**Table 9: Reporting mechanisms of the FANSEP II including timeline and responsibilities**

| **Stakeholder** | **Report/Action** | **Timing** |
| --- | --- | --- |
| Project Management Unit | 1. Follows M&E strategy during all phases of the project cycle  2.First Semi-annual report (to SE)  3. Second Semi-annual and annual report  4. Implementation Status Reports/Mission Report to WB  5. Quarterly, semi-annual and annual report to Ministry of Agriculture and Livestock Development  6. Monthly Progress Report to MoALD  7. Baseline Survey Report to WB  8. Annual Outcome Survey Report to WB  9. Endline Survey Report to WB  10. Project Completion Report (PCR)  11. Financial Monitoring Report  12. Others; as and when required | 1. On-going  2. Every six month (By January 20 of each year during the implementation period).  3. Every six month (By July 20 of each year during the implementation period).  4. Within 7 days after the end of every trimester or a year.  5. On periodic basis (Within 7 days after the end of every quarter or a year).  6. Within 5 days after the end of month.  7. By July 30, 2025  8. By July 30, 2026  9. By July 30, 2027  10. By 30 October, 2027  11. On a periodic Basis  12. As and when required |
| Project Cluster Units (PCUs) | 1. Follows M&E strategy during all phases of the project cycle  2. Quarterly, semi-annual, and annual report to PMU  3. Monthly Progress Report | 1. On-going  2. Within 5 days after the end of every trimester or a year.  3.Within 5 days after the end of month. |
| FAO-TA to FANSEP II | 1. Follows M&E strategy during all phases of the project cycle  2.First Semi-annual report to PMU and FAO-country office  3. Second Semi-annual and annual report to PMU and FAO-country office  4. Terminal Report  5. Assist PCU/PMU for preparation of the reports mentioned in report/action column for the PCUs and PMU of this table | 1. On-going  2. By January 15 of year during the implementation period.  3. By July 15 of each year during the implementation period.  4. By the end of the FAO-TA contract (End of the December, 2026)  5. Regular |

**Analysis and Utilization of M&E Reports**

Project management or higher level agencies (Ministry, supervising entity, etc.) receiving reports will mull over the data, information, problems faced, and likely solutions as suggested by the reports and decide whether they can initiate measures on their own or through involvement of other agencies to resolve problems. Similarly, arrangements will be made to implement appropriate findings and recommendations of evaluation reports. The reports and recommendations can be utilized in the following situations.

1. **Quarterly/Semi-annual/Annual Progress Report** will be used to know the actual status of project against its target in stipulated time period.

2. **Field Visit Report** can be used to initiate corrective measures to improve the effectiveness of project implementation.

3. Development Partners' Reports (for example ISR mission Report of WB) will be used in decision making processes

4. **Evaluation Report** will be used to improve the performance of the project as well as to improve the design of future project or to make decision on project extension or up-scaling.

5. **Monthly Report** can be used to inform the higher level agencies on the performance of project on regular basis and track on the implementation progress.

**Dissemination and Communication of M&E Reports**

M&E reports should be disseminated by the following procedures:

* By posting on the project website: [**www.fansep.moald.gov.np**](http://www.fansep.moald.gov.np)
* Disseminating through the PMISportal, mobile apps
* By posting on the on the website of ministry or concerned agency (supervising entity, FAO)
* By organizing meetings, interaction programmes or workshops to deliberate on monitoring and evaluation reports, and to inform all concerned stakeholders.
* By submitting important accounts, data, information, or reports to the decision making agencies such as the MoALD, the OPMCM, the MoF, WB.

## 2.3 Project Management Information System (PMIS)

***" In view of limited resources of staff, money, and time, the requirements of all users are unlikely to be fully and effectively met by the information system"***

FANSEP, a precedent project of FANSEP-II, had a PMIS to facilitate M&E functions. Although many of the forms and formats including indicators of the FANSEP-II match with the ones in the FANSEP, the system of FANSEP PMIS is not state of the art and was carried over from the Agriculture and Food Security Project (AFSP) and is cluttered with unnecessary forms, formats, and reporting mechanisms. Thus, a new PMIS which is easy and efficient with contemporary technologies is necessary. Hence a new, modern, dynamic, secure and reliable PMIS system will be developed for FANSEP II.

This PMIS will help in producing reliable data on time to support evidence-based management decision making, promote transparency and accountability, and facilitate learning of the project. It documents data and information and facilitates to track project results and activities in a regular basis to generate project reports at agreed intervals or when required through the PMIS.

The consulting firm will be recruited for entire project periods that lasts on June 30, 2027 (F.Y. 2083/84). The Server hosting in the government system will be provided by FANSEP-II and a separate private hosting service will be arranged and purchased by the firm. The key activities to be accomplished by the PMIS consulting firm in different year includes:

**Year 1 (F.Y. 2024-25):**

* Contracting out the PMIS firm, system development, Piloting, refinement of the system, data entry and reporting

**Year 2 (F.Y. 2025/26)**

* Data entry and reporting
* Regular (operation and maintenance) support, data backups for data protection, technical support to PMIS users

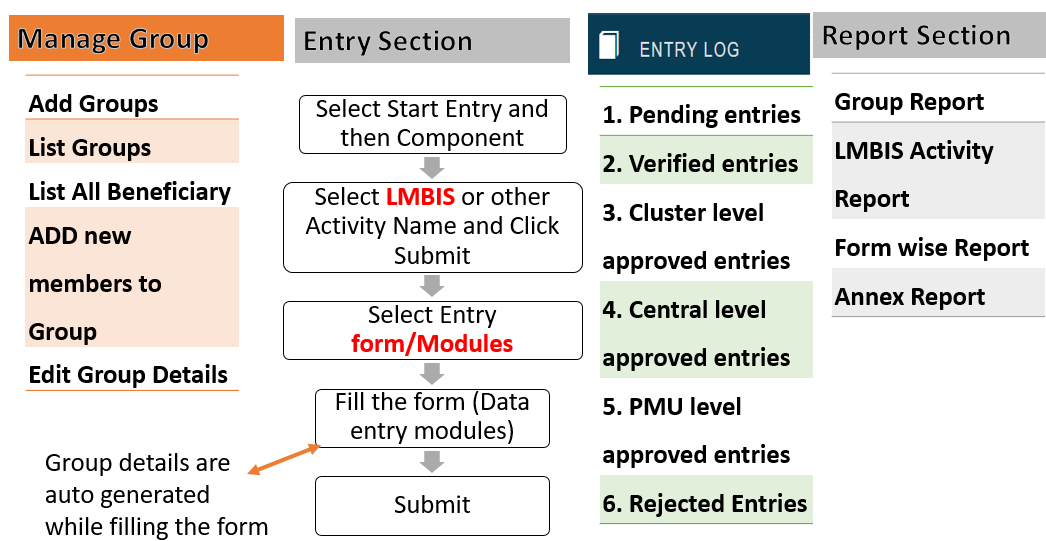
**Year 3 (F.Y. 2026/27)**

* Data entry and reporting
* Regular (operation and maintenance) support, data backups for data protection, technical support to PMIS users
* PMIS software handover to the project (along with final source code and other designing program code of PMIS software)

The web-based Project Management Information System (PMIS) will be created to gather, process, store, and disseminate project data and information. Its architecture will take into account the timelines for data reporting and the specific audiences, ensuring that filtered, organized, and relevant data sets are readily available in the required formats. The PMIS dashboard will be structured to display data-driven reports and snapshots of progress and results in a coherent manner, promoting ease of use and efficiency in data-driven decision-making. Along with the third party surveys, the PMIS will act as the key data source for tracking project progress.

The Monitoring and Evaluation (M&E) team, along with the consulting firm, will take charge of enhancing the skills of individuals engaged in data collection and entry within the Project Management Information System (PMIS). The M&E team holds the primary responsibility for managing data, which encompasses verification, analysis, storage, and dissemination through the PMIS. Training materials for the PMIS will be collaboratively created by the M&E team and the consulting firm. The comprehensive development and management of the PMIS will involve active engagement from all FAO-TA staff and the project M&E team.

The core components of PMIS are shown in the figure below:

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**Figure 3: Core Sections in PMIS of FANSEP II**

**Development of PMIS Modules**

The proposed system will have various modules and the modules are described below. Data entry for each module shall be done via mobile app and/or web, offline and online, with automatic updating.

**Module-A: Entry Log Module (Accessibility, verification, and validation)**

PMIS system should have differing levels of accessibility for different users. The system should also have processes for verification and validation of the data electronically at different level. Persons involved in such verification and validation are:

* the technical experts (crop, livestock and nutrition for respective activities),
* cluster chief/officer, and cluster M&E specialists at a cluster level;
* PMU M&E section led by senior M & E officer, and National M & E specialist of FAO-TA at the PMU level.

Access level and responsibility in PMIS of FANSEP II shall be as following:

**Table 10: Data flow process in PMIS**

| **Data Flow** | **Description** | **Remarks** |
| --- | --- | --- |
| Data Entry | Majority of the data will be entered in PMIS by Respective Cluster level specialist (Crop related data by Crop Production Specialist, Livestock related data by Livestock Production Specialist, Nutrition related data by Nutrition Specialist and Component 2 related data by Agribusiness and Enterprise Development Specialist). Entry persons will be restricted to their respective districts for crop, livestock, and nutrition specialists and their respective clusters for agribusiness and enterprise development specialists. However, PMIS must allow direct data entry by field level technicians (FLTs), as per the need and decision of the project. | The entered dada shall reflect in PMIS as Pending entries under Entry Log Menu |
| Verification (Level 1) | The entered Data will then be verified by Respective Cluster M & E Specialist. The Cluster M & E Specialist will have access of respective cluster level. | Shall be reflected in PMIS as verified entries |
| Cluster Level Approval (Verification Level 2) | The verified data by Cluster M & E specialist are then approved by respective cluster Chief (or designated cluster officer) after critical review. They will have the access of respective cluster level. | The data after verification shall reflect in PMIS as Cluster level approved entries |
| Central Level Approval  (Verification Level 3) | * Data approved by clusters then verified and approved by PMU level specialist (crop, livestock, nutrition and agribusiness) | The data approved by central level specialist shall reflect in PMIS as central level approved entries under Entry Log Menu. |
| PMU level approved entries  (Verification Level 4) | Finally, the data approved by central level specialist are checked by M & E specialist and approved by senior M & E officer of the PMU. Only the data approved by senior M & E officer will be reflected in the report section | The data approved by senior M & E officer shall reflect in PMIS as PMU level approved entries under Entry Log Menu. |
| *Rejected Entries:* As part of the verification process, if any errors/inconsistencies are found in the data, the respective verification authority will revert back the data sheet to the entry person with the reason for doing so. The entry person then rechecks the data and resend it after correction. | | |

*The entry process flowchart tentatively will be like:*

**Figure 4: Entry process flowchart in PMIS**

**Module-B: Modules for providing Input to the PMIS/Data Entry Modules**

*User friendly Electronic Data Entry:* FANSEP-II staff (cluster technical specialists and or FLTs) will enter key data over activities implemented in the field either directly through the PC, smart phones and/or tablets or PMIS friendly excel/csv sheets or through different input modules. The PMIS, to the extent possible, must allow import/export function in excel/csv form and PMIS system should be compatible to upload those excel/csv-based data files directly into the system. Below are the lists of specific input modules to be prepared by the consulting firm in PMIS. The project will provide detailed information under each module to be included in the PMIS by the consulting form.

***Module B.1: Manage Group (Tracking Group Details)***

*The PMIS* will allow tracking all details of the FANSEP II groups, including:

* Add groups,
* list groups,
* list all beneficiary of the group,
* edit group details (like add new members to group)

There must be provision for direct export of group data in PMIS from the excel. The excel sheet of group information that needs to be exported to the PMIS will be provided by the PMU. The group list along with their members will act as the base form. Systems should be developed in such a way that the relevant information input from other module forms which directly relate to the specific group or their members should be automatically added and updated in the group forms.

***Module B.2: Crop Forms (Tracking all the beneficiaries receiving seeds/sets/saplings from FANSEP II)***

Crop form will track detail information about the seeds/sets/saplings receiving beneficiaries from all components and activities. The input format of crop form that needs regarding this form will be provided by the PMU. The module must be developed in such a way that the excel form can directly be exported in PMIS.

***Module B.3: Assets/Infrastructure Forms (Tracking all the beneficiaries receiving Assets/infrastructure from FANSEP II)***

Assets form will track detail information about the Assets/infrastructure receiving beneficiaries from all components and activities.

***Module B.4: Seed Form (Tracking all the information about the seed producer groups formed in FANSEP II)***

One of the major activities under subcomponent A2: Technology Dissemination and Farmers’ Skill of FANSEP II is promotion of community seed programs for improved seed replacement rate through establishment of 16 community-based seed production groups. For this, FANSEP II will form a seed producer group and provide them the source seed for seed multiplication. This form will track the detailed information about the producer group and their activities under seed production, processing and marketing. Module B.4 should allow tracking information related to Seed production/multiplication.

***Module B.5: Demonstration Form-Crop/forage (Tracking all the beneficiaries participating in “on farm demonstration of crop/forage” of FANSEP II)***

FANSEP II through Subcomponent A1 (Technology Adaptation and Testing) under Component A (Climate and Nutrition Smart Agricultural Technology Adaptation and Dissemination) will support the implementation of improved climate- and nutrition-sensitive technologies and associated practices. One of the key activities to be supported under the subcomponent A1 is on-farm demonstration of CSA technologies and practices. Demonstration form for crop/forage will track detailed information about the on-farm demonstration related to crop/forage.

***Module B.6: Demonstration Form-Livestock (Tracking all the beneficiaries participating in “on farm demonstration of livestock” of FANSEP II)***

As mentioned in Module B.5, demonstration form for livestock will track detailed information about the on-farm demonstration related to livestock component (though under the livestock component, forage related information will be tracked in Module B.5. The detailed requirements about the form will be shared by the project.

***Module B.7: Animal Receiving form (Tracking all participants receiving animals from FANSEP II intervention)***

FANSEP II have provision of distribution of different animals (Chicks, ducklings, goat etc.) under several activities like promotion program, home nutrition garden (HNG), matching grants, small grants, NFS, etc. Module B.7 will ensure tracking detailed information regarding distribution of animals by FANSEP II activities.

***Module B.8: Matching Grant form (Tracking detail information about the Matching grant of the FANSEP II)***

FANSEP II will finance around 720 matching grant schemes for targeted beneficiaries from component B: Income Generation and Diversification. The matching grant schemes will be provided and implemented following the grant operating guidelines formulated under FANSEP. This module must allow us to capture detailed information regarding matching grant financed by FANSEP II.

***Module B.9: Small Grant form (Tracking detail information about the small grant of the FANSEP II)***

FANSEP II will finance around 400 small grant schemes for nutrition/mother’s group formed under component C: Improving Nutrition Security. This module must allow to capture detailed information regarding small grants financed by FANSEP II.

***Module B.10: Crop Promotion Program form (Tracking detailed information about the Crop promotion program of the FANSEP II)***

FANSEP II will promote 325 crop promotion programs under Subcomponent A2: Technology Dissemination and Farmers’ Skill Development. Module B.10 will track information pertaining to the crop promotion programs.

***Module B.11: Small Irrigation record form (Tracking detail information about the small irrigation schemes of FANSEP II)***

Among the activities under Sub-component A.2., supporting 400 small-scale irrigation schemes covering 1,200 ha is one of the activities. Module B.11 allows capturing information pertaining to the small irrigation schemes.

***Module B.12: Multiplier Herd record form (Tracking detail information about the Multiplier herd of FANSEP II)***

FANSEP II will establish and operate 16 multiplier herd under Subcomponent A2: Technology Dissemination and Farmers’ Skill Development. Information relating to multiplier herd program (no. of buck distributed, AI/NS provided to the goats, number of kids born, no. of bucks, goatlings and goat sold out, total income from selling these goats) will be tracked under module B.12.

***Module B.13: Artificial Insemination record form (Tracking detail information about the AI***

***centers supported by FANSEP II)***

Module B.13 allows capturing information pertaining to the Artificial insemination centers to be established in FANSEP II under component A2. Name of AI technicians doing AI, animals inseminated, animals conceived (conception rate), number of straws used per conception, and types of calves born (male or female) etc. would be captured through this module.

***Module B.14: Training Form for Beneficiaries (Tracking all the group beneficiaries participating in Training/workshop/exposure visit/street plays of FANSEP II)***

FANSEP II provides training/workshop/exposure visit/street plays under different activities. Using Module B.14, all the information related to the group beneficiaries' training, workshops, exposure visits, and street plays should be tracked.

***Module B.15: Training Form for Government or other stockholders (Tracking all participants from the government and other stockholders who participated in FANSEP II's capacity development support)***

One of the RF indicators of FANSEP II is “***Persons receiving capacity development support, gender-disaggregated***”. 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 training provided to people receiving direct benefits. Using Module B.15, all the information related to the capacity development support for Government officials or other stakeholders should be tracked.

***Module B.16: Market record form (Tracking detailed information about the handling/processing and marketing infrastructure of FANSEP II)***

From FANSEP II, around 32 critical infrastructures (16 Market structures and 16 handling/processing infrastructures) to support the strengthening of the Productive Alliances in the project RMs such as collection centers, storage, markets, and processing and grading facilities will be established to strengthen the supply chain and reduce postharvest losses. Module B.16 must be able to capture detailed information regarding marketing and handling/processing supported by FANSEP II.

***Module B.17: Filed School record form (Tracking detail information about the different categories of Field school under FANSEP II)***

FANSEP II will Support for the conduction and establishment of 485 crop and livestock Farmer’s field schools (FFSs) under Subcomponent A.2, 32 Farm business schools (FBSs) under Subcomponent B1, and 128 nutrition field schools (NFSs) under Subcomponent C2. Using Module B.17, all the information related to the different categories of Field school under FANSEP II is tracked.

***Module B.18: Livestock promotion program record form (Tracking detail information about the Livestock promotion program under FANSEP II)***

FANSEP II will Support 300 goat promotion programs, 120 dairy promotion programs, and 60 rural poultry promotion programs under Subcomponent A2: Technology Dissemination and Farmers’ Skill Development. Detail information about promotion program will be captured through Module B.18.

***Module B.19: Productive alliance record form (Tracking detail information about the Productive alliances under FANSEP II)***

Under the Subcomponent B2: Building Market Linkages through Productive Alliances*, FANSEP II supports* formation of 16 multi-stakeholders’ dialogue platforms at the RM level. Module B.19 must be able to capture detailed information regarding productive alliance formed under FANSEP II.

***Module B.20: Fodder resource nurseries record form (Tracking detail information about the fodder resource nurseries under FANSEP II)***

The establishment of 16 community-level fodder resource nurseries supporting plantations covering 320 ha is one of the key activities under Subcomponent A2. Module B.20 allows capturing information pertaining to the Fodder resource nurseries supported by FANSEP II.

***Module B.21: Crop productivity record form (Tracking detailed information about the crop productivity under FANSEP II)***

Increased crop and animal productivity by direct beneficiaries is the PDO level indicator of FANSEP II. The indicator is defined as improvements in production per ha or animal resulting from improvements in production practices through FANSEP-II interventions. As provisioned in PAD of FANSEP II, 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 or herd of the animal.

FANSEP aims to increase productivity of food grains and vegetables under crop components. Food grains include rice, maize, and wheat. Vegetables include potato, tomato, cauliflower, bitter gourd, cucumber, bottle gourd, sponge gourd, pumpkin, okra, peas and beans, cabbage, radish, carrot, and brinjal.

Though productivity will be measured by periodic surveys, productivity related information will be captured on regular basis in PMIS through module B.21. Data tracked through this module serves the triangulation purpose for data collected through surveys. For this purpose, PMU will share the lists of beneficiaries (selected at random from all beneficiaries) to be considered for measuring productivity. The field level technicians will collect productivity measurements through crop cut surveys to the sampled households. The guidelines about the crop cutting will be provided by the PMU. Module B.21 allows tracking crop productivity related information.

***Module B.22: Livestock productivity record form (Tracking detailed information about the Livestock productivity under FANSEP II)***

As mentioned in Module B.21, Increased animal productivity by direct beneficiaries is the PDO level indicator of FANSEP II. Under livestock productivity, Milk and Meat productivity will be measured. Livestock meat includes goat meat and Milk includes cow and buffalo milk. The field level technicians will collect productivity measurements of meat and milk from the households shared by PMU. The guidelines about productivity measurement will be provided by the PMU. Module B.22 allows tracking livestock productivity related information.

**Module 23: NFS data record module**

This module will allow to track the data related to the NFS including anthropometric measurements made during the NFS.

**Module 24: Grievance Redressal Mechanism**

This module will allow users to track the submission of complaints from the grievant and update the number of grievances redressed and pending.

**Module 25: Environmental and social safeguards related data and information**

This module will allow users to track the ESMF related information as per the requirements of the project.

**Module 26: Upload of success stories and lessons learned:** The system should allow separate modules to upload success stories and lessons learned including pictures of before and after the activity completion. This needs to be published on PMIS only after the verification by the concerned authority. Such stories/lessons could also be in the form of audios and short videos as well which could be uploaded instantly from the field by using smart phones or tablets.

***Other modules as requested by the Project:***

Apart from the information listed in the module above, the system should be able to capture requirements of regular National Planning Commission (NPC) based, Ministry of Agriculture and Livestock Development (MOALD) based, and Office of the Auditor General (OAG) based reporting information. Likewise, the reporting requirement of the World Bank should also be met by PMIS. For this, project might request for additional input modules or modification/update in the abovementioned modules as per the requirement of the project. It is the consulting firm’s obligation to meet all the requirements of the project regarding input modules. Details about the input modules will be provided by the PMU.

***Module-C: Report Module***

The PMIS should have advanced Report module. Report generation system must be customizable and dynamic to address the needs of the project. Such output reports are to be available on a timely basis, per activity as per GoN and World Bank reporting format. The module should have different types and formats of reports. Many of such information should be displayed and updated in real time basis on the dashboard as well. The reports Module should be able to generate the following reports:

**Table 11: Report Modules in PMIS**

|  |  |
| --- | --- |
| ***Reports*** | ***Description*** |
| ***Group Reports*** | The group report should allow PMIS users to view/download   * RM/District/Cluster Wise Group Report * Component/Subcomponent Group Report * Subcomponent Group Report * Group Report by Type of the Group * Other group report as per the demand of PMU |
| ***LMBIS Activity Wise Report*** | The PMIS would generate LMBIS activity wise report based on the LMBIS activity index generated. PMIS should allow users to filter this report based on component and fiscal year. |
| ***Form wise Report*** | There must be a form wise report in PMIS for each form mentioned under Module B: Input Module and other modules as per requirement of the project ) |
| ***Annex Report*** | The following annex report will be generated through PMIS  **Annex-1: Total groups reached report (total unique group reached)**  *This form will provide the sum of unique groups (the same group receiving more than one project intervention is counted as one, through assigning unique ID number to the groups of FANSEP II), disaggregated by component/subcomponent, receiving at least one project intervention. This form also allows detailed information regarding number and list of interventions each group received from FANSEP II.*  **Annex-2: Total beneficiaries reached report (total unique beneficiary reached)**  *This form will provide the sum of unique beneficiaries (the same beneficiary receiving more than one project intervention is counted as one, through assigning unique ID number to the beneficiary), disaggregated by component/subcomponent and gender, receiving at least one project intervention. This form also allows detailed intervention about the intervention received by each beneficiary.*  **Annex-3: Total household reached (total unique household reached)**  *This form will provide the sum of unique households (the same household receiving more than one project intervention is counted as one, captured through unique HH ID of FANSEP II), disaggregated by component/subcomponent, receiving at least one project intervention. This form also allows detailed information about the intervention received by each household.*  **Annex-4: Crop seeds receiving beneficiaries (total beneficiaries reached through seed support)**  *This form will provide the sum of unique beneficiaries (the same beneficiary receiving more than one type of seed support is counted as one) receiving seeds through different activities of FANSEP II. This form also allows detailed information about the seeds received by each beneficiary.*  **Annex-5: Number of PG members provided with access to improved agricultural technologies**  *This report captures the unique number of PG members provided with access to improved agricultural technologies (On farm demonstration, fields schools, training, improved seed/breed support and equipment/asset support).*  **Annex-6: Farmers receiving inputs or services on climate resilient or sustainable agriculture practices**  *This is one of the Intermediate indicators of result framework under component 1.*  *This form will provide the sum of unique beneficiaries (the same beneficiary receiving more than one project input or services on climate resilient or sustainable agriculture practices is counted as one, through assigning unique ID number to the beneficiary), disaggregated by component/subcomponent and gender, receiving at least one inputs or services on climate resilient or sustainable agriculture practices. To ease the tracking of this indicator, each LMBIS activity is categorized as whether is it climate resilient or sustainable agriculture practices or not during LMBIS activity indexing in PMIS.*  **Annex-7: Assets/infrastructure receiving beneficiaries**  *This form will give the total number of unique beneficiaries (a beneficiary who receives more than one kind of asset is counted as one) who have received infrastructure or assets through various FANSEP II interventions. This form also allows detailed information about the assets/infrastructure received by each beneficiary.*  **Annex-8: Farmers reached with agricultural assets/services**  *This is one of the Intermediate indicators of result framework under component 1. This form will give the total number of unique beneficiaries (a beneficiary who receives more than one kind of asset/services is counted as one) who have received* assets/ services *through various FANSEP II interventions, disaggregated by crop/livestock and gender.*  **Annex-9: Training/workshop/exposure visit/street drama for group beneficiaries**  *Counting the unique beneficiaries from module B.14 (group beneficiaries participating in Training/workshop/exposure visit/street drama of FANSEP II), this form provides the total number of group beneficiaries receiving services from the FANSEP II. This form allows the disaggregation of information by component/subcomponent and gender.*  **Annex-10: Persons receiving capacity development support**  *One of the RF indicators of FANSEP II is “Persons receiving capacity development support, gender-disaggregated”. Counting the unique beneficiaries from module B.15 (all participants from the government and other stockholders who participated in FANSEP II's capacity development support), this form provides the total number of Persons receiving capacity development support, disaggregated by gender.*  **Annex-11: Description of beneficiaries receiving animal**  *This form provides the unique number of beneficiaries receiving animals under different interventions of FANSEP II. This form also allows the disaggregation of information by component/subcomponent, gender and animal type.* |

There might be additional modules besides those listed above that are required for the project, or the above-mentioned modules may need to be modified or updated in order to meet the project's requirements. It is the consulting firm’s obligation to meet all the requirements of the project regarding output modules. Details about the output modules will be provided by the PMU.

**Module-D: Dashboard/Data Visualization Module**

As a part of PMIS operationalization, all the beneficiaries and producer groups and their details (as suggested by project) should also be integrated into PMIS. Many of such information should be displayed and updated on a real time basis on the dashboard as well. The consulting firm should develop and update a customizable and interactive dashboard to track incoming data in real-time. PMIS users at various levels must have access to a customizable data dashboard that tracks summary statistics in real-time to enable monitoring of inputs, activities, and outputs. It should include (but not limited to: )

1. Total time elapsed of the project (in percentage bar diagram)

2. Total disbursement of GAFSP status (in percentage bar diagram)

3. Total financial progress (in percentage bar diagram)

4. Group summary (group numbers, members by sector/subsector, and by gender etc.) in pie and bar graphs

5. Total group **(unique)** reached (by sector/subsector, by gender)

6. Total beneficiaries **(unique)** reached (by component/subcomponent and by gender)

7. Updated Result Framework

8. GAFSP Fund Disbursement Report

## 2.4 Use of GEMS and its integration with FANSEP II PMIS

***" Bring eyes on the ground, where we cannot always have feet on the ground"***

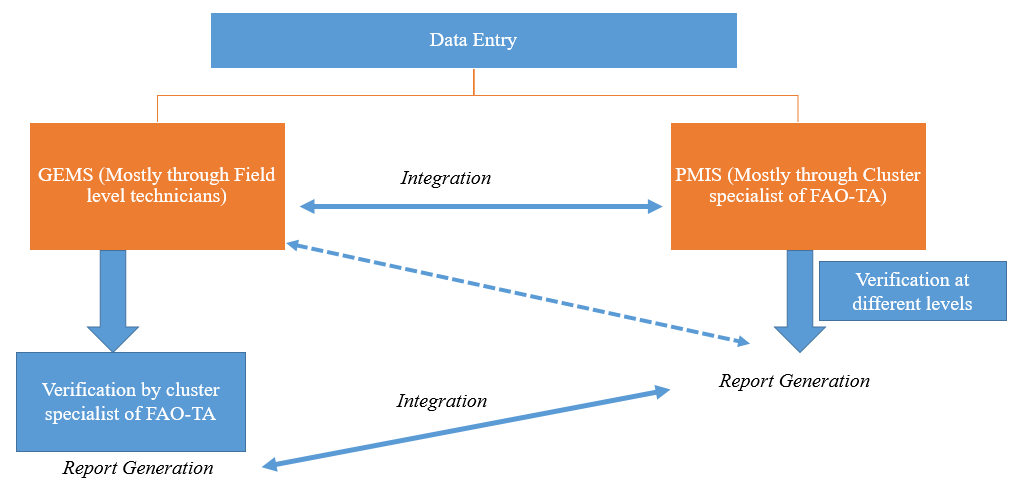
The World Bank, with support from the Korea Trust Fund for Economic and Peacebuilding Transitions (KTF), initiated the Geo-Enabling Initiative for Monitoring and Supervision (GEMS) to systematically improve Monitoring and Evaluation (M&E) of development projects and facilitate real-time risk management in environments affected by Fragility, Conflict, and Violence (FCV). Since 2021, GEMS has also benefited from the World Bank Group Partnership Fund for the Sustainable Development Goals (SDGs) to address challenges in fragile contexts exacerbated by the COVID-19 pandemic globally. Due to its emphasis on capacity building and tangible impact on the ground, GEMS was recognized by the UN Innovation Network as one of the Best Innovations in 2020.

GEMS is focused on enhancing the capabilities of government agencies and local partners by utilizing affordable open-source technologies, like Kobo Toolbox, along with straightforward techniques for digital data collection and analysis. This approach enables the acquisition of real-time insights into local conditions that can guide decision-making processes. By employing GEMS in a systematic manner, development stakeholders can improve the precision and accountability of monitoring and evaluation (M&E) efforts, while also developing tailored platforms for remote oversight, immediate risk management, and collaboration among various projects and partners. GEMS has played a significant role in facilitating project execution, fostering citizen participation, and managing risks globally.

The GEMS team from the World Bank conducted training sessions for the project staff, including members from both the PMU and PCUs. They facilitated various virtual discussions aimed at identifying how FANSEP II can leverage GEMS for monitoring and supervision purposes. *Project team had identified some of the possible areas where the GEMS can be used for Monitoring and Supervision of project activities and results. They are:*

* + Productivity of crops (food grains vegetables)
  + Productivity of Livestock (Meat and Milk)
  + Information related to the infrastructures with geo referencing, where possible (Processing, storage and market facilities, Irrigation infrastructures)
  + Small grant, Matching Grant and Crop Promotion Programs
  + Information related to Model Home Nutrition Garden
  + Farmer's field school
  + CSA technologies demonstrations
  + Multiplier herd, AI centres, Seed producer group
  + Grievance (QR code)
  + Effectiveness of FANSEP II intervention
  + Group, and beneficiary related information beneficiary

In addition, the consulting firm for PMIS should develop the system in such a way that the data collected through the KOBO tools/App will be integrated in the PMIS in an executable form. PMIS of the FANSEP II should be compatible and must be integrated with Kobo to the possible extent for the project at field/cluster/central levels for real time monitoring. The GEMS team of the World Bank and the project team will provide technical feedback regarding this matter.



**Figure 5: Integration of GEMS/Kobo toolbox in the FANSEP II PMIS**

## 2.5 Grievance Redress Mechanism (GRM)

Food and Nutrition Security Enhancement Project II (FANSEP II) put in place a responsive and functioning Grievance Redress Mechanism (GRM) to address the concerns and complaints of beneficiaries and project stakeholders by adopting an understandable and transparent process that is culturally appropriate and readily accessible to all the segments of affected communities. The project’s GRM is at no cost to complainants and guarantees that there will be no retribution for people who lodge complaints on project activities. Furthermore, the grievance mechanism will not impede access to judicial and administrative remedies. FANSEP-II will use the same GRM Guidelines-2076 prepared in FANSEP I and will follow the procedure mentioned in guidelines.

FANSEP II has a two-tiered (i.e. PCUs and PMU) grievance redress mechanism (GRM) with explicit provisions for receiving grievances, processing, finding resolution, and a reporting back mechanism in a timely and culturally appropriate manner. It also incorporated a sequential escalation procedure if the complainant seeks to appeal.

**Grievance lodging:**

Complaints can be submitted through various channels, including project offices, local community centers, complaint boxes, email, and telephone hotlines, as well as during community consultations to ensure they can file grievances easily. Project staff or community facilitators assist in documenting grievances for individuals with literacy challenges. The project will utilize GEMS (KOBO questionnaire) to collect complaints, particularly at the field level. This KOBO system will seamlessly integrate with the project's PMIS.

Upon receipt of a grievance, the project acknowledges it, generally within 3-5 working days, providing the complainant with a reference number and initial information on next steps. Each grievance is assigned a unique tracking ID, which allows both the complainant and project staff to follow the progress of the resolution process. Grievances are classified as per type (e.g., operational, social, environmental) and severity (urgent or routine). This ensures efficient prioritization and helps assign grievances to appropriate project teams.

**PCU level Grievance Committee**

The first level and most accessible and immediate venue for the fastest resolution of grievances will be the Project Cluster Offices. The PCU level GRM Committee is led by the respective cluster chief and supported by the Grievance Hearing Officer, who will document the complaint and put all efforts to address. The GRM committee will resolve the issue within 15 days of receipt/registered of a complaint/grievance If the complainants are not satisfied with decision made by the PCU level Grievance Redressal committee then complainants can appeal to the PMU level Grievance Redressal Committee within the 15 days from the date of receiving of information about the decision.

**PMU level Grievance Committee:**

If the complainant cannot be resolved at the cluster level the grievance will be forwarded to this level or if the complainants are not satisfied with the decision of the PCU GRM committee then the person can appeal to this level. This level will be headed by the Joint Secretory of Planning and Development Cooperation and Coordination Division of Ministry of Agriculture and Livestock along with the Project Director and four other members. The committee supports the Grievance Hearing Officer and E&S Safeguard Specialist. This level has to resolve the grievances within 30 days of receiving the complaints from the cluster Level or appeal of the complainants. If the PMU level GRM committee could not resolve the complainants are forwarded to the Project Screening Committee (PSC).

The GM put in place for the project will also be used for addressing GBV and SEA/SH related issues and the PMU will oversee GBV related complaints. The project will place its uppermost priority on handling and managing the GBV-related grievance by adopting survivor centered approach and maintaining the full confidentiality of the survivor.

Privacy Assurance: Complainants’ identities and details of grievances are kept confidential, and protections are in place to prevent any form of retaliation against individuals who lodge complaints.

***There will be separate modules in PMIS to capture Grievances related information.***

## 2.6 M & E Staffing and Responsibilities

***"M&E is intrinsically challenging and requires a level of technical capacity"***

Effective execution of a project necessitates a proficient project management team, guided by an experienced project coordinator, alongside a comprehensive monitoring and evaluation framework overseen by a skilled M&E personnel. In FANSEP II, the PMU will have the overall responsibility for M&E operations, regular reporting, and dissemination of project results. Furthermore, PMU will also be responsible for monitoring overall project implementation progress, outcome/results, and evaluations; verifying and consolidating data; commissioning and supervising baseline, annual outcome and endline surveys and other surveys. For aforementioned purposes, the PMU of the project will have a Monitoring and Evaluation Section. The PMU will receive the required direct support for these activities from the FAO TA. The World Bank will also have required arrangement to liaise and support the project M&E.

PMU has a Senior M&E officer and an Officer designated to M & E purpose. Similarly, PCUs will have one designated person assigned to M&E. From FAO TA part, one national monitoring and evaluation specialist at the Project Management Unit level, along with two monitoring and evaluation specialists at the cluster level, will provide assistance to the Project Management Unit and Project Coordination Units regarding monitoring and evaluation-related issues. These all comprise M&E team of the FANSEP II.

**Table 12: M & E staffs and key responsibilities**

|  |  |  |
| --- | --- | --- |
| **Staffs** | **Type of Appointment** | **Key Responsibility** |
| **PMU Level** |  |  |
| * Senior M&E officer (1) | * Existing MoALD staff on full-time basis | * Coordinating the overall M&E tasks at the project level |
| * M&E officer (1) | * Existing MoALD staff on full-time basis | * Assist PD and senior M&E officer |
| * National monitoring and evaluation specialist (1) | * For 30 months (FAO-TA) | * Assist PMU and PCUs for M& E Task, updating the PMIS database |
| **PCU Level** |  |  |
| * Agriculture officer with designated role of M & E(1) | * Existing MoALD staff on full-time basis | * Coordinating the overall M&E tasks at cluster level |
| * Cluster monitoring and evaluation specialist (2) | * Each for 28.5 month (FAO-TA) | * Assist PCUs for M& E Related Task, organizing and updating the PMIS database at cluster level |

## 2.7 Implementation plan for key M&E activities

M&E Strategy will be updated and customized as the project activities roll out. Implementation plan for key M&E activities are presented in Table 11 below. The plan will be updated regularly.

**Table 13: Implementation plan for key M&E activities of FANSEP II**

| **Key Activities** | **Timeline** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **2024** | | **2025** | | | | | | | | | | | | **2026** | | | | | | | | | | | | **2027** | | | | | | |
|  | **Nov** | **Dec** | **Jan** | **Feb** | **Mar** | **Apr** | **May** | **Jun** | **Jul** | **Aug** | **Sep** | **Oct** | **Nov** | **Dec** | **Jan** | **Feb** | **Mar** | **Apr** | **May** | **Jun** | **Jul** | **Aug** | **Sep** | **Oct** | **Nov** | **Dec** | **Jan** | **Feb** | **Mar** | **Apr** | **May** | **Jun** | **Jul** |
| **1. Development of M & E Strategy** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **2. Development of M & E templates, PMIS forms and Formats** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **3. Conduction of Baseline survey of the project** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3.1 Evaluation of Request for Proposal (RFP) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3.2 Contract with the firm |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3.3 Commencement of Field Survey |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3.4 Completion of Field Survey |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3.5 Final Report Submissions to Bank |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **4. Hiring of firm for developing PMIS for FANSEP II** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4.1 ToR Preparation and NoL From bank |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4.2 EoI Notice |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4.3 Contract with the consulting firm |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4.4 PMIS deployment |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4.5 Piloting |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4.6 Full scale go live |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4.7 Regular (operation and maintenance) support, data backups for data protection, technical support to PMIS users |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4.8 PMIS software handover to the project (along with final source code and other designing program code of PMIS software) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **5. Conduction of Annual Outcome Surveys (AOS)** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5.1 ToR Preparation and NoL From bank |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5.2 EoI Notice |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5.3 Evaluation of Request for Proposal (RFP) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5.4 Contract |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5.5 Commencement of Field Survey |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5.6 Completion of Field Survey |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5.7 Final Report Submissions to Bank |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **6. Conduction of Endline Surveys** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6.1 ToR Preparation and NoL From bank |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6.2 EoI Notice |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6.3 Evaluation of Request for Proposal (RFP) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6.4 Contract |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6.5 Commencement of Field Survey |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6.6 Completion of Field Survey |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6.7 Final Report Submissions to Bank |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **7. Preparation and Submission of Semiannual Report, ISR mission report and government report** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **8. Preparation and Submission of Terminal Report by FAO-TA** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **9. Preparation and Submission of Project Completion Report** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **10. Capacity Building Training to Project Staffs (on M & E, PMIS, GEMS etc.)** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **11. Dissemination of learning and knowledge products** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

LIST OF ANNEXES

Annex 1: RF Indicators and Their Cumulative Target Values

| **Indicator Name** | **Unit of Measure** | **Baseline** | **Target Values[[20]](#footnote-20)** | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Year 1 (F.Y. 2024-25)** | **Year 2 (F.Y. 2025-26)** | **Year 3**  **(F.Y. 2026-27)** | **End Target** |
| **PDO 1:** Farmers adopting improved agricultural technology CRI(disaggregated by gender) | Number | 0 | 8000 | 17000 | 23625 | 23625 |
| Of which female | Number | 0 | 5200 | 11050 | 15356 | 15356 |
| Of which Male | Number | 0 | 2800 | 5950 | 8269 | 8269 |
| **PDO 2:** Increased crop and livestock productivity by direct beneficiaries (disaggregated by crop and animal species) (***GAFSP Tier 2 Outcome Indicator)*** |  |  |  |  |  |  |
| Crops (food grains) | Percent | BL | BL+5% | BL+10% | BL+15% | BL+15% |
| Crops (vegetables) | Percent | BL | BL+5% | BL+15% | BL+25% | BL+25% |
| Livestock (meat) | Percent | BL | BL+5% | BL+12% | BL+20% | BL+20% |
| Livestock (milk) | Percent | BL | BL+5% | BL+10% | BL+15% | BL+15% |
| **PDO 3:** Increased household income (farm and off-farm) (***GAFSP Tier 1 Indicator***, gender-disaggregated) | Percent | BL | BL+5% | BL+10% | BL+15% | BL+15% |
| Female-headed households | Percent | BL | BL+5% | BL+10% | BL+15% | BL+15% |
| **PDO 4:** Reduced food insecurity experience scale score of direct beneficiaries (FIES) (***GAFSP Tier 1 Indicator)*** | Percent | BL | 5% reduction in BL value | 10 % reduction in BL value | 15 % reduction in BL value | 15 % reduction in BL value |
| Female-headed households | Percent | BL | 5% reduction in BL value | 10 % reduction in BL value | 15 % reduction in BL value | 15 % reduction in BL value |
|  |  |  |  |  |  |  |
| **PDO 5:** Improved Minimum Dietary Diversity for Women (MDD-W) (***GAFSP Tier 1 Indicator)*** | Percent | BL | BL+5% | BL+15% | BL+25% | BL+25% |
| **PDO 6:** Improved Minimum Dietary Diversity for Children (MDD-C) between 6 and 24 months (***GAFSP Tier 1 Indicator)*** | Percent | BL | BL+5% | BL+15% | BL+25% | BL+25% |
| **Intermediate Indicators by Components** |  |  |  |  |  |  |
| **Component A: Climate and Nutrition Smart Agricultural Technology Adaptation and Dissemination** | | | | | | |
| **IR A.1** Farmers receiving inputs or services on climate resilient or sustainable agriculture practices (***GAFSP Tier 2 Output Indicator)*** | Number | 0 | 8,000 | 17,000 | 27,000 | 27,000 |
| **IR A.2** Farmers reached with agricultural assets/ services (CRI) | Number | 0 | 11,000 | 22,500 | 33,750 | 33,750 |
| Of which female (CRI) | Number | 0 | 7,150 | 14,625 | 21938 | 21938 |
| **IR A.3** The land area provided with new/improved irrigation services (***GAFSP Tier 2 Output Indicator)*** | Hectare | 0 | 400 | 1000 | 1,200 | 1,200 |
| **Component B: Income Generation and Diversification** | | | | | |  |
| **IR.B.1** Producer-based organizations supported (***GAFSP Tier 2 Output Indicator)*** | Number of organizations | 0 | 540 | 1,100 | 1,350 | 1,350 |
| **IR.B.2** Number of subprojects (business plans) submitted by the producer groups | Number | 0 | 375 | 750 | 1,000 | 1,000 |
| **IR.B.3** The number of subprojects (business plans) financed by the project on a matching grant basis. | Number of business plans | 0 | 275 | 550 | 720 | 720 |
| **IR.B.4** Increased Net farm income | Percent | BL | BL+5% | BL+12% | BL+20% | BL+20% |
| **IR.B.5** Processing, storage, and market facilities constructed and/or rehabilitated (number) (***GAFSP Tier 2 Output Indicator)*** | Number of facilities | 0 | 16 | 32 | 32 | 32 |
| ***Component C: Improving Nutrition Security*** |  |  |  |  |  |  |
| **IR.C.1** People receiving improved nutrition services and products, gender-disaggregated ) (***GAFSP Tier 2 Output Indicator)*** | number of people | 0 | 7,000 | 14,500 | 16,250 | 16,250 |
| **IR.C.2** Improved Household dietary diversity score including nursing mothers and children under two years (1,000 days mother target) | Number | BL | BL+5% | BL+12% | BL+20% | BL+20% |
| **IR.C.3** Number of small grant-financed subprojects (business plans) | Number of small grants | 0 | 150 | 300 | 400 | 400 |
| **Intermediate Result (Component D) - Project management, communication, and M&E** | | | | | | |
| **IR.D.1** Persons receiving capacity development support, gender-disaggregated (***GAFSP Tier 2 Output Indicator)*** | Number | 0 | 200 | 500 | 700 | 700 |
| of which female | Number | 0 | 100 | 250 | 350 | 350 |
| **IR.D.2** Beneficiary satisfaction rate with relevance, timeliness and effectiveness of services provided by the project | Percent | 0 | 10% | 35% | 70% | 70% |
| **IR.D.3** Grievances registered addressed within the delay set by the project GRM | Percent | 0 | 75% | 80% | 90% | 90% |
| **IR.D.4** Periodic reports submitted on time | Number (cumulative) | 0 | 2 | 4 | 6 | 6 |

**Annex 2: Trimester /Annual Reporting Structure**

.......................................... Trimester/Annual Progress Report

|  |  |
| --- | --- |
| 1. FY: | 7. Expenditure of this period (Rs.): |
| 2. Budget Sub-title No. : | (1) Nepal Government: |
| 3. Ministry: MoALD | (2) GAFSP/IDA Trust Fund: |
| 4. Title of the Project: FANSEP II, PCU ………………/PMU | 8. Financial Progress (Expenditure percentage in comparison to trimester/annual target): |
| 5. Name of the PCU Chief: | 9. Percentage of weighted progress of the reporting period: |
| 6. Budget for this Period (Rs.): | 10. Percentage of elapsed time (in comparison to the total period): |
| (1) Nepal Government: |  |
| (2) GAFSP/IDA Trust Fund: |  |

| S.N. | Description of Activity | Unit | Annual Target | | | ……...Trimester/Annual Target | | | …...Trimester/Annual Progress | | Progress of this FY as of Reporting Period | | Remarks | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Quantity | Weight | Budget | Quantity | Weight | Budget | Quantity | Weight | Quantity | Weight | |  | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | | 14 | |
| a) Programme under capital expenditure |  |  |  |  |  |  |  |  |  |  |  |  | |  | |
|  |  |  |  |  |  |  |  |  |  |  |  |  | |  | |
| i) Total of Programmes under Capital Expenditure | |  |  |  |  |  |  |  |  |  |  |  | |  | |
| b) Programme under recurrent expenditure |  |  |  |  |  |  |  |  |  |  |  |  | |  | |
| Component A | Activity 1.1 |  |  |  |  |  |  |  |  |  |  |  | |  | |
|  | …. |  |  |  |  |  |  |  |  |  |  |  | |  | |
| Subtotal of Component A |  |  |  |  |  |  |  |  |  |  |  |  | |  | |
| Component B | Activity 2.1 |  |  |  |  |  |  |  |  |  |  |  | |  | |
|  | …. |  |  |  |  |  |  |  |  |  |  |  | |  | |
| Subtotal of Component B |  |  |  |  |  |  |  |  |  |  |  |  | |  | |
| Component C | Activity 3.1 |  |  |  |  |  |  |  |  |  |  |  | |  | |
|  | …. |  |  |  |  |  |  |  |  |  |  |  | |  | |
| Subtotal of Component C |  |  |  |  |  |  |  |  |  |  |  |  | |  | |
| Component D | Activity 4.1 |  |  |  |  |  |  |  |  |  |  |  | |  | |
|  | ….. |  |  |  |  |  |  |  |  |  |  |  | |  | |
| Subtotal of Component D |  |  |  |  |  |  |  |  |  |  |  |  | |  | |
| ii) Total of Programmes under Current Expenditure | |  |  |  |  |  |  |  |  |  |  |  | |  | |
| ***Total (i + ii)*** |  |  |  |  |  |  |  |  |  |  |  |  | |  | |

* Targeted Weight: mention the targeted weight for the period according to the Approved Annual Programme (NPC form 1 of LMBIS)
* Trimester/Annual Progress, Quantity: Mention the progress quantity, number, percentage etc. achieved in this period among the determined work targets.
* *Annual Progress/Weighted:* Mention the figure ascertained by multiplying the ratio of the annual progress quantity of related programmes/activities and annual targeted quantity by annual weight. (Or, Weighted Progress = Progress Quantity (Column No.10)/ Targeted Quantity (Column No.4) X Weight (Column No.5)
* *Trimester Progress/Weighted:* Mention the figure ascertained by multiplying the ratio of the trimester progress quantity of related programmes/activities and trimester targeted quantity by trimester weight. (Or, Weighted Progress = Progress Quantity (Column No.10)/ Targeted Quantity (Column No.7) X Weight (Column No.8)
* Column 7, 8 and 9 should not be filled out while reporting on the annual progress as the information to be provided in these columns are already mentioned in Column No.4, 5 and 6.
* Column 12 and 13 should not be filled out while reporting on the annual progress.

***Description Regarding Problems of the Project***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| S.N. | Main Problems Observed in the Project Implementation | Causes of the Problems Observed | Efforts Made to Solve Problem | Problems Observed to be Presented in MDAC | Suggestions for Solution of Problems |
|  |  |  |  |  |  |

Details as per this page will be filled in and submitted to the Ministry to present in MDAC.

|  |  |  |
| --- | --- | --- |
| Name, Post and Signature of preparation in-charge Date: | Recommended by:  Date: | Signature of Approval:  Date: |

**Annex 3: Reporting Structure for Semi-Annual/Annual Report to be submitted to the WB**

**Semi-annual Progress Report Format for FANSEP II**

**Title Page**

Name of the project: Food and Nutrition Enhancement Security Project II

Implementing Agency: Ministry of Agriculture and Livestock Development

Time Frame: Semi-annual Progress Report (Jan-June/July- Dec…)

Logos

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Abbreviations

Summary

**A. Introduction/Project background:** provide a summary including introduction, project development objectives, and project components.

**B. Overall progress**

* Number of beneficiaries reached (component and subcomponent wise, gender disaggregated, unique number)
* Number of HHs reached (component and subcomponent wise, unique number)
* Number of groups reached through project interventions (component and subcomponent wise)
* Number of smallholders receiving productivity enhancement support[[21]](#footnote-21)
* Persons receiving capacity development support (gender disaggregated)
  + Of the group members
  + Of the persons other than the group members
* Any key issues occurred during the reporting period (Such as natural disasters, disease outbreak, etc., which affected project implementation)

**C. Progress against the timeline agreed at last mission**

**D. Component and subcomponent wise progress**

*D.1. Component A: Climate and Nutrition Smart Agricultural Technology Adaptation and Dissemination*

D.1.1.a Sub- Component A1: Technology Adaptation and Testing-Crop Sector

D.1.1.b. Sub- component A1: Technology Adaptation and Testing-Livestock Sector

D.1.2.a Subcomponent A2: Technology Dissemination and Farmers’ Skill Development- Crop Sector

D.1.2.b Subcomponent A2: Technology Dissemination and Farmers’ Skill Development- Livestock Sector

Under each component and subcomponent, include the following:

* Overview of the component, subcomponent, including its purpose and objectives
* Key progress made (in the following template)

| Activities accomplished | Unit | End of Project Target | Progress up to the last reporting period (Specify period) | Progress during the reporting period (Specify period) | Cumulative progress so far | Remarks |
| --- | --- | --- | --- | --- | --- | --- |
| Inputs/assets distributed |  |  |  |  |  |  |
| …. |  |  |  |  |  |  |
| ……….. |  |  |  |  |  |  |
| …. |  |  |  |  |  |  |
| Service provided |  |  |  |  |  |  |
| …… |  |  |  |  |  |  |
| Other… |  |  |  |  |  |  |

* What exact activities have been conducted in the reporting period, how did it go, what challenges faced, what findings observed, etc. For example, in case of CSA technology adoption, not only # of technologies disseminated though what activities to how many number of beneficiates, what worked well in which region why, etc. should be discussed.
* Provide a **short narrative** for the table. In addition, please mention **evidence-based outputs, outcomes, and impact of the accomplished activities** (During the reporting period, if applicable). Example: in the table above, mention the target and progress of foundation seed distribution. But also include quantity of certified seeds/truthfully labelled seeds produced from the distributed foundation seed, quantity used during the reporting period, quantity stored for the next season etc. (As discussed during the mission, M & E strategy covers detailed about output/outcome indicator. Semi-annual and annual report must include progress against the output /outcome indicator as mentioned in M & E strategy). This applies for all other major activities under each component.
* Wherever possible, **disaggregate the progress by cluster**
* Also mention **key approach/process/strategy** to accomplish activities and obtain results.
* **Implementation challenges** faced during the reporting period (if any), **mitigation strategies applied**, key lessons learned, and recommendations (if any).
* Also include in brief the **plan for next 6 months** with an estimated timeline for their completion.

*D.2. Component B- Income generation and diversification*

D.2.1 Subcomponent B1: Strengthening Producer Groups (PG)

D.2.2 Subcomponent B2: Building Market Linkages through Productive Alliances

***Same as mentioned under component A.***

**For matching grants**, in addition to the number of matching grants that have been awarded/completed, also include the total cost of the scheme, share of the beneficiaries, amount of funding disbursed till the reporting period, number of beneficiaries disaggregated by gender, areas of matching grants, and other relevant information (top 10 category each for crop/livestock supported by grants).

**Facilitation of productive alliances**: What activities conducted, how did they go and what are the outcomes, including multi stakeholder dialogue platform and other brokerage activities to tie producer groups with other value chain actors.

**Critical market infrastructure establishment:** Progress against the plan, outcomes of the investments (such as X amount of product sold at price of Y).

***Note: Same applies for Crop Production Promotion program under Sub-component A2 and small grants under C2.***

**For multiplier herd**, a tabular information regarding number of female local goats in MH, number of crossbred kids born, average daily growth rate, marketable number (if any), income generated through sale etc. during the reporting period.

*D.3. Component C: Improving Nutrition Security*

Subcomponent C1: Institutional Capacity Strengthening

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

***Same as above.***

D.5. Component D: Project management, communication, and M&E

**Same as above**

***Also include ESMF and Capacity development progress under this component.***

**E. Disbursement update and projection**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| *Category* | | *Allocation of GAFSP Grant/IDA Trust Fund (US$)* | *Disbursement from WB (As of last reporting period) (US$)* | *Disbursement during the reporting period (US$)* | *Total Disbursement as of (…….reporting period) (US$)* | *Balance of GAFSP/IDA Trust Fund (US$)* |
| *No.* | *Name* |  |  |
| *1* | (1) Goods, works, non-consulting services, consultants’ services, training and workshops, and incremental operating cost | 14.82 |  |  |  |  |
| *2* | (2) Matching Grants Subcomponent B2 | 3.5 |  |  |  |  |
| *3* | (3) Small grants Subcomponent C2 | 1.68 |  |  |  |  |
|  | *Total* | *20.00* |  |  |  |  |

Disbursement History

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  |  | | --- | --- | --- | | **S.N.** | **ACTUAL DATE** | **CUMULATIVE AMOUNT IN USD** | |  |  |  | |  |  |  | |  |  |  | |  |  |  | |

In the first Semi-annual report (July-Dec), include disbursement projection for next six months: Q3 (Jan-Mar) and Q4 (April-June)

 In the second semi-annual report, include disbursement projection for next fiscal year: Q1 (July-Sep), Q2 (Oct-Dec), Q3 (Jan-Mar) and Q4 (April-June)

**F. Procurement related activities, progress, issues, etc. (If any)**

**G. Updated Results Framework of the project in the following format**

| **PDO Level Results Indicators** | **Unit** | **Baseline** | **Status** | **YR 1 (Mention reporting period)** | **YR 2**  **(Mention reporting period)** | **YR 3**  **(Mention reporting period)** | **Remarks** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Indicator 1:** Farmers adopting improved agricultural technology CRI(disaggregated by gender) | Number |  | Target | 8000 | 17000 | 23625 |  |
| Actual |  |  |  |
| Of which female | Number |  | Target | 5200 | 11050 | 15356 |  |
| Actual |  |  |  |  |
| Of which male | Number |  | Target | 2800 | 5950 | 8269 |  |
| Actual |  |  |  |  |
| ……….. |  |  |  |  |  |  |  |
| ………….. |  |  |  |  |  |  |  |

-Analyze the results achieved to date, including any trends or patterns that have emerged, and discuss the implications for the project's development objectives, outcomes, and outputs.

**H. Key progress of FAO TA PART**

**I. Lesson Learnt and way forward**

**Annex 4: Reporting Structure for Implementation Status Reports/Mission Report to be submitted to the WB**

**Implementation Support Review Mission Progress Report Format**

**Title Page**

Name of the project: Food and Nutrition Enhancement Security Project II

Implementing Agency: Ministry of Agriculture and Livestock Development

Time Frame: …………..Implementation Support and Review Mission (date….to date…

**Table of Content**

List of Tables

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Abbreviations and acronyms

Summary

**A. Introduction/Project background:** provide a summary including introduction, project development objectives, and project components.

**B. Progress against the timeline agreed at last mission**

**C. Component and subcomponent wise progress**

*C.1. Component A: Climate and Nutrition Smart Agricultural Technology Adaptation and Dissemination*

C.1.1.a Sub- Component A1: Technology Adaptation and Testing-Crop Sector

C.1.1.b. Sub- component A1: Technology Adaptation and Testing-Livestock Sector

C.1.2.a Subcomponent A2: Technology Dissemination and Farmers’ Skill Development- Crop Sector

C.1.2.b Subcomponent A2: Technology Dissemination and Farmers’ Skill Development- Livestock Sector

Under each subcomponent:

* Overview of the component, subcomponent, including its purpose and objectives
* Key progress made (in the following template)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Activities accomplished | Unit | End of Project Target | Progress up to the last reporting period (….ISR) | Progress during the reporting period (Specify period) | Cumulative progress so far | Remarks |
| Inputs/assets distributed…. |  |  |  |  |  |  |
| …. |  |  |  |  |  |  |
| ……….. |  |  |  |  |  |  |
| …. |  |  |  |  |  |  |
| Service provided |  |  |  |  |  |  |
| …… |  |  |  |  |  |  |
| Other… |  |  |  |  |  |  |

* S**hort narrative** for the table. In addition, please mention **evidence-based outputs, outcomes, and impact of the accomplished activities** (During the reporting period, if applicable). Example: in the table above, mention the target and progress of foundation seed distribution. But also include quantity of certified seeds/truthfully labelled seeds produced from the distributed foundation seed, quantity used during the reporting period, quantity stored for the next season etc. ISR report must include progress against the output /outcome indicator as mentioned in M & E strategy, where applicable. This applies for all other major activities under each component.
* Wherever possible, **disaggregation of the progress by cluster**

**Overview of the main topics related to each component and subcomponent that the mission intends to discuss, as outlined in the mission schedule.**

K**ey approach/process/strategies** to accomplish activities and obtain results (no activity specific), at subcomponent level

**Key constraints to improved performance of the project and measures to accelerate implementation and disbursement,**

*C.2. Component B- Income generation and diversification*

C.2.1 Subcomponent B1: Strengthening Producer Groups (PG)

C.2.2 Subcomponent B2: Building Market Linkages through Productive Alliances

***Same as mentioned under component A.***

**For matching grants:** Summary of the grant process, total cost of the MG schemes, share of the beneficiaries, amount of funding disbursed till the reporting period, number of beneficiaries disaggregated by gender, areas of matching grants, and other relevant information (top 10 category each for crop/livestock supported by grants).

**Facilitation of productive alliances**: What activities conducted, how did they go and what are the outcomes, including multi stakeholder dialogue platform and other brokerage activities to tie producer groups with other value chain actors.

**Critical market infrastructure establishment:** Progress against the plan, outcomes of the investments (such as X amount of product sold at price of Y).

***Note: Same applies for Crop Production Promotion program under Sub-component A2 and small grants under C2.***

**For multiplier herd**, a tabular information regarding number of female local goats in MH, number of crossbred kids born, average daily growth rate, marketable number (if any), income generated through sale etc. (in line with the M & E Strategy) during the reporting period.

*C.3. Component C: Improving Nutrition Security*

Subcomponent C1: Institutional Capacity Strengthening

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

***Same as above.***

**C.5. Component D: Project management, communication, and M&E**

**C.5.1 Same as above**

**C.5.2 *Progress related to ESMF***

All aspects of safeguards and fiduciary compliance

**C.5.3 *Progress related to Capacity Development***

**D. Disbursement update and projection**

| *Category* | | *Allocation of GAFSP Grant/IDA Trust Fund (US$)* | *Disbursement from WB (As of last reporting period) (US$)* | *Disbursement during the reporting period (US$)* | *Total Disbursement as of (…….reporting period) (US$)* | *Balance of GAFSP/IDA Trust Fund (US$)* |
| --- | --- | --- | --- | --- | --- | --- |
| *No.* | *Name* |
| *1* | (1) Goods, work, non-consulting services, consultants’ services, training and workshops, and incremental operating cost | 14.82 |  |  |  |  |
| *2* | (2) Matching Grants Subcomponent B2 | 3.5 |  |  |  |  |
| *3* | (3) Small grants Subcomponent C2 | 1.68 |  |  |  |  |
|  | *Total* | *20.00* |  |  |  |  |

Disbursement History

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  |  | | --- | --- | --- | | **S.N.** | **ACTUAL DATE** | **CUMULATIVE AMOUNT IN USD** | |  |  |  | |  |  |  | |  |  |  | |  |  |  | |

**Disbursement projection for the next six months:**

**E. Procurement related activities, progress, issues, etc. (If any)**

**F. Updated Results Framework of the project in the following format**

| **PDO Level Results Indicators** | **Unit** | **Baseline** | **Status** | **YR 1 (Mention reporting period)** | **YR 2**  **(Mention reporting period)** | **YR 3**  **(Mention reporting period)** | **Remarks** |
| --- | --- | --- | --- | --- | --- | --- | --- |
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| Actual |  |  |  |
| Of which female | Number |  | Target | 5200 | 11050 | 15356 |  |
| Actual |  |  |  |  |
| Of which male | Number |  | Target | 2800 | 5950 | 8269 |  |
| Actual |  |  |  |  |
| …………… |  |  |  |  |  |  |  |

-Analyze the results achieved to date, including any trends or patterns that have emerged, and discuss the implications for the project's development objectives, outcomes, and outputs.

**G. Key progress of FAO TA PART**

**H. Lesson Learnt and way forward**

**Annex 5: Reporting Structure for Project Completion Report**

FOOD AND NUTRITION SECURITY ENHANCEMENT PROJECT II

PROJECT COMPLETION REPORT (2023-2027)

Project Fact Sheet

Executive Summary

Table of content

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Abbreviation

1. INTRODUCTION

1.1 Background: Brief about the project and PCR

1.2 Objective of the PCR

1.3 Methodology: This includes the methodology for preparation of the PCR

1.4 Report Structure

2. PROJECT CONTEXT AND PROJECT DEVELOPMENT OBJECTIVE

2.1 Context at Appraisal

2.2 Scope of the Project

2.3 Structure of Project and Summary Description of Components and Subcomponents

2.4 Project Development Objective and Result Framework

3. PROJECT OUTPUT, OUTCOME AND IMPACT

3.1 Relevance of PDOs

3.2 Achievement of the PDOs

* Updated Result Framework

3.3 Key Results of the Project by component and sub-component wise

*3.3.1 Component A: Climate and Nutrition Smart Agricultural Technology Adaptation and Dissemination*

3.3.1.1.a Sub- Component A1: Technology Adaptation and Testing-Crop Sector

3.3.1.1.b. Sub- Component A1: Technology Adaptation and Testing-Livestock Sector

3.3.1.2.a Sub-Component A2: Technology Dissemination and Farmers’ Skill Development- Crop Sector

3.3.1.2.b Sub-Component A2: Technology Dissemination and Farmers’ Skill Development- Livestock Sector

*3.3.2 Component B: Income generation and diversification*

3.3.2.1 Sub-Component B1: Strengthening Producer Groups (PG)

3.3.2.2 Sub-Component B2: Building Market Linkages through Productive Alliances

*3.3.3 Component C: Improving Nutrition Security*

3.3.3.1 Subcomponent C1: Institutional Capacity Strengthening

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

*3.3.4 Component D: Project management, communication, and M&E*

*3.3.5 Environment and Social Management Framework (ESMF)*

*3.3.6 Capacity development*

Under each component and subcomponent, presenting the Key results year wise and cluster wise.

Table: Progress of ………………………(Key intervention)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Cluster | Year 1  (2081-82)  (2024-25) | Year 2  (2082-83)  (2025-26) | Year 3  (2083-84)  (2026-27) | Total Progress |
| Saptari |  |  |  |  |
| Dhanusha |  |  |  |  |
| Gorkha |  |  |  |  |
| Sindhupalchowk |  |  |  |  |
| Total |  |  |  |  |

Also include outputs, outcomes, and impact of the intervention mentioned in the Table with supportive evidence.

*3.3.7 Financial Expenditure and Disbursement*

4. KEY FACTORS THAT INFLUENCED PROJECT IMPLEMENTATION AND OUTCOME

4.1 Key factors during project preparation

4.2 Factors that influenced implementation and outcomes

5. LESSONS AND RECOMMENDATIONS

6. EXIT STRATEGY AND SUSTAINABILITY PLAN

7. BEST PRACTICES AND SUCCESS STORIES

8. PHOTOGRAPHIC LOG

ANNEXES:

ANNEX A: List of Matching Grant Schemes

ANNEX B: List of Small Grant Schemes

ANNEX C: List of Producer Group Receiving Small Irrigation Support

Annex D: List of Promotion Programs

Annex D: List of Critical Infrastructure constructed/rehabilitated

1. *Number of PG members provided with access to improved agricultural technologies = unique count (the same beneficiary receiving more than one type of support is counted as one) participating in on farm demonstration, fields schools, training, and recipient of improved seed/breed support and equipment/asset support* [↑](#footnote-ref-1)
2. S. Khadka and R. K. Adhikari, 2021. Comparative economics of tomato production under poly-house and open field condition in Dhading district of Nepal. Nepalese Journal of Agricultural Sciences, 2021, volume 20. [↑](#footnote-ref-2)
3. *The assessment of meat productivity considers both standing and marketed bucks, whether castrated or uncastrated, that are older than 9 months.*  [↑](#footnote-ref-3)
4. *For further knowledge about FIES, FAO provides an e-learning course on the collection and analysis of data, and on how the information provided by the FIES can be used to inform decisions of policy making, which is available at:* [*https://www.fao.org/in-action/voices-of-the-hungry/using-fies/en/*](https://www.fao.org/in-action/voices-of-the-hungry/using-fies/en/) [↑](#footnote-ref-4)
5. *Ballard, T. J., Kepple, A. W., & Cafiero, C. (2013). The food insecurity experience scale: development of a global standard for monitoring hunger worldwide. (FAO technical paper). Rome, Italy: Food and agriculture Organization of the United Nations.* [↑](#footnote-ref-5)
6. *Cafiero, C., Viviani, S., & Nord, M. (2018). Food security measurement in a global context: The food insecurity experience scale. Measurement, 116, 146–152.* [↑](#footnote-ref-6)
7. *FAO and FHI 360. 2016. Minimum Dietary Diversity for Women: A Guide for Measurement. Rome* [*https://www.fao.org/3/i5486e/i5486e.pdf*](https://www.fao.org/3/i5486e/i5486e.pdf%20)  [↑](#footnote-ref-7)
8. ### *FAO. 2021.*Minimum dietary diversity for women.*An updated guide to measurement - from collection to action. Rome.*[*https://doi.org/10.4060/cb3434en*](https://doi.org/10.4060/cb3434en)

   [↑](#footnote-ref-8)
9. *WHO & UNICEF. (2021). Indicators for assessing infant and young child feeding practices: definitions and measurement methods (pp 34)* [↑](#footnote-ref-9)
10. *WHO & UNICEF. (2021). Indicators for assessing infant and young child feeding practices: definitions and measurement methods.* [*http://www.who.int/publications/i/item/9789240018389*](http://www.who.int/publications/i/item/9789240018389) [↑](#footnote-ref-10)
11. [*https://www.fao.org/climate-smart-agriculture-sourcebook/en*](https://www.fao.org/climate-smart-agriculture-sourcebook/en) [↑](#footnote-ref-11)
12. [*https://www.fao.org/agroecology/home/en/*](https://www.fao.org/agroecology/home/en/) [↑](#footnote-ref-12)
13. *Only count those hectares brought under new or improved/reconstructed irrigation during the reporting year. Include all hectares within the service area of the new or improved/rehabilitated irrigation/drainage system regardless of whether or not theyare under production during the reporting year.* [↑](#footnote-ref-13)
14. *Reporting should only concern the infrastructure for which physical works were fully completed by the time of the reporting. For GAFSP and WB reporting, infrastructure for which physical works have started during the past six months, but are not yet complete, will be reported in the next reporting period (or upon completion).* [↑](#footnote-ref-14)
15. *When using the 24-hour recall method, the interviewer should first determine whether the previous 24-hour period was "usual" or "normal" for the household. If it was a special occasion, such as a funeral or feast, or if most household members were absent, another day should be selected for the interview. If this is not possible, it is recommended that another household be selected, rather than conduct the interview using an earlier day in the week* [↑](#footnote-ref-15)
16. *Swindale, Anne, and Paula Bilinsky (2006). Household Dietary Diversity Score (HDDS) for Measurement of Household Food Access: Indicator Guide (v.2). Washington, D.C.: FHI 360/FANTA.* [*https://www.fantaproject.org/sites/default/files/resources/HDDS\_v2\_Sep06\_0.pdf*](https://www.fantaproject.org/sites/default/files/resources/HDDS_v2_Sep06_0.pdf) [↑](#footnote-ref-16)
17. *Kennedy, G., Ballard, T., & Dop, M. (2011). Guidelines for measuring household and individual dietary diversity. FAO.* [*https://www.fao.org/fileadmin/user\_upload/wa\_workshop/docs/FAO-guidelines-dietary-diversity2011.pdf*](https://www.fao.org/fileadmin/user_upload/wa_workshop/docs/FAO-guidelines-dietary-diversity2011.pdf) [↑](#footnote-ref-17)
18. [↑](#footnote-ref-18)
19. ***Target might vary according to the PIM and annual approved program of PMU/PCUs*** [↑](#footnote-ref-19)
20. *The targets for each year represent the cumulative values up to that specific year.* [↑](#footnote-ref-20)
21. ***Refer GAFSP M & E guidelines for definition and measurement*** [↑](#footnote-ref-21)