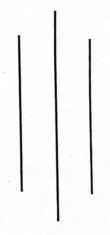




Government of Nepal
Ministry of Agriculture and Livestock Development
Food and Nutrition Security Enhancement Project II (FANSEP II)
Grant No.: TFOC1798

Reference Number: NP-MOALD-438584-CS-QCBS\_BASELINE\_FANSEP2



Terms of Reference (TOR) for Conducting Baseline Survey of FANSEP II





#### 1. INTRODUCTION

Food and Nutrition Security Enhancement Project II (FANSEP II) has received a grant of US \$20 million from the Global Agriculture and Food Security Program (GAFSP) Trust Fund where Government of Nepal contributes US\$ 2 million making total project budget US \$22 million. World Bank (IDA/WB) is the supervising entity for this project. The Ministry of Agriculture and Livestock Development acts as the implementing agency for the project. 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. Climate resilience of the project beneficiaries or their ability to withstand and recover from climatic shocks, particularly droughts and heavy rainfall will be achieved through the application of CSA practices, diversification towards high value and nutritious crops and generation of additional incomes. Nutrition security will be realized through crop and animal productivity, increased household income, improvement in score on food insecurity experience scale and improved dietary intake for pregnant and nursing mothers and children between 6-24 months.

**Project Implementation Area:** The project is implemented in the same eight districts (four in mid-hills and four in Terai) of FANSEP. However, the project is being implemented in the new 16 rural municipalities (two municipalities in each district) of the FANSEP districts, which are affected by floods, earthquakes, food insecurity, malnutrition, poverty, and other challenges. These areas have been severely impacted by the COVID-19 pandemic, supply chain disruptions, and food price inflation. The primary beneficiaries include earthquake and flood-affected communities, those facing acute food insecurity, smallholder farmers, female-headed households, landless workers, and marginalized groups. Project implemented districts and rural municipalities are as below:

Cluster	Province	District	Rural Municipality
Gorkha	Gandaki	Gorkha	Aarughat
			Sahid Lakhan
	Bagmati	Dhading	Siddhalek
			Galchi
Sindhupalchok	Bagmati	Sindhupalchok	Sunkoshi,
			Tirpurasundari
		Dolakha	Melung
			Baiteshwor
Saptari	Madehsh	Saptari	Chhinamasta
			Mahadeva
		Siraha	Nawarajpur
			Laxmipur Patari
Dhanusha	Madhesh	Dhanusha	Bateshwor
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Project beneficiaries. The project will primarily target vulnerable (earthquake-affected, acutely food insecure, disadvantaged, marginalized, and women-headed) households as in FANSEP. The nutrition interventions will mainly target households with young children, adolescent girls, and pregnant and lactating women. The 16 new RMs for FANSEP II have been selected based on the same vulnerability ranking and are either at the same level or close in ranking to the 16 RMs selected for FANSEP. The project will benefit 55,000 new direct beneficiaries from the 16 RMs through scaling-up of best practices from FANSEP. Among the 55,000 project beneficiaries, 38,750 beneficiaries will receive direct interventions from Components A and B through the formation of 1,350 PGs, while the remaining 16,250 beneficiaries will constitute 650 nutrition groups receiving interventions under Component C.

## Project Expected Outcomes (PDO Level Indicators)

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

#### **Project Components**

## Component A: Climate and Nutrition Smart Agriculture Technology Adaptation and Dissemination

This component will focus on promotion of best practices and technologies such as climate resilient crop varieties and livestock breeds, climate-smart technology, and husbandry practices in the 16 new RMs. The interventions under Component A will be delivered through producer groups (PGs) formed under Component B. Two key subcomponents under this component are: 1). Technology adaptation & testing and 2. Technology Dissemination and Farmers' Skill Development.

#### Component B: Income Generation and Diversification

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. This component includes two sub-components, which are: 1). Strengthening producer groups and 2). Building market linkages through productive alliances.

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## **Component C: Improving Nutrition Security**

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 2). Nutrition field school (NFS) and home nutrition gardens (HNGs).

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

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).

#### 2. THE ASSIGNMENT AND ITS OBJECTIVE

As part of monitoring and evaluation, and making the base to measure the progress of Food and Nutrition Security Enhancement Project II, the project intends to hire a consultancy service to conduct a baseline survey for the FANSEP II. The consulting firm will assess the before project status of the project area and beneficiaries on the indicators related to the project development objectives (PDOs) and articulated as project results framework (RF), so that the project's achievement could be tracked and managed appropriately. The baseline survey will follow the standard methodology which will become base for the consecutive evaluations of the FANSEP II and will ensure comparability.

The main objective of the baseline survey is to accurately capture the actual situation of the project beneficiaries for outcome and results indicators just before the implementation of the project. This Terms of Reference is for a consulting firm/consortium ("survey firm") to develop and implement all aspects of a Baseline Survey for the FANSEP II.

Selection process of this baseline survey will follow Quality and Cost Based Selection Method (QCBS) as per the World Bank's Procurement Regulation.

#### 3. SCOPE OF THE CONSULTANCY

The project is focusing its interventions on 16 vulnerable rural municipalities of Nepal, in the hills and Terai, the details are presented under introduction part. The baseline survey will cover all 16 Rural Municipalities (RM) for largest geographical coverage. The sample for this survey will include 5% of the selected project households as a treatment group. Being the total household coverage of 35000 households (HHs), this will account for total of 1750 HHs from all the

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municipalities. There will be additional 750 households in the comparison group totaling the sample size to 2500.

To select those samples, the sampling strategy will be as follows:

- 1) Project will provide the number and precise sample list that are to be surveyed in the baseline by using stratified random sampling method. The list will be proportionately disaggregated according to the number of HHs in different types of groups (according to the value chain commodities) and the rural municipalities to appropriately represent the beneficiaries of the project.
- 2) The project beneficiaries from the producer groups and nutrition groups will be in the treatment group while the non-participant treatment village eligible HHs who are left out and/or who were not interested to be included as beneficiaries in the producer and nutrition groups will be treated as comparison group.

The project can revisit the number of samples and sampling strategy according to the field context of the project. The final list of sample will be provided after the agreement.

The consultancy firm/consortium will be responsible for preparing and programing the survey questionnaire, implementing data collection activities and delivering quality data according to the expectations and protocols, analyzing the data and finally delivering the quality report with issues and recommendations within a timeframe defined by the ToR. The selected consultancy firm/consortium will work under the direct supervision of PMU.

#### 4. DESIGN, QUESTIONNNAIRE, AND TESTING

The consulting firm will be responsible for preparation of questionnaire in English as well as Nepali language, as to capture the indicators mentioned in key output variables sections and others as required. The final questionnaire of the baseline survey has to be approved by the FANSEP II project team to ensure it captures all required information.

Data collection will be through a household survey. An intensive household level survey will be carried out in around 2500 households from the sampling framework of baseline study as stated above. The survey will take between 60 – 90minutes and include sections on household composition, proportion of farmers adopting improved agricultural technologies, crop productivity (rice, wheat, maize, potato and major vegetables), milk and meat productivity, household income (farm & off farm), food security and nutrition status with particular focus to food insecurity experience scale (FIES), dietary intake of pregnant and lactating women and children 6-23 months, to mention important few. The consultancy may propose additional data collection methods as well to triangulate the information from the household survey. Review of appropriate documents from the project as well as project local levels and its documentation would also be required.

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There is a requirement for consultancy firms/consortiums that can undertake electronic data collection for the survey. Consultancy firms that propose electronic data collection must show demonstrated ability in undertaking CAPI surveys. The firm will have to arrange appropriate electronic devices that are needed to carry out the data collection. The successful firm is responsible for ensuring proper equipment for supporting electronic data collection, such as wifi routers, generators, backup batteries, and server for storage of incoming data.

Firms will have to prepare paper-based data collection tools / questionnaires and training manual (see section 7) to have on hand in case of technical problem occur during electronic data collection as a backup plan of enumerators. In case paper-based data collection is necessary to compensate for temporary electronic data collection issues, certain sections of the data (identification variables and yield measurements) for all RMs must be entered from paper into tablet program. Survey entry should use double data entry methodology or any discrepancies in data entry should be manually reviewed.

#### 5. STAFFING & TRAINING

The firm will recruit, hire, and train enumerators, data managers, and supervisors for the successful data collection (see section 9 for competency and targeted numbers):

- 1) The firm will recruit enumerators that have experience in collecting information on households active in agriculture and are familiar with local geography, context, and language.
- 2) The training of all enumerators and supervisors will be organized during a training session of multiple days (5).
- 3) Training should start with briefly explaining the objective of project, the baseline survey and data collection. The training will explain and discuss in detail each section of the questionnaire so that enumerators and supervisors understand the questions and can provide feedback based on their prior experience. It should also explain how enumerators and supervisors should introduce themselves and engage with households and communities along with taking consent to proceed on the survey. The enumerators should also be oriented well to ensure the respondents about the confidentiality of their information received and adherence to it.
- 4) The training should also identify issues in the programmed questionnaire, such as incorrect skip patterns, the use of local, non-standardized units, consistency in wording, appropriateness of potential answers, flow of the questionnaire etc.
- 5) Training should include individual and group exercises for enumerators to become familiar with the practice of asking questions, the electronic collection of information, and filling questionnaires on tablets. This may include in-class demonstrations, where the questionnaire is projected on screen and each interviewer completes the questionnaire as a mock survey.

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- 6) The training should also serverings a screening process for skilled enumerators. Consequently, the Service provider must recruit more enumerators for the training than will be ultimately hired for the Baseline survey. At least 5 enumerators should be included in the training as a reserve.
- 7) Additional criteria to select enumerators are their education, experience, and knowledge of local languages for effective communication with the respondents.
- 8) The consultancy firm will pilot the questionnaire in a selected location.
- 9) Enumerators should go to the field to administer the full questionnaire to a small number of households. The test should not focus on major adjustments to the questionnaire, but rather simulate the administration of the questionnaire under normal circumstances. All field team members must demonstrate that they clearly understand their roles and are correctly following the survey protocols.
- 10) Every enumerator carries out at least two pilot interviews.
- 11) The piloting is to be carried out in a suitable region, similar to the survey region.
- 12) After the piloting, the survey firm will organize a group session with interviewers, supervisors, and data managers to obtain feedback.
- 13) The feedback session serves the main purpose to evaluate enumerators' understanding of the questionnaire and field-test the implementation arrangements of the survey.
- 14) Supervisors should address identified problems, for instance in the programming of the questionnaire.
- 15) The results of the pilot with potential suggestions for questionnaire modifications are to be submitted to the project.
- 16) Following the training, the feedback session should conclude only when the field teams have demonstrated mastery of the designated tasks. Decisions as to which field staff will take part in the data collection must be made on the basis of this evaluation.

#### 6. QUALITY ASSURANCE PLAN

The consultancy firm will develop a quality assurance plan (QAP) that will include measures and procedures to which the service provider will adhere to ensure the highest quality of the data collection. This QAP will include:

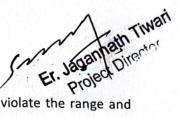
- 1) Protocols for ensuring full adherence to the sample frame, including rules for respondent re-visits or replacements.
- Proposed measures to ensure the high quality of the collected data, which includes but is not limited to
  - a. Questionnaires are programmed with a logical skip pattern.
  - b. Questionnaires allow valid open-ended and "other" textual responses outside of the response options provided in the questionnaire.
  - c. Questionnaire should conduct range and consistency checks as data is entered. Violations of these checks should lead to an immediate and transparent message sent to the enumerator, along with a practical method for correcting key punch

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errors, or over-riding and documenting any answers that violate the range and consistency check rules.

- d. Minimizing enumerator and respondent errors and biases during data collection.
- e. Build logical error checks in the program software.
- f. During the data transfer phase, dates and numbers are reported correctly, missing data are labeled correctly, etc.
- 3) Implementing data quality checks:
  - a. Back-checks (in-person) on a random 10% of surveys by independent back-check team.
  - b. Audio-audits (in-office) on a random 15% of surveys by quality control officers.
  - c. Spot-checks by field supervisors on a rotating basis with each enumerator on his/her team.
  - d. Online Excel file that flags data quality errors to be investigated/corrected by quality control officers and supervisors.
  - e. Protocols for corrective actions to be taken on poorly performing enumerators.
- 4) Setting up a robust system for data storage, backup, management, and sharing.
  - a. The consultancy will be responsible for setting up a server where data is stored and which is linked to the survey software for questionnaire updates.
  - b. A data backup system must be provided. Data must be properly backed up if not submitted to the server upon completion of the interview.
  - c. The server needs to satisfy the data encryption and data security requirements. The data privacy and confidentiality handling should be of highest quality.
- 5) The consultancy firm will ensure end-to-end encryption of collected data and follow the instructions put in place by the project to safeguard personally identifying information.

The quality assurance plan will be shared with the FANSEP-II team at the start of the assignment to agree on a common understanding. As part of the quality assurance plan, the consultancy firm will develop a training manual based on the draft questionnaire. The interviews will be carried out at the interviewees' houses, face-to-face, using electronic devices with the programmed questionnaire, and the GPS coordinates will also be collected. It is the consultancy's responsibility to make proper arrangements with the selected interviewees to agree on a timing to conduct the interview.

It will be critical to keep non-response rates as close to zero as possible. Non-response includes both refusal to participate in the survey and refusal to answer particular questions. Interviewers should be able to achieve a level of comfort with respondents so as to minimize non-response rates for each question. Similarly, measurement error can also be problematic. Therefore, it will be critical to develop a data quality control protocol that allows for consistency and quality checks in the field, concurrent with electronic data collection.

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#### 7. EXPECTED ACTIVITIES

The consultancy firm will be responsible for the baseline survey and required analysis and final report submission. The major duties of the consultancy firm will include:

## Activity 1: Inception activity

Activity 1.1: 1. Develop a work plan, including the human resources, training and transport logistics. The work plan will be submitted to the PMU for approval; the work plan should include a detailed field procedure plan, covering

- The HR plan including the number of enumerators and supervisors that will be trained and eventually retained for actual data collection. This depends on the number of the sample size and the length of the survey instrument.
- A detailed agenda for organizing the training, pilot, and feedback session.
- · Travel and lodging logistics.
- Ensure selected respondents can participate in a follow-up survey as part of the requirements for the construction of a panel dataset (which is particularly important in the control group).

Activity 1.2: Ensure related equipment and other requirements needed for the survey.

- Arrange required electronic devices suitable for data collection
- Acquire all permissions necessary for conducting the survey, including relevant permissions or clearance from municipal and/or local authorities as needed.
- Adhere to local formalities and obtain any required permits related to the survey implementation, as well as survey team health and accident insurance, salary, taxes, and others as necessary.

## Activity 1.3: Preparation of survey tools

- Suggest adaptations to any components that are necessary to accurately capture the intended information on the study populations.
- Generate the paper-based format of the finalized questionnaire and training manual for backup to electronic questionnaire.
- Programming of the finalized questionnaire
- Testing the electronic questionnaire to ensure data quality

## Activity 1.4: Detailed Field Procedure Plan

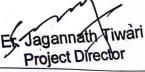
The Field Procedure Plan will detail the following:

- Composition of field teams: number of enumerators, supervisors, editors, quality control officers/data management staff
- Responsibilities of each field team member, with checklists as appropriate.
- Calendar of activities, including the expected time each team will spend in each enumeration area and the order in which enumeration areas will be covered
- Provisions for ensuring data quality, including procedures for addressing data inconsistencies/misreporting when identified

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- Protocol for dealing with and/or replacing households who refuse to participate, are unable to be located, or are otherwise unable to participate in the follow-up survey, and rules for household re-visits and substitution
- Supervision and spot check plans to ensure adherence to data collection protocols
  and confirm quality of data collection and entry, including a minimum of [10%] of revisits to a random sample of the evaluation sample to confirm the validity of the data.
- For electronic data collection, protocols for Computer Assisted Personal Interviewing (CAPI), outlining how data will be stored, validated, backed-up and transmitted to the Project.
- In cases where back-up paper questionnaires are used due to logistic problems with tablets: protocols for Computer Assisted Field Entry (CAFÉ), whereby questionnaires are captured and validated immediately following the paper and pencil survey, and the results transmitted back to the field teams to conduct quality checks as needed.

Action 1.5: Prepare and Submit Inception Report

The inception report should include finalized approach and methodology, sampling frame and size, training schedule, survey tools, field procedure plan, etc.

Activity 2: Recruitment, training, and contracting of experienced field staff

### Activity 2.1: Recruitment and contracting

 Recruitment of qualified enumerators and supervisors, training of all recruited enumerators and supervisors, and selection of strongest enumerators for data collection will have to be ensured by the firm.

Activity 2.2: Training of Supervisors and enumerators (See also section 5)

- Train all enumerators, field supervisors, and data managers on the administration of the questionnaires provided by the project team, in the presence of members of the project team.
- Enumerators should receive a minimum of 5 full days of training to allow sufficient time to understand key agricultural concepts, gain a deep understanding of the questions, and learn how to use the tablet version of the questionnaire (how to enter, erase responses, save, and send data) as well as the logistics of recording completed surveys.
- The training should also serve as a screening process for skilled interviewers and data entry agents, so the survey company must recruit more interviewers and data entry agents for the training than will be ultimately hired for the project and select enumerators at the end of the training using transparent assessment criteria.
- · The following components must be included in training:
  - Theoretical: Training should include a review of the theory of the questionnaire and each question in order to fully understand the objective of each question.
     Standard quantitative interviewing techniques and field protocols should also be covered.

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- O Classroom practice: Training should include individual and group exercises to become familiar with the practice of asking and filling questionnaires. This part of the training may include in class demonstrations, where the questionnaire is projected and one interviewer completes the questionnaire in front of the classroom. The training may also use vignettes, where the company designs case scenarios based on typical households (perhaps those found during the supervisor training or piloting) and have interviewers complete the questionnaire based on the vignette. Finally, the trainees should conduct pilot interviews on the same subject, and have the interviewers fill in a questionnaire for the interview to test consistency across the interviewers.
- o Field practice: After the theoretical and classroom practices, the interviewers should go to the field to administer the full questionnaire to a small number of households (outside the study sample). The pre-test shouldn't focus on major adjustments to the questionnaire, but rather simulate the administration of the questionnaire under normal circumstances. All field team members must demonstrate that they clearly understand their roles and are correctly following survey protocols.
- O Evaluation: Following the training, interviewers, supervisors and data entry clerks should be evaluated based on their understanding of the questionnaire and their ability to correctly record data using the same test scenarios as used in the classroom practice. The training period should conclude only once the field teams have demonstrated mastery of the designated tasks. Decisions as to which field staff will take part in the data collection must be made based on this evaluation.

#### Activity 2.3: Piloting of the questionnaire

Pilot test the translated questionnaires using tablets under real conditions. Monitoring time per question and module for estimation of average time per interview, test consistency checks of electronic form, as well as taking GPS point and testing tablet battery life under field conditions is necessary. Interviews must be conducted with at least 50 households outside of the Baseline survey area and data sent in to test the program and management of data using the server. Submit report on challenges faced during the pilot and suggested revisions to the questionnaire/electronic programming to the research team.

## Activity 3: Finalization and reproduction of all questionnaires and data collection forms

- Questionnaires must be revised after the training and pre-testing and updated in both English and Nepali.
- Identification information should be pre-filled where possible
- Paper questionnaires must be reproduced in high-quality with durable binding

## Activity 4: Implementation of baseline data collection

Field mobilization, data collection, weekly field progress reporting

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- Develop monitoring / information system to track questionnaires completed and replacements.
- Provide weekly reports to project team detailing number of interviews completed, implementation of sampling and replacement strategy, number of questionnaires entered, challenges faced, modifications made to the Field Procedure Plan, and any other notable occurrences.
- Electronic data in server regularly backed-up and compiled by the data manager.
- Summarizing the weekly progress reports and detailing overall response rate.
- Run real-time data quality checking program and report on results.
- Deliver raw data to the project team on a weekly basis.

## **Activity 5: Field Completion Report**

- Provide a final Field Completion Report at the end of the data collection period.
- Deliver final raw data to the project team.

## Activity 6: Analysis of data and sharing of draft report

- The consultancy firm shall analyze the data using standard methods and produce the draft report with appropriate interpretation and discussion.
- Share the draft report with the project team.

## Activity 7: Draft report sharing meeting and getting the feedback/comments

- Organize a sharing meeting with the project team.
- Receive comments/feedbacks and appropriately incorporate the relevant comments/feedbacks in the report.

### **Activity 7: Final Baseline Report**

Submit the final version of the baseline survey report after appropriately addressing all the comments and the feedbacks.

#### 8. DELIVERABLES AND TENTATIVE SCHEDULE OF DELIVERY

SN	Activity/Deliverables	Tentative Completion Date*
1	Inception Report and Quality assurance plan	07 October, 2024
2	Training to Survey Team (enumerators & supervisors)	22 October, 2024
3	Piloting of Questionnaire	22 October, 2024
4	Finalization of tools including electronic questionnaire	24 October, 2024
	Reproduction of final paper-based questionnaire	
5	Field mobilization, data collection, weekly field	18 November, 2024
	progress reporting	
6	Final field completion report	20 November, 2024
7	Analysis of the data and draft report preparation and	30 November, 2024
	submission to the project	
7	Organization of the sharing meeting with the project	01 December, 2024
	and relevant.	
8	Final Baseline Report submission	05 December, 2024







\* The project may change the date according to the context. It will be finalized during agreement.

#### 9. COMPETENCIES REQUIRED

The service provider shall possess the following expertise and required qualifications:

- A thorough understanding and work experience related to designing and implementing quantitative survey at household level, preferably related to agricultural enterprises.
- Legal status recognized by the Government of Nepal enabling the firm to undertake household surveys.
- Required enumerators need to be managed by the service provider (the consultancy).
- Minimum Average Turn Over: 2 Million NPR within best 3 years out of last five years
- Minimum Year of Standing: 3 Years
- Must have proven record of having completed the electronic data collection of large surveys of minimum 500 Samples in different regions of Nepal with rural households
- Must have proven record of using commonly used survey tools (such as KOBO, Survey Solutions, etc.) to program and administer complex household survey both programmatically and conceptually

The proposed team should consist of reasonable number of qualified and experienced professionals having proven track record in designing and implementing socio-economic and baseline studies and/ or evaluation<sup>1</sup> studies and having good depth of understanding of rural development as well as of gender and social inclusion. The bidders are expected to propose a study coordinator/Team Leader and appropriate number of experts, field supervisors, data checkers, enumerators and support staff.

Minimum key professional staff<sup>2</sup> positions (recommended):

■ Team leader (1 No.): Minimum Master's degree in Agriculture<sup>3</sup>, Livelihoods, Nutrition, Management, Social Sciences<sup>4</sup>, Natural sciences or related field. At least five years of relevant experiences in conducting such surveys post minimum qualification, have experience of large quantitative survey (at minimum 500 sample) implementation and analysis, and have experience in household and agricultural studies, analysis, and report

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<sup>&</sup>lt;sup>1</sup> Evaluation studies comprise all the arrays of evaluations from baseline, midline, annual outcome, endline, post monitoring, to impact studies/evaluations/surveys of the socioeconomic and developmental nature. However, this will not include such studies of the engineering structures.

<sup>&</sup>lt;sup>2</sup> The mentioned key professional staffs cannot be changed until and unless the project authorizes it conditional to appropriate and unavoidable reasons.

<sup>&</sup>lt;sup>3</sup> Agriculture denotes all the subjects related to the agriculture and livestock development.

<sup>&</sup>lt;sup>4</sup> Social science includes Sociology, Economics related disciplines, Social studies, Social works, Rural development, and the subjects related to these. However, although being the social sciences, the subjects like History, literature, political science, geography, psychology, etc. are not the eligible disciplines within the social sciences.



writing. He/she should also have Team Leader experience and is able to coordinate teams and ensure timely report submission.

- Team members (Experts; normally 3): The consultant should also propose required number of other experts of complementary abilities covering the field of agriculture, livestock development and nutrition with minimum three years of post-minimum qualification relevant (different types of evaluation) experience. They should have Master degree in the related field.
- Data Manager (1 No): Minimum experience of three years with large survey data sets and data entry software required. Should have at least bachelor's degree qualification.

## Minimum key support staff positions (recommended):

- Field supervisors (2 Nos): Field supervisors should have a bachelor (at the minimum) degree. At least two years' experience in conducting or managing surveys is required.
- Appropriate number of Data checkers: Minimum two years of data checker experience in large (more than 500 samples) and electronic based evaluation studies.
- Survey enumerators (as required, estimate is 32 in Nos.): Minimum qualifications of High-school pass out (10+2 equivalent) and knowledge of local language. High preference should be given to candidates with extensive experiences in quantitative and survey data collection in the project area, on the themes of the questionnaire using the KOBO or any other electronic data collection tools. Preference should be given to the candidates who is familiar with the geography, context, and language of the survey locality.

Signed CV and supporting documents (Academic and others) of the team leader, experts, and data manager needs to be submitted along with the proposal.

The Service Providers (firm) will be selected using **Quality and Cost Based Selection Method** (**QCBS**) in accordance with World Bank's Procurement Regulations for IPF Borrowers, 5th Edition, September 2023.

#### 10. FINANCIAL DETAILS AND PAYMENT TERMS

The Consultancy Firm is expected to start fieldwork on 24 October, 2024 and complete the work by 05 December, 2024. The expected contract start date will be 01 October, 2024 to provide enough time for instrument programming, enumerator training, classroom practice, in-field piloting and other preparation activities. However, the projects reserves the right to change the mentioned dates according the then context. The contract amount covers all costs, including consultant time, travel-related expenses, project administration, procurement of portable power sources, communication capability to submit electronic data to server from the field, use of server for hosting electronic data, and printing of back up paper version of follow-up survey.

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The Consultancy Firm will be considered to have failed to comply with this contract it, based on a random and representative sample, it is determined that either: i) 3% or more of the households that the Firm claims that it could not find are in fact living at the same address, or: ii) it is shown that 1% or more of the surveys that are presented were filled without the Firm having visited the household. The project will use its right to conduct its own checks on 5 to 10% of the interviews (in addition to the proposed check-backs of the survey firm). Considering close by project completion date, the firm is advised to strictly follow the schedule; failing to do so may result in nonpayment of the work. Likewise, if the study deliverables do not meet the Project's/World Bank's requirements in terms of integrity of data, quality of analysis, and organization of the information in the report, the project will reserve the right to request a repetition of the work or the option of not paying for the work done (being reimbursed for any initial payment).

## 11. DOCUMENTS REQUIRED

Expression of Interest (EoI) must be submitted ensuring inclusion of following notarized copies of the documents. The consultant firm should also submit other documents mentioned required in the above sections of this ToR.

- i) Firm registration certificate and firm update letter
- ii) PAN/VAT registration
- iii) Tax clearance certificate of FY 2080/81 (or any other authorized letter of exemption for the period)

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#### 11. ANNEX: KEY OUTPUT VARIABLES

Major indicators that need to be captured during Baseline survey are:

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## PDO 1: Farmers adopting improved agricultural technology (Number) (CRI)

The adoption number is measured as the product of (i) the share of PG members adopting at least one improved technology of the concerned value chain commodity (measured in the sample covered by the household survey) and (ii) the number of PG members surveyed within the value chain commodity.

Adoption rate =  $\frac{\textit{Number of Farmer's adopted at least one improved technologies}}{\textit{Total number of Farmer's Surveyed}} \times 100$ 

## PDO 2: Increased crop and animal productivity by direct beneficiaries (disaggregated by crop and animal species)

### Crop Productivity (ton/ha)

Crop yield is calculated as Production (Mt per hectare). For each crop the amount produced is calculated in tonnes (1 ton = 1,000 KG) per unit of land (hectare).

 $Crop\ Yield = rac{Amount\ of\ crop\ produced\ in\ tonnes}{Total\ area\ of\ crop\ in\ hectares}$ 

PDO: 2.a. Productivity of Crops (Food Grains): Measure improvements in production (Mt.) per ha stating average quantity of production and percentage of increment in unit of production of the major cereals by taking the weightage means of yields for the paddy, maize and wheat. It will be calculated only from the crop group samples.

PDO: 2.b. Productivity of Crops (Vegetables): Measure improvements in production (Mt.) per ha stating average quantity of production and percentage of increment in unit of production of the vegetables promoted by the project (potato, tomato, cauliflower, bitter gourd, cucumber, bottle gourd, sponge gourd, pumpkin, okra, peas and beans, cabbage, radish, carrot, and brinjal). It will be calculated only from the crop group samples.

PDO: 2.c. Productivity of Livestock (Meat): Measure improvements in meat production (kg/animal) stating average quantity of production and percentage of increment in unit of production. Project focuses to measure meat productivity of goat. The value for this indicator needs to be calculated by calculating average live weight of goats (adult doe, adult buck, female hogget and male hogget) regardless of breed and type. The meat productivity will be calculated from the data of goat promotion groups only.

PDO: 2.d. Productivity of Livestock (Milk): Measure improvements in production (Ltr/animal) stating average quantity of milk production and percentage of increment in unit of production. Project focuses to measure milk productivity of cattle and buffalo. The

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value for this indicator will be calculated by 1) calculating average amount of milk produced per milking cow regardless of breed, 2) calculating average amount of milk produced per milking buffalo regardless of breed. 3) And finally calculating the mean value of 1) and 2) giving proportional weight to the production of milk from cow and buffalo. The milk productivity will be computed based on the data from the dairy promotion group.

## PDO 3: Increased household income (farm and off-farm) disaggregated by gender:

Household income is accounted in a production-based approach (i.e., revenue minus cost), and home-produced food that is not sold but consumed at home is valued as income. Therefore, this indicator will be calculated by adding income from all sources of the household, additionally the value of household's self-cultivated and self-consumed crops will be imputed by multiplying the amount of crop produced by average sale price of same crop at household/RM/district levels. The household income should be measured as: Total HH income, HH income of male headed HHs, HH income of female headed HHS. HH income should also be disaggregated into farm income and non-farm income. For crop income and livestock income, costs of production such as cost of inputs, labor, veterinary services need to be subtracted from the total sales revenue of crops and livestock.

$$HH\ income = \frac{1}{n} \sum_{i=1}^{n} Income\ Sources_i$$

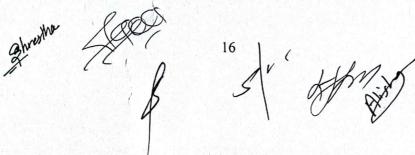
## PDO 4: Reduced food insecurity experience scale score of direct beneficiaries (FIES) (GAFSP Tier 1 Indicator):

This indicator measures the percentage of households that experienced food insecurity at moderate and severe levels during the 12 months prior to data collection. The questions refer to the experiences of the individual respondent or of the respondent's household as a whole.

The FIES indicator based on 12-month recall period is the indicator recommended by FAO and GAFSP M&E guidelines. 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. It is calculated based on the standard set of 8 yes or no questions.

#### PDO 5. Minimum Dietary Diversity for Women (MDD-W) (GAFSP Tier 1 Indicator)

This indicator need to be restricted to women who are currently pregnant or nursing children, as stated in the Results Framework. The outcome variable of Minimum Dietary Diversity (MDD), which takes value of 1 if the woman consumed 5 out of 10 food groups specified by FAO the previous day or night of interview. The indicator is calculated as a share of women that meet MDD in the numerator, divided by total number of pregnant or nursing women in our sample. This is then multiplied by 100 to get the percentage.





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the number of pregnant and nursing women who consumed foods and beverages from at least (≥) five food groups

during the previous day

× 100

MDD(W) =

the total number of pregnant and nursing women surveyed

The 10 food groups are:

- 1. grains, white roots and tubers
- 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

## PDO 6. Minimum Dietary Diversity for Children (MDD-C) Children between 6 and 24 months (GAFSP Tier 1 Indicator):

This indicator is measured as percentage of children 6-23 months of age who consumed foods and beverages from at least five out of eight defined food groups during the previous day.

Numerator: Total number of children 6-23 months of age who consumed foods and beverages from at least five out of eight defined food groups during the previous day. The eight food groups used for tabulation of this indicator are: 1) breast milk; 2) grains, roots, tubers and plantains; 3) pulses (beans, peas, lentils), nuts and seeds; 4) dairy products (milk, infant formula, yogurt, cheese); 5) flesh foods (meat, fish, poultry, organ meats); 6) eggs; 7) vitamin-A rich fruits and vegetables; and 8) other fruits and vegetables.

Denominator: Total number of children 6-23 months of age.

## Key intermediate result indicators to be assessed during Baseline study are:

1. Improved Seed Replacement Rate (SRR): SRR is calculated using the formula

$$SRR = \frac{\text{Area under improved seed}}{\text{total area under crop}} \times 100$$

Area under improved seed is defined as area planted with hybrid or improved seed. Improved seeds are defined as truthfully labelled or certified seeds. Seeds distributed from Government Agency, Agrovet, or purchased from seed cooperative will be considered improved. Area is calculated in hectares in both numerator and denominator. The final indicator is calculated as the average value of SRR across major crops: paddy, maize, and wheat.



### 2. Increased Net farm income:

This indicator measures the net farm income (total revenue-total cost) for beneficiaries receiving matching grants. Data will be gathered from a representative sample of members of the producer groups that are recipients of matching grants by administrating a questionnaire

3. Improved Household Dietary diversity score including nursing mothers and children under two years (1000 day mother target):

This indicator is described as the number of food groups consumed by a 'household' over a given reference period.

The 12 food groups used to calculate the HDDS indicator are: 1) Cereals; 2) Roots & Tubers; 3) Vegetables; 4) Fruits; 5) Meat, Poultry; 6) Eggs; 7) Fish & Seafood; 8) Pulses, legumes, nuts; 9) Milk/milk products; 10) Pils/Fats; 11) Sugar/honey; 12) 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)

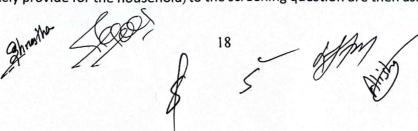
The average household dietary diversity score for the population of study can be calculated as follows:

Sum (HDDS) / Total number of households surveyed

The source of data for the HDDS is based on a recall of food groups consumed by the household in the previous 24 hours, reported by the person primarily responsible for food preparation in the household. He/She would answer on behalf of the entire household. The food group, even if consumed by one person in the household, is considered as consumed. In the baseline, the measurement will come through sample survey among all beneficiary HHs of the project participating in the nutrition group.

#### Additional Indicators to be included in the FANSEP II:

- 1. Increase in cropping intensity for crop sub-group; New: This indicator indicates how intensively a land is being utilized for crop production within a year. This is more important for small and marginal farmers as they have to produce and earn more from the same small piece of land they cultivate. It is measured as a percentage of total area of land they have at their disposal to cultivate (denominator) to the cumulative area of land under different crops in different seasons within a year (Numerator).
- 2. Months of Adequate Household Food Provisioning (MAHFP; for food security; New): It is a proxy measure to assess household food access.: Data for this indicator are collected by first screening out those households that were able to provide for their household food needs throughout the entire year. Those households that respond positively (i.e., were unable to adequately provide for the household) to the screening question are then asked to identify in





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which months (during the past 12 months) they did not have access to sufficient food to meet their household needs. The focus of these questions is the months in which there is limited access to food regardless of the source of the food (i.e., purchase, barter, or production). Although the response options start with the month of January, the respondent is asked to think back over the previous 12 months, starting with the current month. If needed, the interviewer may prompt the respondent to think about last month in order to start the process of recall. These questions should be asked of the person who is responsible for food preparation, or if that person is unavailable, of another adult (e.g. the head of the household). The questions refer to the household as a whole, not any single member of the household. It is administered with a standard set of questions.

3. Food Consumption Score (Already one of the key indicators; has to be elaborated): The FCS is a composite score based on dietary diversity, food frequency, and relative nutritional importance of different food groups. The FCS is the core indicator of consumption recommended by VAM. The frequency weighted diet diversity score or "Food consumption score" is a score calculated using the frequency of consumption of different food groups consumed by a household during the 7 days before the survey. According to the score obtained, the households and the population is categorized into poor or borderline or acceptable level of food consumption based on the specified threshold score.

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