

REQUEST FOR EXPRESSION OF INTEREST (REOI) – MONITORING AND EVALUATION FIRM SELECTION

Country: India

Name of Project: Nanaji Deshmukh Krushi Sanjivani Prakalp (NDKSP) (POCRA-Phase II)

Assignment Title: Consultancy services for Monitoring and Evaluation (M&E) for Nanaji Deshmukh Krishi Sanjivani Prakalp (POCRA-Phase II)

Reference No: IN-MAHAPOCRA-488904-CS-QCBS

SCHEDULE OF REOI

Sr. No	Particulars	Date	Time (Hours)
1	PUBLICATION OF REOI	10.05.2025	11.00AM
2	LAST DATE FOR SUBMISSION OF REOI	28.05.2025	3.00 PM

The Government of India has applied financing from the World Bank towards the cost of the implementation of the Nanaji Deshmukh Krushi Sanjivani Prakalp (NDKSP) PoCRA phase-II project to be implemented by the Department of Agriculture, Govt. of Maharashtra and intends to apply part of the proceeds for the Monitoring and Evaluation firm.

Brief Background: Government of Maharashtra has launched World Bank assisted Nanaji Deshmukh Krushi Sanjivani Prakalp (POCRA-Phase II) .The Project Development Objective (PDO) is „to improve resilience and profitability of small farmers by promoting resource use efficiency and emission-competitive production systems with data-driven decision tools“. This project would attempt transformational changes in the agriculture sector by scaling-up climate-smart technologies and practices at farm and (micro) watershed level that would contribute to drought-proofing and management of lands in states“ most drought affected villages. The Project would focus on smallholders (farmers up to 5 ha of farmland) with particular focus on vulnerable population whose livelihood is impacted by changing climate conditions and climatic uncertainties.

Nanaji Deshmukh Krishi Sanjivani Prakalp (NDKSP) will be implemented in 21 districts of Maharashtra in the 7196 villages covering 888 mini watershed clusters.

Objectives of the Assignment for Monitoring & Evaluation Agency:

The proposed consultancy is expected to assist the PMU in effectively monitoring and evaluating all aspects of the project, for the entire Project period. The Agency will be responsible for implementing the M&E framework for the Project and conducting and overseeing all key evaluation activities.

The objectives of M&E assignment are:

- 1) To help the PMU in measuring and assessing the outputs, outcomes and impacts generated by the Project activity qualitatively and quantitatively over the duration of the Project.
- 2) To assess whether the activities are reaching to the intended beneficiaries and providing recommendation (information) for improving targets as well as service delivery mechanism.
- 3) To promote accountability in allocation and utilization of resources across the Project area and activities so as to keep the activities and Project implementation in the decided mode of participatory and transparent mechanisms.
- 4) To bring out the gaps, if any, in the implementation of activities and components, so that PMU can create strategies and design tools for effective implementation of the same.
- 5) To encapsulate the experiences and contribute to learning, document best practices, and promote policy dialogue.

Duration of the Assignment: 72 months from the contract signing

Expected Start date of Assignment: October 2025

The Project Management Unit (PMU) of NDKSP (PoCRA Phase –II) PMU now invites eligible consulting firms (“Consultants”) to indicate their interest in providing the Services. Interested Consultants should provide information demonstrating that they have the required qualifications and relevant experience to perform the services and should comply all the following qualifying criteria.

Qualifying Criteria:

The minimum qualifying criteria for the selection of a Monitoring and Evaluation Agency is as follows for Lead firm:

1. The firm must have been in existence and actively engaged in business related to the assignment for at least 10 years as of the date of submission of the Expression of Interest (EOI). A copy of the registration certificate must be submitted as proof.
2. The firm should have successfully completed at least five (5) similar assignments in Government or Semi-Government or Multilateral, or Bilateral projects. Documentary evidence such as Work Orders or copies of Contracts must be provided.
3. The firm must have appropriate key personnel, as specified in the Terms of Reference (ToR), available on its payroll. Brief information in academic qualifications, and relevant experience of the key personnel must be provided.
4. The firm should have an average annual turnover of INR 25 Crore or more during the last three financial years. Audited balance sheets for the relevant years must be submitted as evidence.

Note:- Any bidder failing to meet even one of the above qualifying criteria will be disqualified.

Supporting relevant documents regarding fulfilment of eligibility criteria shall be provided. Joint Venture is allowed, if Joint Venture is legally formed before submitting the EOI.

The attention of interested Consultants is drawn to Section III, paragraphs, 3.14, 3.16, and 3.17 of the World Bank's "Procurement Regulations for IPF Borrowers", September 2023. In addition, please refer to the following specific information on conflict of interest related to this assignment "a firm that has been engaged by the borrower to provide consultancy services for preparation or implementation of a project shall be disqualified from subsequently providing Goods, Works, Non-Consultancy Services resulting from, or directly related to those consultancy services".

Consultants may associate with other firms to enhance their qualifications, but should indicate clearly whether the association is in the form of a joint venture and/or a sub- consultancy. In the case of a joint venture, all the partners in the joint venture shall be jointly and severally liable for the entire contract, if selected.

A Consultant will be selected in accordance with the Selection Based on Consultants Quality and Cost-based Selection (QCBS) method set out in the World Bank's Procurement Regulation for IPF Borrowers September 2023.

Further information can be obtained at the address below during office hours [09.45 to 18.15 hours].

Interested Consultant may submit "Expression of Interest" through www.mahatenders.gov.in

Sd/-
Project Director, NDKSP

Address:

Project Director, NDKSP (PoCRA PHASE-II),
30 B, Arcade, World Trade Centre, Cuffee Parade,
Mumbai -400005
Maharashtra, India.

Website: www.mahapocra.gov.in

Tel: 022-221633351

E-mail: procurement.pmu@mahapocra.gov.in

Annexure III – Format of Turnover Certificate

(To be issued in the Letter Head of CA Firm)

This is to certify that the following particular of M/s _____ are true and correct as per the information and explanation provided to us and to the best of our knowledge and belief.

Year	Gross Turnover	Turnover from Audit Activities
2021-2022		
2022-2023		
2023-2024		
Total		
Average		

Place:

Date:

Signature

Name and Regn No. of Firm

Name and Membership No. member certifying

ToR

Monitoring and Evaluation (M&E) for Nanaji Deshmukh Krishi Sanjivani Prakalp (Project)

1. Background:

Agriculture is the primary source of livelihood in the State of Maharashtra. The state has 17.4 million ha of land under cultivation. About 84% of the total area under agriculture is rainfed and is directly dependent on the monsoon. The proportion of irrigated area in the State is around 16%, whereas this is about 38% for the country (RKVY Plan). About 49% of landholdings fall in less than one-hectare „marginal“ category (Agriculture Census, 2011).

Agriculture and allied activities, one of the prime sectors of the economy, accounts for on an average 12.1 per cent share in the Gross State Value Added. More than half of the rural population in the State is dependent on agriculture and allied activities sector for their livelihood. One-third area of the State falls under rain-shadow region, where rains are scanty and erratic. The net sown area is about 54 per cent of the total geographical area of the State. (Economic survey of Maharashtra 2022-2023)

This project would attempt transformational changes in the agriculture sector by scaling-up climate-smart technologies and practices at farm and (micro) watershed level that would contribute to drought-proofing and management of lands in states“ most drought affected villages. The Project would focus on smallholders (farmers up to 5 ha of farmland) with particular focus on vulnerable population whose livelihood is impacted by changing climate conditions and climatic uncertainties.

Nanaji Deshmukh Krishi Sanjivani Prakalp (NDKSP) will be implemented in 21 districts of Maharashtra. The Project on Climate Resilient Agriculture will be implemented in the 21 districts covering 7196 villages covering 888 mini watershed clusters. The Government of Maharashtra, in partnership with the World Bank, will lead the implementation of the project over the next six years (2025-26 to 2030-31). The project will be implemented through the Department of Agriculture, Government of Maharashtra. Further details about the project area available at <https://mahapocra.gov.in/>

The project is being implemented in 21 districts in Maharashtra namely, Chhatrapati Sambhaji Nagar, Jalna, Dharashiv, Beed, Parbhani, Hingoli, Latur, Nanded, Nashik, Jalgaon, Buldana, Washim, Akola, Amravati, Yavatmal, Wardha, Chandrapur, Gondia, Nagpur, Gadchiroli and Bhandara

2. Project Development Objective(s):

The Project Development Objective (PDO) is **“to improve resilience and profitability of smallholder farmers across selected districts in Maharashtra”**.

Key Results- Proposed PDO level Indicators are as follows:

- Beneficiaries with enhanced resilience to climate risks: CRI (Number) By Gender
- Enhanced Farm Income: Increase in Farm Income at Household level (by Gender) (%)
- Increase in water use efficiency (percentage)
- People using digitally-enabled services (CRI)

Innovations for resilience: In the context of the project development objective (PDO), the NDKSP Phase II proposes to position Maharashtra in a leadership role to address the emerging climate context and climate change impact. To transform agriculture into a resilient productive system for smallholder farmers, there is a need to promote efficiency of both natural and external resources for strengthening ecosystem resilience leading to emission- competitive and profitable production systems. Emissions competitiveness refers to net GHG emission reduction due to improved packages of practices in pilots relative to similar cropping systems under conventional practices. Intervention design will be informed by creation of a data-driven Decision Support System.

Aligned to the GoM Vision 2030 and MSAPCC, the NDKSP Phase II aims to support the GoM’s priority to transform agriculture into a productive system for smallholder farmers through science- and data-based interventions for improving the efficiency of natural resources and external inputs. The project would both build upon the successful proof of concept demonstrated by the NDKSP and scale up the outcomes by expanding coverage to nearly 20 percent of the state. Building on the NDKSP’s achievements particularly its cutting-edge digital agriculture platform and robust implementation framework, the Project’s second phase aims to leverage these foundations to provide customized on-farm technical services. These services, tested and improved by a consortium of experts, are intended to reduce input costs to boost farmers’ income, and integrate climate resilience into routine agricultural practices. The project will follow precision farming with special emphasis on reduction of cost of cultivation so that farmers’ witness increased profitability.

Project Components

The Village Adaptation Plans give an account of the constraints faced by the farming communities, and also the ways suggested by them to cope with the situations. Based on the experience and expectations of the farming community, the recommendations by the researchers, and the determined commitments by the Governments, this project is conceptualized around four key components, each addressing a critical dimension of sustainability and resilience in agricultural systems.

3. Project Components

Component A: Resource Efficient Productivity Enhancement

The first component emphasizes optimizing the use of natural resources in agricultural production systems, ensuring sustainability and minimizing ecological footprints.

Component B: Precision Agriculture for Emission Management

This component focuses on integrating precision farming technologies to monitor and manage agricultural emissions effectively, contributing to climate mitigation.

Component C: Improving and building Income Resilience

The third component is centred on strategies to improve the economic resilience of farmers, safeguarding livelihoods against climate-induced uncertainties.

Component D: Project Management and Institutional Strengthening

The last component underlines the importance of strengthening institutional capacities and fostering innovations to support the transition to climate-resilient agriculture.

Together, these four components provide a comprehensive framework to address the challenges of climate-resilient agriculture, ensuring environmental sustainability, economic stability, and institutional adaptability.

In the context of PDO and climate change impact, project will support to transform agriculture into a resilient productive system for smallholder farmers, through promoting efficiency of both natural and external resources for strengthening ecosystem resilience leading to emission competitive and profitable production system.

4. Monitoring & Evaluation for Project:

The key building blocks of the M&E system will comprise of: (a) Preparation of the Results Framework for the Project including Result Framework Indicators; (b) Carry out baseline survey for sampled clusters and prepare a report ; (c) Carry out Half-yearly concurrent monitoring activities and prepare a consolidated report ; (d) Conduct Mid-term assessment and submit report (e) Conduct End-term Impact Assessment Surveys and provide report, (f) Prepare End term Environment and Social Management Framework (ESMF).

To achieve the above-mentioned Project Development Objectives, the key approach is to have independent Monitoring and Evaluation agency under the project. The agency is expected to use the MIS and GIS products developed by the project for monitoring and evaluation purpose

The PMU proposes to engage a M&E agency for the entire project region. The number of districts and villages covered under the project for total project area:

Region	No. of Districts	No. of Villages
Project	21	7196

5. Objectives of the Assignment:

The purpose of M & E consultancy is to effectively monitor project progress and achievement, and to analyse prevailing baseline conditions with statistical data and information related to technical, socio- economic, agricultural, environmental, institutional, and related areas relevant to the Project. It will provide mid-term and end-of-project evaluations with sufficient data and information to assess the project's success. The M&E Consultant will be responsible for monitoring Project progress, Project impact, and achievement of the Project Development Objectives (PDO) and Intermediate Result Indicators, and will establish the M&E System based on a review of M&E needs and establish necessary practical procedures and measures in order to operationalize M&E (data collection and processing). The M&E system will be based on the agreed PDO indicators and annual performance targets presented in the Results Framework. It will fetch / generate data and information from various sources- - Project MIS, conducting periodic surveys, official records, secondary sources & undertake remote sensing analysis, and analyse them for progress review and assist the Project Director SPMU on regular basis. It will also provide necessary data and information to the World Bank Review Missions from time to time.

The M& E consultant will work in close coordination with the PMU and report to the Client/World Bank, in a manner that the assigned tasks specified are delivered on time . The consultant will also be flexible in generating additional information/analysis/studies as per the requirements which could emerge in course of experiences to be gained and likely issues to be flagged during periodic review of progress monitoring. The proposed consultancy is expected to assist the PMU in effectively monitoring and evaluating all aspects of the project, for the entire Project period. The Agency will be responsible for implementing the M&E framework for the Project and conducting and overseeing all key evaluation activities.

The objectives of M&E assignment are:

1. To help the PMU in measuring and assessing the outputs, outcomes and impacts generated by the Project activity qualitatively and quantitatively over the duration of the Project.
2. To assess whether the activities are reaching to the intended beneficiaries and providing recommendation (information) for improving targets as well as service delivery mechanism.
3. To promote accountability in allocation and utilization of resources across the Project area and activities so as to keep the activities and Project implementation in the decided mode of participatory and transparent mechanisms.
4. To bring out the gaps, if any, in the implementation of activities and components, so that PMU can create strategies and design tools for effective implementation of the same.
5. To encapsulate the experiences and contribute to learning, document best practices, and promote policy dialogue.

6. Status of compliance / achievements regarding the Procurement Performance Indicators as shown in Annex-.

6. Scope of services:

The agency will work in close coordination with PMU under the supervision and guidance of the Project Director for the attainment of project's goal. They will serve as the main focal point for all monitoring and evaluation related activities for the project, and will assist and report to the Project Director (PD) regarding the monitoring and evaluation of project implementation.

The consultant will also be flexible in generating additional information/analysis/studies as per the requirements which could emerge in course of experiences to be gained and likely issues to be flagged during periodic review of progress monitoring.

The M&E Agency's responsibility will be to prepare an MIS ,carry out monitoring and evaluation of all the project activities such that it creates insights on output and outcome indicators suggested within the Results Framework of the project as well as carrying out an impact assessment.

At present, PMU has estimated the requirement of sample size for Baseline, Concurrent Monitoring, Mid-term Impact Assessment and Final Impact Assessment, the details of which are given in section 8.1. However, the exact villages in the sample for every survey, the survey tools and methodology will be finalized by the agency for every M&E intervention after consultation with the PMU. The Agency, as part of their proposal, will submit an initial inception report and implementation strategy for review, covering the details with timelines for each of the activities described below.

Baseline Survey: The M&E Agency will carry out a Baseline Survey to record the data values of relevant variables at the start of the intervention in treatment and control sample areas. Particular attention will have to be paid to building the relevant list of variables including those mentioned in the Results Framework as well as Environment and Social Management Framework (ESMF).

Mid Term Assessment: The Mid-term Assessment will focus on informing the project on implementation processes, progress, and recommend adjustments in the project design and/or implementation arrangements to overcome identified bottlenecks. The assessment will also include socio-economic and environmental impacts of the project. Mid-term assessment will include primary survey data and MIS.

End Term Assessment: End term assessment will focus on understanding the outcomes of project interventions and effect of the same on the target population. It is expected that the End-term assessment will compare the value of relevant variables with the baseline values. Where feasible, the impact assessment will use panel data i.e. using data from three rounds of surveys (baseline, mid-term, and end-term) with counterfactual (control). This assessment will also undertake analysis of issues relating to sustainability of project outcomes and impacts.

Concurrent Monitoring: Field level process implementation will be independently monitored by identified external M&E agency. The review of the Agency will focus on understanding the critical processes as well as the progress of performance indicators. Field visits will also include random verification of the information of progress reports and MIS generated by the project during the project cycle. The six-monthly concurrent monitoring reports data prepared by M&E agency with a half yearly cycle (including sample and control areas) will be used to understand overall progress.

Environment and Social Management Framework (ESMF): The environmental and social impacts of the Project need to be assessed towards the end of the Project intervention. This will be done in accordance with the Environment and Social Management Framework detailed in the PIP and ESMF manual.

7. Duration of the Assignment

The duration of the assignment shall be for 6-year covering entire project period subject to the satisfactory outcome of performance review at the end of first year and every second year thereafter. In case of unsatisfactory performance, the project will have the discretion to terminate the contract.

8. Key Responsibilities & Deliverables

The key responsibilities of the M&E agency will be to formulate the following:

i. Baseline Survey:

For the baseline survey the M&E Agency will be expected to complete the following:

- a. Prepare a concept note: This note will serve as the inception report whereby the agency will capture details on study methodologies, sampling, survey protocols, timeline, key variables, analysis plan, data quality checks and processes, schedule of training the investigators for the field survey and the selection criteria of the field team etc. among others.
- b. Design survey instrument and digitize (CAPI): Detailed questionnaires will be designed to ensure all key variables are captured for Individual and farmers groups as per the RF indicators and KPIs Digitized questionnaire Apps in the Marathi to be administered on HHDs enabled with GPS systems for the baseline survey will be submitted along with the concept note.
- c. Pilot the instruments: consultant should conduct the pilot testing of the questionnaires.
- d. Design a data quality check protocol: Back check and HFC.
- e. Training enumerators: training plan and materials to be submitted to the PMU.
- f. Survey: Primary baseline surveys to be completed in the 888 villages (treatment and control), and the surveys to be followed by 10% backchecks. Acceptable error rate – 5%
- g. Regular survey quality monitoring protocol: M&E agency to conduct daily High Frequency Checks and provide weekly reports to the PMU.
- h. The final list of villages and beneficiaries as well as variables will be chosen for the upcoming assessment in consultation with the PMU.
- i. The Agency will create a system of information (live survey dashboards or portals) so that the PMU has an exact view of all process aspects of the survey (how much of the survey is completed, in which areas is it on-going, where it will be undertaken over next 3 days, etc.) as well as of the data being collected and uploaded in the Baseline database at weekly intervals.
- j. The M&E Agency will undertake the Baseline Survey in accordance with the sampling considerations defined in Section 8.1.
- k. The M&E Agency will respond to any query on the survey process, survey quality issues, data collection methods, quality of information systems or data quality issues raised by the PMU during or after the Baseline Survey

- l. The M&E Agency will initiate immediate corrective mechanisms in any aspect of the survey if so, indicated by the PMU.
- m. Develop jointly data transmission and storage protocols for sharing with PMU.
- n. Clean, process and analyze the data set using STATA, E-views etc. statistical analysis software.
- o. Prepare baseline report with descriptive statistics and prove that variables representing pre intervention outcomes, determinants of outcomes and program participation are balanced between control and treatment units to prove that the control units are a valid counterfactual.
- p. Make a presentation to PMU and WB.

ii. Mid-term Evaluation:

The Mid-Term Evaluation will be carried out after the third year of implementation of the Project. The Mid-term Assessment will focus on informing the project on implementation processes, progress, and recommend adjustments in the project design and/or implementation arrangements to overcome identified bottlenecks. The assessment will also include socio-economic and environmental impacts of the project. Mid-term assessment will include primary survey data and MIS. Apart from creating data-based insights on the progress of the Project, the Mid-term Evaluation will also necessarily create:

- (a) A detailed evaluation of Project activities;
- (b) Mid-term Impact Assessment reports for every component and sub-component of the Project;
- (c) Suggestions for modifications in the design or implementation, if any;
- (d) Suggestions of relevant or emerging research themes for further studies under the aegis of Project and
- (e) Identification of policy gaps which need to be addressed so that the Project impact could be enhanced over the remaining duration of the Project and even after the intervention is completed.

For the mid-term evaluation the M&E Agency will be expected to complete the following:

- a. Prepare a concept note: This note will serve as the inception report whereby the agency will capture details on study methodologies, sampling, survey protocols, timeline, key variables, analysis plan, data quality checks and processes, schedule of training the investigators for the field survey and the selection criteria of the field team etc. among others.
- b. Design survey instrument and digitize (CAPI): Detailed questionnaires will be designed to ensure all key variables are captured for Individual and farmers groups as per the RF indicators and KPIs Digitized questionnaire Apps in the Marathi to be administered on HHDs enabled with GPS systems for the baseline survey will be submitted along with the concept note.
- c. Pilot the instruments: consultant should conduct the pilot testing of the questionnaires.
- d. Design a data quality check protocol: Back check and HFC.
- e. Training enumerators: training plan and materials to be submitted to the PMU.
- f. Survey: Primary Mid - Term surveys to be completed in the 888 villages (treatment and control), and the surveys to be followed by 10% backchecks. Acceptable error rate – 5%
- g. Regular survey quality monitoring protocol: M&E agency to conduct daily High Frequency Checks and provide weekly reports to the PMU.
- h. The final list of villages and beneficiaries as well as variables will be chosen for the upcoming assessment in consultation with the PMU.
- i. The Agency will create a system of information (live survey dashboards or portals) so that the PMU has an exact view of all process aspects of the survey (how much of the survey is completed, in which areas is it on-going, where it will be undertaken over next 3 days, etc.) as

- well as of the data being collected and uploaded in the Mid- Term database at weekly intervals.
- j. The M&E Agency will undertake the mid-term Survey in accordance with the sampling (quantitative and qualitative) considerations defined in Section 8.1.
 - k. The M&E Agency will respond to any query on the survey process, survey quality issues, data collection methods, quality of information systems or data quality issues raised by the PMU during or after the Baseline Survey
 - l. The M&E Agency will initiate immediate corrective mechanisms in any aspect of the survey if so, indicated by the PMU.
 - m. Develop jointly data transmission and storage protocols for sharing with PMU.
 - n. Clean, process and analyze the data set using STATA, E-views etc. statistical analysis software.
 - o. Apart from tracking the physical outputs and socio-economic outcomes of Project interventions, the M&E Agency will also use a “Participatory Approach”. Thus, the M&E Agency will necessarily obtain feedback from stakeholders on whether they are realizing the intended benefits of the components.
 - p. The Mid Term Impact Evaluation will bring out the values of the RFID variables clearly. It shall also bring out the values of the indicators as suggested in the Environment and Social Management Framework (ESMF) of the Project Implementation Plan of project clearly.
 - q. The M&E Agency shall bring out the impact of the project on the marginalized sections of the society as well as small holders. It shall also look at the project implementation from the point of view of social and environmental sustainability.
 - r. Prepare a report and make a presentation to PMU and WB.

iii. End-term Impact Evaluation:

The End-Term Evaluation will be carried out in the final year of project intervention. The basic frame used to capture data on relevant variables in the End-Term Evaluation will be the same as the one used in the Mid-term Evaluation. The M&E Agency will be responsible for creating progress and impact reports for every component, sub-component and activity under the End-term evaluation.

The End-term Evaluation will necessarily create:

- (a) A detailed evaluation of all Project activities;
- (b) End-term Impact Assessment reports for every component and sub-component of the Project;
- (c) An overall Impact Assessment and sustainability of the project as a whole;
- (d) Suggestions of relevant or emerging research themes for further studies
- (e) Identification of policy gaps which need to be addressed so that the project impact could be enhanced after the intervention is completed
- (f) Identification of new policies to be created by the Government of India as well as Government of Maharashtra to enhance the impacts of project.

For the End-term evaluation the M&E Agency will be expected to complete the following:

- a. Prepare a concept note: This note will serve as the inception report whereby the agency will capture details on study methodologies, sampling, survey protocols, timeline, key variables,

analysis plan, data quality checks and processes, schedule of training the investigators for the field survey and the selection criteria of the field team etc. among others.

- b. Design survey instrument and digitize (CAPI): Detailed questionnaires will be designed to ensure all key variables are captured for Individual and farmers groups as per the RF indicators project interventions, theory of change and KPIs. Digitized questionnaire Apps in the Marathi to be administered on HHDs enabled with GPS systems for the baseline survey will be submitted along with the concept note.
- c. Pilot the instruments: consultant should conduct the pilot testing of the questionnaires.
- d. Design a data quality check protocol: Back check and HFC.
- e. Training enumerators: training plan and materials to be submitted to the PMU.
- f. Survey: Primary End Term surveys to be completed in the 888 villages (treatment and control), and the surveys to be followed by 10% backchecks. Acceptable error rate – 5%
- g. Regular survey quality monitoring protocol: M&E agency to conduct daily High Frequency Checks and provide weekly reports to the PMU.
- h. The final list of villages and beneficiaries as well as variables will be chosen for the upcoming assessment in consultation with the PMU.
- i. The Agency will create a system of information (live survey dashboards or portals) so that the PMU has an exact view of all process aspects of the survey (how much of the survey is completed, in which areas is it on-going, where it will be undertaken over next 3 days, etc.) as well as of the data being collected and uploaded in the end term survey database at weekly intervals.
- j. The M&E Agency will undertake the end-term survey in accordance with the sampling (quantitative and qualitative) considerations defined in Section 8.1.
- k. The M&E Agency will respond to any query on the survey process, survey quality issues, data collection methods, quality of information systems or data quality issues raised by the PMU during or after the Baseline Survey
- l. The M&E Agency will initiate immediate corrective mechanisms in any aspect of the survey if so, indicated by the PMU.
- m. Develop jointly data transmission and storage protocols for sharing with PMU.
- n. Clean, process and analyze the data set using STATA, E-views etc. statistical analysis software.
- o. The End Term Impact Evaluation will bring out clearly the values of the RFID indicators as well as the variables as suggested in the Environment and Social Management Framework of the Project Implementation Plan of project.
- p. The End Term Impact Evaluation will cover the financial and economic analysis of the project.
- q. The M&E Agency shall bring out the impact of the project on the marginalized sections of the society as well as small holders. It shall also look at the project implementation from the point of view of social and environmental sustainability.
- r. Prepare a report and make a presentation to PMU and WB.

iv. Concurrent progress monitoring:

It is the responsibility of the M&E Agency to carry out Concurrent Progress Monitoring at half-yearly intervals. The Concurrent Progress Monitoring focuses on process monitoring for all components and sub-components of project. The concurrent monitoring will also look into the compliance with ESMF framework. In every alternate Concurrent Progress Monitoring i.e. once

a year, it is expected that the values of the RFID indicators will be brought out clearly. The success stories of the project activities will be captured in the Concurrent Progress Monitoring report. It is expected to bring out themes for new areas of research, if any, on different issues in the project area.

In each of the eleven rounds the following will be done:

- a. Prepare a concept note: This note will serve as the inception report whereby the agency will capture details on study methodologies, sampling, survey protocols, timeline, key variables, analysis plan, data quality checks and processes, schedule of training the investigators for the field survey and the selection criteria of the field team etc. among others.
- b. Design survey instrument and digitize (CAPI): Detailed questionnaires will be designed to ensure all key variables are captured for Individual, Farmers Groups, and SHGs (project beneficiaries) as per the RF indicators, project interventions, theory of change and KPIs. Digitized questionnaire Apps in the Marathi to be administered on HHDs enabled with GPS systems for the baseline survey will be submitted along with the concept note.
- c. Pilot the instruments: consultant should conduct the pilot testing of the questionnaires.
- d. Design a data quality check protocol: Back check and HFC.
- e. Training enumerators: training plan and materials to be submitted to the PMU.
- f. Survey: Primary concurrent monitoring surveys to be completed in the 888 villages (treatment and control), and the surveys to be followed by 10% backchecks. Acceptable error rate – 5%
- g. Regular survey quality monitoring protocol: M&E agency to conduct daily High Frequency Checks and provide weekly reports to the PMU.
- h. The final list of villages and beneficiaries as well as variables will be chosen for the upcoming assessment in consultation with the PMU.
- i. The Agency will create a system of information (live survey dashboards or portals) so that the PMU has an exact view of all process aspects of the survey (how much of the survey is completed, in which areas is it on-going, where it will be undertaken over next 3 days, etc.) as well as of the data being collected and uploaded in the concurrent survey database at weekly intervals.
- j. The M&E Agency will undertake during each concurrent monitoring round in accordance with the sampling (quantitative and qualitative) considerations defined in Section 8.1.
- k. The M&E Agency will respond to any query on the survey process, survey quality issues, data collection methods, quality of information systems or data quality issues raised by the PMU during or after the Baseline Survey
- l. The M&E Agency will initiate immediate corrective mechanisms in any aspect of the survey if so, indicated by the PMU.
- m. Develop jointly data transmission and storage protocols for sharing with PMU.
- n. Clean, process and analyze the data set using STATA, E-views etc. statistical analysis software.
- o. The concurrent monitoring round will bring out clearly the values of the Key Performance Indicators (KPIs) as well as the variables as suggested in the Environment and Social Management Framework of the Project Implementation Plan of project.
- p. The qualitative interviews with farmers, GKVS, FPCs, SHGs, Krishi Tai"s and project functionaries to understand the reasons for high and low demand for project interventions, issues and solutions in project implementation etc. Accordingly present actionable recommendations for the project to consider. (See Table 8.1.3)
- q. Prepare a report and make a presentation to PMU and WB.

v. Environment and Social Management Framework (ESMF)

The External M&E agency will undertake a final assessment regarding the compliance of Environment and Social Management Framework (ESMF) of the Project.

8.1. Sampling Design and Considerations for M&E

Nanaji Deshmukh Krishi Sanjivani Prakalp (NDKSP) will be implemented in 21 districts of Maharashtra. The Project on Climate Resilient Agriculture will be implemented in the 21 districts covering about 7196 villages covering 888 mini watershed clusters. The PMU will

share secondary data on the villages as collected from Census, Agriculture Census and Socio-Economic Caste Census with the M&E Agency. The PMU will also share Remote-Sensing Imagery maps on the Project area with the M&E agency.

This section details the sampling designs for the M&E Agency.

8.1.1 Sampling design and considerations (Household Level)

A. Baseline Survey:

The Baseline Survey for the Project shall be conducted in 296 clusters, the spread of which has been given in the table below.

Table 8.1.1: District-wise Population and Sample of Watershed Clusters

Sr. No	District	No. of Taluka	No. of project Clusters	Total Number project Villages	No. of clusters to be sampled
1	Akola	7	20	149	7
2	Amravati	13	50	454	17
3	Bhandara	7	25	291	8
4	Bid	11	48	396	16
5	Buldana	13	45	310	15
6	Ch.Sambhajinagar	9	46	297	15
7	Chandrapur	15	55	561	18
8	Dharashiv	8	32	138	11
9	Gadchiroli	12	66	532	22
10	Gondiya	8	23	293	8
11	Hingoli	5	17	148	6
12	Jalgaon	15	51	319	17
13	Jalna	8	24	176	8
14	Latur	10	31	216	10
15	Nagpur	13	73	563	24
16	Nanded	16	41	375	14
17	Nashik	15	91	674	30
18	Parbhani	9	25	173	8
19	Wardha	8	45	383	15

20	Washim	6	27	189	9
21	Yavatmal	16	53	559	18
	Total	224	888	7196	296

The mini watershed clusters in any district need to be so chosen by the Agency for the Baseline that they are spread across talukas in that district. Talukas should preferably be non- adjacent. Choice of talukas should reflect bio-physical and socio-economic diversity.

The Baseline will be conducted in 2 villages in every selected mini watershed cluster i.e. the Baseline will cover a total of **592** treatment villages in Project area. The ratio of treatment to control villages will stand at 2:1. Thus, the M&E Agency will choose total **296** villages as a control group. The control villages should also be chosen as far as possible from the same taluka in which the Baseline is being conducted. The chosen control villages should necessarily be similar to the Project villages in terms of their bio-physical characteristics (water vulnerability, water resources, agro-climatic zone, major crops, soil characteristics, etc.) as well as in terms of their socio-economic characteristics (income levels, poverty ratio, gender ratio, literacy, etc.) The strategy of choosing the control villages as well as the final list of control villages will be decided in consultation with the PMU prior to the Baseline.

The M&E Agency will survey Sixteen households per village in order to identify the Baseline values of the relevant variables under different components. Where, village level values are to be identified, the Agency may interview members of the GKVS.

The number of clusters and number of treatment and control villages to be covered in each district are given in the table below.

Table 8.1.2: District-wise no. of villages in sample for treatment and control, total number of villages and households to be surveyed.

Sr. No	District	No. of Taluka	No. of project Clusters	No. of clusters to be sampled	Total Number project Villages	Treatment villages to be sampled (2 per Cluster)	Control Villages to be sampled (1 per Cluster)	Total Villages to be surveyed	Total HH to be surveyed 16 per village
1	Akola	7	20	7	149	13	7	20	320
2	Amravati	13	50	17	454	33	17	50	800
3	Bhandara	7	25	8	291	17	8	25	400
4	Bid	11	48	16	396	32	16	48	768
5	Buldana	13	45	15	310	30	15	45	720
6	Ch.Sambhajinagar	9	46	15	297	31	15	46	736
7	Chandrapur	15	55	18	561	37	18	55	880

8	Dharashiv	8	32	11	138	21	11	32	512
9	Gadchiroli	12	66	22	532	44	22	66	1056
10	Gondiya	8	23	8	293	15	8	23	368
11	Hingoli	5	17	6	148	11	6	17	272
12	Jalgaon	15	51	17	319	34	17	51	816
13	Jalna	8	24	8	176	16	8	24	384
14	Latur	10	31	10	216	21	10	31	496
15	Nagpur	13	73	24	563	49	24	73	1168
16	Nanded	16	41	14	375	27	14	41	656
17	Nashik	15	91	30	674	61	30	91	1456
18	Parbhani	9	25	8	173	17	8	25	400
19	Wardha	8	45	15	383	30	15	45	720
20	Washim	6	27	9	189	18	9	27	432
21	Yavatmal	16	53	18	559	35	18	53	848
	Total	224	888	296	7196	592	296	888	14208

B. Mid-term Evaluation

The Mid-term Evaluation will also be conducted in total **296** project clusters (See Table 8.1.2 for details), out of which **148** clusters and the villages chosen therein will be the same as the Baseline clusters and villages sampled therein. The strategy for choosing the other **148** clusters and the final choice of clusters and villages also will be fixed prior to the Mid-term Evaluation in consultation with the PMU. The Mid-term Evaluation will be carried out in 2 villages per mini watershed cluster, i.e. it will be carried out in **592** project villages.

The ratio of treatment to control villages will stand at 2:1. Thus, the M&E Agency will choose total **296** villages as a control group. The control villages should also be chosen, as far as possible, from each taluka in which the Mid-term is being conducted. The control villages should necessarily be similar to the Project villages in terms of their bio-physical characteristics (water vulnerability, water resources, agro-climatic zone, major crops, soil characteristics, etc.) as well as in terms of their socio-economic characteristics (income levels, poverty ratio, gender ratio, literacy, etc.). The strategy of choosing the control villages as well as the final list of control villages will be decided in consultation with the PMU prior to the Midterm.

C. End-term Evaluation.

The end -term Evaluation will also be conducted in total **296** clusters (See Table 8.1.2 for details), out of which **148** clusters and the villages chosen therein will be the same as the Baseline and Midterm clusters and villages sampled therein. The strategy for choosing the other **148** clusters and the final choice of clusters and villages will be fixed prior to the End-term Evaluation in consultation with the PMU. The End-term Evaluation will be carried out in in **592** project villages i.e 2 project villages per mini watershed cluster

The ratio of treatment to control villages will stand at 2:1. Thus, the M&E Agency will choose total **296** villages as a control group. The control villages should also be chosen from the same talukas in which the End-term is being conducted. The control villages should necessarily be similar to the project villages in terms of their bio-physical characteristics (water vulnerability, water resources, agro-climatic zone, major crops, soil characteristics, etc.) as well as in terms of their socio-economic characteristics (income levels, poverty ratio, gender ratio, literacy, etc.) The strategy of choosing the control villages as well as the final list of control villages will be decided in consultation with the PMU prior to the End-term. Also, economic and financial analysis of the project will be included in the final end term report.

The qualitative interviews with farmers, GKVS, FPCs, SHGs, project functionaries to understand the impact of project intervention on farm, farmers income etc.

Table 8.1.3: Qualitative Sample to be covered during Baseline, Mid-term and End-term evaluation report

Sr. No	KII	Criteria	Baseline		Mid-term		End term	
			Project	Control	Project	Control	Project	Control
1	FGDs with potential beneficiaries	Farmers with less than 5 ha (including landless)	42	21	42	21	42	21
		Farmers with more than 5 ha	20	10	20	10	20	10
2	GKVS	GKVS member	63	32	63	32	63	32
3	FPC	BOD- FGD	63	32	63	32	63	32
4	SHG	Women SHGs - FGD	42	21	42	21	42	21
5	FIG	FIG- FGD	42	21	42	21	42	21
6	Project functionaries	Personal	147		147		147	
		Interviews						
		Total	419	137	419	137	419	137

Apart from this qualitative data collection, the agency should also collect data from 100% of the project-supported FPCs during both the mid-term and end-term evaluations for measuring the RFID indicators.

Assets Verification during Baseline, Midterm and End term

The asset verification of 10% of the total sample clusters (296) will be carried out during the mid-term and end-term evaluations covering each sample cluster . This includes two community works (NRM works and FPO assets) per sample village and 100% for individual assets supported by the project.

D. Concurrent Progress Monitoring:

In each project implementation year, two half-yearly concurrent monitoring rounds will be conducted. However, in the last year of the project, only one six-monthly concurrent

monitoring round will be conducted. Thus, there will be a total number of 11 Concurrent Progress Monitoring activities conducted by the M&E Agency over a period of 6 years.

It is envisaged that Concurrent Monitoring activities should be conducted in all 888 clusters over 6 years. In each of the chosen cluster in each of the Concurrent Monitoring activities, the M&E Agency will cover one village. The strategy for identification of the sample villages and the finalization of the list of sample villages will happen in consultation with the PMU before every Concurrent Monitoring.

The following table gives details of the sample sizes for each of the Concurrent Progress Monitoring activities.

Table 8.1.4: Concurrent Monitoring Sampling Plan

No. of Round	No. of clusters in which the monitoring is to be conducted	No. of villages for treatment group (1 village per watershed)	No. of villages for control group
Concurrent 1	80	80	40
Concurrent 2	80	80	40
Concurrent 3	80	80	40
Concurrent 4	81	81	41
Concurrent 5	81	81	41
Concurrent 6	81	81	41
Concurrent 7	81	81	41
Concurrent 8	81	81	41
Concurrent 9	81	81	41
Concurrent 10	81	81	41
Concurrent 11	81	81	41
Total clusters	888	888	444

The ratio of treatment to control villages will be 2:1. Thus, the Concurrent Progress Monitoring activity will be conducted in sampled project clusters and villages as per given in the table below. The concurrent monitoring exercise will survey 10 individual beneficiaries and 5 community works beneficiaries in each selected sample village. If community interventions are not available in the selected sample villages, the concurrent monitoring will focus on interviews with individual beneficiaries. Additionally, the concurrent monitoring report will include qualitative sampling.

The details of the qualitative sampling to be covered during the concurrent monitoring rounds are provided in the table below.

Table 8.1.5: Qualitative Sampling Design for Concurrent Monitoring Report (indicative)

Qualitative interviews	Project	Control
GKVS (FGD)	81	41
FGD with non-project beneficiaries	81	
Krishi Tai	81	41
Agriculture Assistant (AA)	81	41
Cluster Assistant (CA)	81	41
Farmer Producer Company (FPC) Representatives	81	41
Self Help Group (SHG/FIG) Representatives	81	
Project Specialists (PS Agribusiness, PS- Procurement, PS HRD) implementing NDKSP in districts	63	
Nodal Officer (District level)	21	
Sub-Divisional Agricultural Officer (SDAO)	55	
Account officer (SDAO level)	55	
Project Assistant (SDAO level)	55	
Technology Coordinator (SDAO level)	55	
Agriculture Supervisor (AS)	74	37
Circle Agriculture Officer	74	37
Taluka Agriculture Officer (TAO)	74	37
Project Director- ATMA	21	
District Superintendent Agriculture Officer (DSAO)	21	
Joint Director Agriculture	5	
Nodal Officer (Division level)	5	

Assets Verification during Concurrent Monitoring:

100% assets verification of sampled village beneficiaries to be carried out during each six-monthly Concurrent Monitoring rounds.

8.2 List of Variables to be used in the Baseline Survey:

Following is an indicative list of variables which will be used in creating the templates for Baseline Survey, and also for the other assessments.

Profile of village level characteristics such as Physical, population number and demographics (gender ratios, caste categories, etc.), weather, water, soil, major and minor crops, accessibility, socio economic profile of the sample village, migration pattern etc., Profile of

village level infrastructure: Rail, Roads, Electricity lines etc., Village level Project relevant variables: Proportion of afforested land, fallow land, number of maati nala bund, cement nala bund, works already carried out under Jal Yukta Shivar and other schemes, CCTs, no. of farmers with drip irrigation, bore wells, farm ponds, shade nets, warehouses, cold storages, input suppliers, agriculture markets, CHCs, GHG accounting indicators etc., Existing Government schemes already implemented in the village such as Maha DBT, Magel Tyala Shet Tale, NHM Schemes, RKVY, Jal Yukta Shivar, etc., Farmer Groups such as FIGs/ FPOs/ FPCs, their Turnover, major activities, profits, membership numbers, whether endowed with some value addition machinery such as grading, sorting units, whether facilities such as godowns, etc. exist, etc., Self-help Groups (SHG)- their Turnover, major activities, profits, membership numbers, whether endowed with some value addition machinery such as grading, sorting units, whether facilities such as godowns, etc. exist, etc., Credit/ insurance facilities: No. of banks, co-operative institutions such as PACs, other informal sources of credit, amount of credit extended by the institutions, rate of default, proportion of loanee and non-loanee farmers enrolled under PMFBY, no. of farmers enrolled under WBICS, etc., Profiles of Individual farmers e.g. Demographic and socio-economic characteristics, total income, agriculture income, allied activities, income from allied activities, Soil properties, Cropping pattern, yields of different crops, acres under crops, irrigation sources, irrigated land, information on informal climate risk mitigation mechanisms, cost of cultivation, marketing of produce, marketing cost, climate technology adoption, GHG accounting indicators, advisory services, source of inputs, usage of machinery, water use efficiency, fertilizers use etc.

8.3 Methodology for M&E

An impact evaluation measure causal effects of program participation on farm and farmer household-level outcomes. A critical step is to identify a control group that is a valid counterfactual to the treatment villages and households. The treatment and control villages would be identified using matching techniques on pre-treatment outcomes and their determinants and the determinants of program placement and program participation and other characteristics that would be similar to the watershed and irrigation treatment areas in terms of geology, agro-climatic zone, climate, altitude, soil type, soil moisture, crops grown, levels, trends of soil moisture and vegetative indices from satellite data, etc. The control villages should not have other specialized interventions similar to this project's interventions.

Matching variables will be sourced from existing secondary data such as census, remote sensing and from other government administrative sources. The control and treatment households would be over-sampled at baseline and any imbalances in critical variables between the two groups would be rectified by matching again using the baseline data to arrive at the final balanced set of sample households.

Econometric analysis using the difference-in-differences approach will be used to arrive at the causal impact of program participation on the outcomes listed. Both Intent-to-Treat and Average Treatment Effects on the Treated should be measured.

M&E agency is expected to carry out impact assessments using robust statistical analysis methods. In the literature, there are many methods that address impact assessments such as Double Difference methods, Propensity Score Matching (PSM), Randomized Controlled Trial, etc. The M&E agency is expected to submit a work plan which uses a combination of

these methods for impact assessment of various activities creatively and yet without sacrificing statistical robustness.

8.4 Quality Standards and Approval Mechanism

All the above deliverables have to be submitted to the PMU as per the time-frame finalized by the PMU before the commencement of each assessment. A pre-concept note has to be submitted to the PMU before commencing any assessment. PMU will communicate approval with or without changes for the assessment plan outlined in the note within a period of two weeks of submission. Any changes suggested by the PMU in the research design, training of enumerators, design of questionnaire, data collection methods, or any survey process for any of the assessments will be adhered to by the M&E Agency.

The PMU will carry out Quality Checks on the data collection methods of the M&E Agency as well as on the data collected by the latter from time to time for each of the assessments. It is binding on the M&E Agency to re-do part or whole of the survey and collect part or whole of the data again at no extra cost if the quality check reveals presence of errors.

All the reports submitted by the Consultant must comply with PMU's quality standards to be accepted. In case of any compromise in the quality of the deliverables, a suitable penalty would be imposed on the Consultant as per the provisions will be given in the RFP. An indicative PMU quality standard is given below. The consultant may include more such standards to further enhance the report quality.

Executive Summary of the reports:

The executive summary is meant to be read by a wider audience; thus, it must be written with extreme neatness and attention to detail. It should be written with clarity, coherence, and crispness. Findings of the report should be elaborated with key statistics and recommendations following from findings. The executive summary should offer more than just a synopsis of the chapters; it should also triangulate all the evidence obtained during the study from the primary survey and secondary data and policy implications to flow from such findings.

The executive summary should be forthright in its observations, precise in its deductions, and proactive in its suggestions. ES should ideally be written in short, separate paragraphs that do not exceed five-seven pages. All data/findings/recommendations cited from the main report need to be properly referenced using page numbers. The executive summary should only briefly touch upon the evaluation questions, issues, and problems. The executive summary needs to be sharp and centered on the conclusions and suggestions emerging from the evaluation study.

Professional Language and Referencing:

The report should be written in a professional manner and in accordance with the standards of a typical double-blind, peer-reviewed publication. The report should be free from grammatical errors, plagiarism and spelling mistakes. The plagiarism will be ascertained through software/tools such as Turnitin etc and submit the copy of results. It must adhere to the suggested report structure, and appropriately referenced with necessary citations. Any data, diagrams, and graphs must be appropriately labeled and referenced.

Objective, Findings and Recommendation:

The report should be a succinct, stand-alone document with objective language that may be used to inform decision-making. The findings should be presented clearly, providing sufficient evidence, and systematically addressing all the evaluation objectives. The recommendations should be clearly formulated and logically derived from the findings of the report. It should be clearly articulated and prioritized based on their importance and potential impact for the improvement of the implementation of the project interventions.

Ethical Considerations and Data Protection

Ethical considerations, such as confidentiality and data protection, and data quality, must be upheld throughout the process.

9. Team Composition & Implementation Arrangements:

Details of requirement of the Key experts are indicated below:

Sr. No	Experts	Minimum Qualification	Minimum Experience
1	Monitoring & Evaluation Expert (Team Leader)	Post Graduation in Social Science or in a related field	10 years of experience in design, managing and implementation of M&E in development projects of which at least one significant project was in the public sector, state government or GoI. Experience in designing survey questionnaires and strategies for data collection, analysis and reports writing such as baseline, mid-term and end term, and Experience in leading and coordination with M&E Teams.
2	Agronomy Expert	Post Graduate in Agronomy	10 years of experience in evaluation of dryland agriculture and farming systems, and having knowledge of both traditional practices and modern techniques for improving water use efficiency and agricultural productivity, crop advisories. Experience in rural water sector and having knowledge about environment and natural resource management issues and Compliances.
3	Agri – business Expert	Post Graduate in Agribusiness Management / Agri-Economics.	10 years of experience in evaluation of Agri-business activities, Agriculture value chains, rural agri livelihood management, agriculture value added services, and agriculture markets and

			market advisories. .
4	Agri Economist	Post Graduate in / Economics	10 years" experience in agriculture, economic and financial analysis of agriculture, evaluation of irrigation and water management projects, practical understanding of field level issues and capacity to undertake economic and financial analysis of the project, and cost benefit analysis of the project
5	Social Development Expert	Post Graduate in Social Sciences / Sociology	10 years" experience in evaluation of water and agriculture sector / community-based organizations / gender and tribal issues / rehabilitation and resettlement issues/ social inclusion.
6	Statistical Expert	Post Graduate in Statistics/	10 years of experience of developing statistical design of studies, sampling frameworks, data analysis, evaluation of the projects and interpretation of findings and presentation in graphics. Ability to use automated software for statistical analysis, capable of handling Big Data, AI & ML
7	Agricultural Engineering Expert	Post Graduate in Agriculture Engineering	10 years of experience in management soil and water conservation works and assessment of NRM and groundwater related works.
8	Environment Expert	Post Graduate in Ecology/ Environment or BE/ B. Tech in Environment Engineering	7 years of experience in Climatology, GHG accounting, carbon credit, Irrigation management and hydrological planning and modelling.
9	Soil Science Expert	Post Graduate in Soil Science	10 years of experience in evaluation of dryland agriculture and farming systems, and having knowledge of both traditional practices and modern techniques for improving soil health and agricultural productivity, crop advisories.

			Experience in rural water sector and having knowledge about environment and natural resource management issues and Compliances.
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- It is expected that most of the core team remains unchanged over the assignment period. Any change in key personnel without the prior approval of PMU will be not accepted.
- Since the learnings from such a big Project are at various levels, data sharing through joint reviews and process documentation becomes pertinent hence, it is envisaged that the core team of the M&E Agency will set up continuous rapport with the PMU. The PMU will arrange a quarterly review in person of the Project, which will be attend by all key experts in the core team of the M&E Agency. Further, it will be mandatory for the entire team to present their findings to the PMU and to the World Bank Support Mission every six months. The dates for the meetings will be communicated well in advance to the M&E Agency.
- Consulting firms need to engage adequate number of non-key experts depending on the approach and methodology proposed for carrying out the assignment.
- The M&E firm needs to engage an adequate number of field enumerators and field supervisors, possessing minimum bachelor's degree in any field and having minimum 2 years of experience in field data collection to ensure the quality of data collection and the timely submission of reports. Local language skill is required.
- If any key expert has not visited the field or attended the meetings/offices as outlined in the man-days specified in the proposal submitted by the consultant, the payment for the unused man-days will be deducted from the deliverable payment.

10. Deliverables, Timeline and Payment Schedule:

Deliverables:

The following are the detailed assigned deliverables under this engagement. The exact dates of submission of the deliverables will be finalized by the PMU prior to commencing each of the assessments.

- i. Inception Report
- ii. Baseline Reports and Relevant Datasets
- iii. Mid-term Assessment Reports and Relevant Datasets
- iv. End-term Assessment Reports and Relevant Datasets
- v. Concurrent Monitoring Report and Relevant Datasets (11 nos)
- vi. ESMF Report and Relevant Datasets

5 printed copies as well as soft copies of all the relevant assessments reports should be submitted to the PMU. The M&E agency is obligated to ensure that the content quality of all reports submitted during the course of this contract is of the highest standard. The digitized questionnaires and Apps (e.g. CAPI or survey solution) should be submitted to the PMU for approval within the timeframe suggested by the PMU. completed, cleaned, coded,

respondents" names, contact details and merged datasets for each of the reports with geo-tagged survey photos need to be submitted digitally at the submission of 1st draft report.

The agency will give a dissemination seminar at PMU level after the submission of the reports for Baseline, Concurrent Monitoring, Mid-term and End-term evaluation. Each seminar presentation will be aided by suitable information capsules, graphics, and other appropriate visualization techniques. The Agency will take into consideration relevant points that emerge in the seminar pertaining to research design, execution of the survey and data analysis whilst preparing for the next assessment.

Sr No.	Deliverables	Description	Schedule of Delivery
1	Submission and Acceptance of Inception Report	Monitoring and Evaluation Strategy, Work Plan and Methodology Deployment schedule of key staff; Outline / ToC for the M & E Reports;	Within 30 days of the signing of the contract.
2	Submission and Acceptance of Baseline Survey and datasets	Chapters & contents of the Report may include, but not be limited to the following, subject to the advice /suggestions of the World Bank 1. List of indicators (PDO /Intermediate /Others) required for preparation of the report. 2. Narrative on methodology and periodicity for posting the data relating to the indicators in the MIS and suggestions for improvement, if any. 3. Extent of compliance /achievement at the time of preparation of the report, on the basis of MIS reports, other reports /documents and field verification to the extent	Submitted* 4 months of signing of contract

		<p>specified.</p> <p>4. Narrative on overall performance at the time of assessment.</p> <p>5. Suggestions for betterment of performance, if any.</p>	
3	Submission and Acceptance of Mid - Term Survey report and datasets	<p>Chapters & contents of the Report may include, but not be limited to the following, subject to the advice /suggestions of the World Bank.</p> <p>1. List of indicators (PDO /Intermediate /Others) required for preparation of the report.</p> <p>2. Extent of compliance /achievement at the time of preparation of the report, on the basis of MIS reports, other reports /documents and field verification to the extent specified.</p> <p>3. Narrative on overall performance at the point of assessment.</p> <p>4. Highlighting key issues /areas of weakness that are impeding time bound execution of the project and achieving the required performance level.</p> <p>5. Other M & E tasks that may be assigned by the World Bank during the Mid-term Review Mission.</p> <p>6. Suggestions for betterment of performance, if any.</p>	Submitted* within 4 months of completing Mid- Term Project Implementation around.

4	Submission and Acceptance of Concurrent Progress Monitoring Reports and Datasets (11 nos.)	<p>Annual M& E reports will focus on M& E activities to be outlined in the Inception report and their compliances and will include but not be limited to the followings:</p> <ol style="list-style-type: none"> 1. Component wise physical & financial progress. 2. Progress of PDO achievement. 3. Progress of achievement of Intermediate Result Indicators. 4. Other aspects already mentioned under “Scope of services”, . 	Submitted* within the One month after every six-monthly cycle till the end of the Project period.
5	Submission and Acceptance of End- term (Project Completion) M & E Report and data set	<p>Chapters & contents of the Report may include, but not be limited to the following, subject to the advice /suggestions of the World Bank.</p> <ol style="list-style-type: none"> 1. List of indicators (PDO /Intermediate /Others) required for preparation of the report. 2. Extent of compliance /achievement on completion of the project on the basis of MIS reports, other reports /documents and field verification to the extent specified. 3. Narrative on overall performance and impact of the project on completion. 4. Lessons learnt and good practices to be shared. 5. Special Report as 	Submitted* Three months prior to the closure of Project.

		Appendix to End-term (Project Completion) Report as covered in Sr. 8 below:	
6	Submission and Acceptance of ESMF report and datasets.		Submitted* Three months prior to the closure of Project.

*The submitted report will be considered eligible for payment only upon acceptance. If revisions/ improvement is needed, PMU will communicate to the consultant within a specified timeframe, and the report will be updated, revised, or amended accordingly.

Client's Input and Counterpart Personnel

- The M&E expert and the assistant at the PMU will coordinate with and offer necessary guidance and support to the consultants on a day-to-day basis
- M&E agency needs to engage a dedicated coordinator for day-to-day coordination with the PMU
- The PMU will share secondary data on the villages as collected from Census, Agriculture Census and Socio-Economic Caste Census with the M&E Agency.
- The PMU will provide the relevant documents and organize regular feedback sessions where interaction between the concerned officials and the consultant will be undertaken. All project documents, which are not classified documents will be made available to the selected consultant firm for the purpose of the assignment.

ENVIRONMENTAL AND SOCIAL POLICY

[Note to Client: for supervising civil works contracts:

The Client should attach or refer to the Client's environmental, social, health and safety policies that will apply to the Project. If these are not available, the Client should use the following guidance in drafting an appropriate policy for the Works.

SUGGESTED CONTENT FOR AN ENVIRONMENTAL AND SOCIAL POLICY

The Works' policy goal, as a minimum, should be stated to integrate environmental protection, occupational and community health and safety, gender, equality, child protection, vulnerable people (including those with disabilities), gender-based violence (GBV), HIV/AIDS awareness and prevention and wide stakeholder engagement in the planning processes, programs, and activities of the parties involved in the execution of the Works. The Client is advised to consult with the World Bank to agree the issues to be included which may also address: climate adaptation, land acquisition and resettlement, indigenous people, etc. The policy should set the frame for monitoring, continuously improving processes and activities and for reporting on the compliance with the policy.

The policy should, as far as possible, be brief but specific and explicit, and measurable, to enable reporting of compliance with the policy.

As a minimum, the policy is set out to the commitments to:

1. apply good international industry practice to protect and conserve the natural environment and to minimize unavoidable impacts;
2. provide and maintain a healthy and safe work environment and safe systems of work;
3. protect the health and safety of local communities and users, with particular concern for those who are disabled, elderly, or otherwise vulnerable;
4. ensure that terms of employment and working conditions of all workers engaged in the Works meet the requirements of the ILO labour conventions to which the host country is a signatory;
5. be intolerant of, and enforce disciplinary measures for illegal activities. To be intolerant of, and enforce disciplinary measures for GBV, child sacrifice, child defilement, and sexual harassment;
6. incorporate a gender perspective and provide an enabling environment where women and men have equal opportunity to participate in, and benefit from, planning and development of the Works;
7. work co-operatively, including with end users of the Works, relevant authorities, contractors and local communities;
8. engage with and listen to affected persons and organizations and be responsive to their concerns, with special regard for vulnerable, disabled, and elderly people;
9. provide an environment that fosters the exchange of information, views, and ideas that is free of any fear of retaliation;
10. Minimize the risk of HIV transmission and to mitigate the effects of HIV/AIDS associated with the execution of the Works.

The policy should be signed by the senior manager of the Client. This is to signal the intent that it will be applied rigorously.

11. Composition of Review Committee to monitor work of consultant

A Committee comprising of the following members shall monitor the Consultant's work and would be responsible for making available the data and information, conveying approvals and also deal with the problems if any faced by the Consultant in executing the Contractual obligations:

The constitution of review committee is as follows:

1	Project Director	Chairman
2	Deputy Project Director,	Member
3	Agronomist	Member
4	Agri-business Expert	Member
5	Soil Science Expert	Member
6	Social Development Expert	Member
7	Finance Specialist	Member
8	GIS Specialist	Member
9	Procurement Specialist	Member
10	Agricultural Engineering Expert	Member
11	Monitoring and Evaluation Expert	Member

The Committee shall co-opt any additional members if needed

Annexure 1: Project Results Framework Indicators (RFID)

I.	PDO Level Indicators
1	Beneficiaries with enhanced resilience to climate risks: CRI (Number) By Gender
2	Enhanced Farm Income: Increase in Farm Income at Household level (by Gender) (%)
3	Increase in water use efficiency (percentage)
4	People using digitally-enabled services (CRI)
A.	Intermediate Outcome Indicators - Component A: Resource efficient productivity enhancement
5	Enhanced Fertilizer Use Efficiency (in percentage)
6	Increase in Cropping Intensity (in percentage)
B.	Intermediate Outcome Indicators- Component B: Promoting Precision agriculture for emission management
7	Agricultural area where climate-Resilient agriculture practices are implemented (in Hectares)
8	Net Greenhouse Gas Emissions (GHG) reductions (CRI) (Tons of CO2 equivalent)
C.	Intermediate Outcome Indicators- Component C: Building and improving income resilience
9	Number of Project supported FPCs with growth in annual profits
10	Number of exclusive women SHG supported by the project
D.	Intermediate Outcome Indicators- Component D: Institutional strengthening and Innovations
11	Number of knowledge products delivered through consortia approach
12	Number of dynamic Village Adaptation Plans (VAPs) prepared

Annexure II- Tentative list of project component and subcomponent

Components	Sub - Components	Activities
A. Resource Production System Efficiency	A1. Promoting Production Systems Efficiency	A1.1 Enhancing Soil/ Land Efficiency
		A.1.2. Soil health assessment
		A.1.3. On - farm production of biofertilizers
		A.3.4 Production of organic inputs
		A.3.5 Conservation agriculture
		A.3.6 Enhancing FUE
	A2. Enhancing Water Use Efficiency	A2.1 Micro-planning process at Village Level
		A.2.2 Catchment Treatment
		A2.3 Reducing water-footprint through water use efficiency
	A3. Technology Transformation for climate resilience	A.3.1 Climate Resilient Technologies for Field crops
		A.3.2 Climate Resilient Technologies for Fruit crops
		A.3.3 Conservation and multiplication of climate resilient seeds
B. Promoting Precision Agriculture for GHG Emissions Management	B1 Approach to Low Carbon Emission of Paddy	
	B2 Reduced Energy Consumption in Agriculture	B2.1 Promotion of Solar energy in agriculture
	B3 Promoting Crop Diversification to Enhance Carbon Sequestration	B3.1 Agroforestry
		B3.2 Bamboo plantation
		B3.3 Horticulture Plantation
		B3.4 Protected cultivation
B.3.5 Enhancing millet production (Individual)		
C. Improving and Building and Income Resilience	C1 Strengthening Agribusiness Value Chains	C1.1 FPOs as a vehicle of transformation
		C1.2 Strengthening Value Chain
	C2 Agribusiness	C.2.1 Creation of storage infrastructure

	Growth Centers	C2.2 Agro Input and post-harvest Service Centers	
		C2.3 Value Chain and Market assessment studies	
		C2.4 Capacity Building for agribusiness planning and executions	
		C2.5 Promotion of agri-entrepreneurship (Individual)	
D. Project Management and Strengthening Institutions	D1 Consortia of Scientific and Technical Expertise	D1.1 Consortia Approach	
	D2 Digital Services for Climate Smart Agriculture		
	D3 Project Monitoring, Evaluation and Learning		
	D4 Capacity Enhancement	D.4.1 Capacity Enhancement Need Assessment (CENA)	
		D4. 2 Training	
		D.4. 3 Workshops/Seminar/Conference	
		D.4. 4 Exposure visits	
	D5 Human Resource Management		