TERMS OF REFERENCE (ToR)

MID-TERM EVALUATION OF WATERSHED DEVELOPMENT COMPONENT OF PRADHAN MANTRI KRISHI SINCHAEE YOJANA (WDC-PMKSY 2.0)

1. BACKGROUND

The Department of Land Resources (DoLR), MoRD, GoI has been implementing a Centrally Sponsored Scheme (CSS) 'Integrated Watershed Management Programme' (IWMP) since 2009-10, which was amalgamated as the Watershed Development Component of PMKSY (WDC-PMKSY) in 2015-16. The continuation of WDC-PMKSY has been allowed by Government of India on 15.12.2021 as 'WDC-PMKSY 2.0' for the project period of 2021-2026 with a physical target of 49.50 lakh ha and indicative Central financial outlay of Rs. 8,134 crore. The unit cost of projects has been revised upward from Rs 12,000/ha to Rs 22,000/ha for plain areas, and Rs 15,000/ha to Rs 28,000/ha for the difficult areas and LWE areas. The project period is 3 - 5 years.

In Haryana State, 9 projects across five districts of the state covering an area of 31221 hectares with a projected costs of Rs.80.59 crore had been approved by the Govt. of India under WDC-PMKSY 2.0. This is Centrally Sponsored Scheme in the ratio of 60:40 by Central and State Govt. respectively. This projects are being executed since 2021-22. This being the fourth year of execution of the programme, mid-term evaluation of the programme to get feedback and recourse to remedial steps becomes paramount importance. Project wise funds released under WDC-PMKSY 2.0 is given at **Annexure-II** and details of NRMs work executed are given at **Annexure-III**.

The WDC-PMKSY 2.0 is being implemented as per the Guidelines for New Generation Watershed Development Projects.

2. OBJECTIVES OF PMKSY-WDC

The main objectives of watershed development projects are to improve productive potential of rainfed / degraded land through integrated watershed management; to strengthen community based local institutions for promotion of livelihoods & watershed sustainability, and to improve the efficiency of watershed projects through cross learning and incentive mechanism.

3. CURRENT STATUS

Watershed Development Component of PMKSY (WDC-PMKSY 2.0) are being implemented in the Haryana State since year 2021-22 in the five districts namely Bhiwani, Charkhi Dadri, Gurugram, Mahendergarh and Yamuna-Nagar. The work is going on as per the common guidelines of New Generation Watershed Projects (WDC-PMKSY 2.0) issued by Department of Land Resources (DoLR), Govt. of India. 9 Projects under WDC-PMKSY 2.0 covering an area of 31221 hectares with 9 projects cost of Rs.80.59 crore under execution.

Mid-Term Evaluation of these projects proposed to be carried out to obtain feedback on the initials impacts of the programme and the bottlenecks faced in the process of its implementation. This mid-term evaluation would enable a pathway analysis at the mid-course providing for improvement in the remaining part of the project. The M&E system on the whole is designed as a learning mechanism with corrective options both at the project & policy level.

4. RATIONALE FOR THE PRESENT ASSIGNMENT

Apart from the various project components and activities like Entry Point Activities, Watershed Development Activities and Production System Activities, Monitoring and Evaluation is an important component, which

needs to be undertaken through the Consultant. Since WDC-PMKSY 2.0 projects in Haryana are in Works phase, Mid-Term evaluation study of project implementation is imperative.

The Mid-Term evaluation of these projects is to be carried out to examine and explore the impact and status of the watershed projects, the implementation mechanism including analysis of institutional arrangements, bottlenecks if any in the process of implementation and recommend suitable measures for effective implementation. The said evaluation would check the achievement of each component in the DPR, assess ecological, economic, social impact, capture the best practices of the WDC-PMKSY 2.0 projects and suggest policy improvements.

The evaluation study is confined to the WDC-PMKSY 2.0 projects implemented under the support of DoLR, GoI and matching fund of Government of Haryana covering 9 projects in 5 districts of the State.

Specifically, the areas to be covered for the evaluation of the projects are:

Section I: Impact Evaluation against key deliverables

a.To assess the impact created under the programme, including benefit to community through indicators (suggestive – to be added if needed) is attached at **annexure-IV**. covering three broad areas of the programme, as listed in Table 1.

A. List of indicators for mid-term evaluation of WDC-PMKSY 2.0 Annexure-1 and Annexure-II.

b.To ascertain the impact of Watershed Development using Photographic image analysis (RS and GIS) for assessing the changes in various biophysical indicators like land use / land cover condition and overall biomass change.

Section II: Evaluation of project related components

a.To assess the administrative machinery system and its adequacy at SLNA, District and PIA and watershed committee level.

b.To assess the Training and Capacity Building activities at all levels type, status and impact

- c.To assess the M&E system in the project and ways to strengthen it.
- d. To assess the fund flow status, financial progress and impediments, if any.
- e.To assess the constitution of SHGs its effectiveness and impact on the living of member and ways to strengthen the SHG.
- f. Any other activities realised through the programme
- g.Recommend process and policy measures for effective implementation of the scheme and enhanced outcome

Section III: Case Study

a. To capture best practices adopted in the intervention area by means of case study of project progress, enabling factors contributing to community participation, sustainability of the watershed structures and changes in beneficiary's socio-economic conditions.

Minimum 2 case studies per projects to be documented.

6. Methodology:

Mid-term evaluation will employ mixed method approach, combining quantitative and qualitative data collection methods. The evaluation team will ensure the participation of diverse stakeholders and adopt participatory approaches to data collection and analysis & report. It may include the following components.

- Document review.
- Key information interviews.
- Focus group discussions (may use also Participatory rural appraisal (PRA), Participatory Learning & Action (PLA).
- Surveys / questionnaires.
- Field Assessment and Observations.
- Proper documentation.
- Ensure the quality and completion of work and submission of complete report within the stipulated timeline.

7. Sample size & Area coverage:

- i. Impact study will be confined to the WDC-PMKSY 2.0 projects implemented with the support of the DoLR funds.
- ii. The study will cover 100% of the WDC-PMKSY2.0 projects sanctioned in all 5 districts of the state. However, in each project evaluation of all the activities required to be carried out in the 3 micro watersheds covering all three reaches i.e. upper reaches, middle reaches and lower reaches (all micro watersheds shall be covered where some of the projects cover only 1(one) or 2(two) micro watersheds).
- iii. The study will cover 30% of households from the selected micro watershed for evaluation.
- iv. In addition to the above about 10% of the total households in three (3) control adjoining villages outside in each project with similar topography & socioeconomic features. This would facilitate a comparative analysis of with & without project scenarios. The control village sareone each from the upper, middle and lower reaches.

Time Duration of the Project - The project is to be completed within 5 months, however, the entire exercise should be completed by 31st July, 2025.

2. Indicators for Mid-Term Evaluation

A list of indicators is given in **Annexure-IV** These will be incorporated into an online data entry module / mobile application to be developed by DOLR for data entry by the evaluating agency for each of the project evaluated and to be submitted on the online module/portal to DOLR. Over and above the given list of indicators, States/UTs may incorporate other parameters as per their specific requirements (for ex., Case studies, Sustainable Livelihood for continuous income generating activities (IGA) may be included).

8. DELIVERABLES

The Consultant is expected to deliver the following during the course of the assignment.

➤ Inception Report (Maximum 20 pages)

- A note on the sampling methodology to identify the watersheds/micro watersheds/villages that needs to be studied.
- o A brief note on the study methodology and study tools to be used
- A note on the detailed data collection plan with timelines for key milestones

➤ Mid-Term Evaluation Report (Maximum 200 pages)

- o Incorporating the feedback/suggestions from state workshop and submission of final report
- Final Report should contain:
- o Executive Summary
- o Introduction, detailing the background of scheme, methodology of study, sample size and analytical frame work.
- Changes observed in final data with respect to baseline data and its trend analysis with respect to whole population data
- Impact on Natural Resources
- o Impact on Agriculture and Allied Sectors.
- o Impact on Economic Aspects
- o Impact on Institutional Systems.
- o Impact on the Society especially with Gender and Equity Analysis
- Overall Impact- A summary of analysis.
- Best practices, Limitation if any and lessons learnt with suggestions for future alternative policy linkages

9. TIME FRAME

The Consultant shall complete the assignment within a period of five (5 months maximum) from the date of the effectiveness of the contract. Date for submission of assignment may be increased once if genuine grounds to the satisfaction of client existed. But at all cost final report should be submitted by 31.07.2025.

Failure on bidder's part to submit the final completed reports and the deliverables as per the agreed time line will enforce a penalty @ 2% per week subject to maximum of 10% of the total contract value. The amount will be deducted from the subsequent payment.

10. COMPOSITION OF CONSULTING TEAM

Besides having a Project Manager, the Consultant team should have one Social Development Specialist, one GIS/RS Technical Expert, one Natural Resource Management Expert, one Data Analyst and a Documentation Specialist.

The Human Resources qualification and experience requirement for the proposed study is mentioned below:

Sl. No.	Key Resources	Qualification
1.	Project Manager (1)	This key person should have at least 10 years' experience in project planning management and monitoring and evaluation. Experience of working on evaluation of watershed projects with state / central governments will be desired. The Project Manager should have at least a Masters'/Post Graduate degree
		in a Management or Economics or Social Sciences from a recognized University/Institution.
2.	Social Development Specialist(1)	This person should have at least 8 years' experience in social/rural development including institutional

3.	GIS/RS Technical Expert(1)	analysis and monitoring and evaluation. The Social Development Specialist should have at least a Masters'/Post Graduate degree in a Management or Social Sciences from arecognized University/Institution. This person should have at least 5 years' experience in Remote sensing and GIS application for watershed planning and monitoring. The GIS/RS Technical Expert should have at least a Masters'/Post Graduate degree in Natural Sciences with GIS/RS expertise from a recognized University/Institution.
4.	Natural Resource Management Expert (1)	This person should have at least 5 years' experience in watershed planning, monitoring and soil conservation activities. The NRM expert should have at least a Masters'/Post Graduate degree in Masters / Post Graduate degree in Agriculture/Forestry Sciences/Agricultural Engineering/ Environment or equivalent from recognized University from a recognized University/Institution.
5.	Documentation Specialist (1)	This person should have at least 5 years' experience in documenting development projects. The Documentation Specialist should have at least a Masters'/Post Graduate degree from a recognized University/Institution.
6.	Data Analyst(1)	This person should have at least 5 years' experience in sampling techniques, analytical methods, quality control, data management and analysis particularly of qualitative data. Experience of usage of statistical package like SPSS will be desired. The Data Analyst should have at least Graduate degree from a recognized University/Institution
7.	Field Supervisor(4)	The Field Supervisors should have at least three years of experience and be familiar with data collection tools/technique, knowledge on participatory monitoring and PRA. Additional supervisory role in data collection and survey work will be desired. The Field Supervisors' should have at least a Bachelor's degree.
8.	Field Investigator(20)	The Field Investigators should have at least three years of experience and be familiar with data collection tools/technique and field surveys. The Field Investigator' should have at least a Bachelor's degree.

13. PAYMENT TERMS AND SCHEDULE

Under this assignment, the payment of the Contract value to the Consultant will be made based on the achievement of milestones indicated for each activity as listed below in Table 4.

Table 4: Payment Terms and Schedules

Sl. No.	Key Resources	Qualification	
1.	Submission of Inception Report including	20%	
	finalized methodology and work plan		
2.	Completion of Field Work and Submission of	25%	
	Dataset		
3.	Submission and acceptance of Draft Mid-Term	25%	
	Evaluation Report		
4.	Submission and acceptance of Final Mid-Term	30%	
	Evaluation Report		

Project wise funds received, funds allocated and funds utilized till 20.12.2024.

Sr. No.	District wise name of project	Name of Blocks	No. of MWS	Project area for treatment (in Ha)	Project Cost/ Ha	Total project cost (Rs. Crore)
1	Bhiwani WDC- I/2021-22	Behal	7	3881	28000*	10.87
2	Bhiwani WDC- II/2021- 22	Loharu	7	4146	28000*	11.61
3	Charkhi Dadri WDC- I/2021-22	Badhra	7	4141	28000*	11.59
4	Mahendergarh WDC- I/2021-22	Nangal Chaudhary	9	2742	28000*	7.68
5	Mahendergarh WDC- II/2021-22	Mahendergarh	12	4934	28000*	13.82
6	Gurugram WDC-I/2021- 22	Sohna	6	3047	22000*	6.70
7	Gurugram WDC-I/2021- 22	Pataudi	16	2782	22000*	6.12
8	Yamuna Nagar WDC- I/2021-22	Chhachhrauli	4	2797	22000*	6.15
9	Yamuna Nagar WDC- II/2021-22	Sadhura	6	2751	22000*	6.05
Total		9	74	31221		80.59

^{*}The unit cost of projects has been revised upward from Rs 12,000/ha to Rs 22,000/ha for plain areas, and Rs 28,000/ha for the difficult areas and up to 28000/ha difficult/LWE areas.