



**Request for Proposal**  
**for**  
**Study on Estimation of GHG Emission Reduction and Carbon**  
**Sequestration from ITC MSK's NRM Initiatives**

Last date for Application: 9<sup>th</sup> March 2021

## 1. Background

ITC's Mission Sunehra Kal (MSK) primarily aims at strengthening the livelihoods of its stakeholder communities and preparing them for a better future. Apart from catering to the needs of the communities, MSK programmes also contribute to SDG goals, the Nation's priority areas in development and ITC's sustainability commitments. The major initiatives aimed at strengthening the livelihoods include Natural Resources Management, Climate Smart Agriculture, Social Forestry and Livestock Development. Natural resources management aims at enriching water, soil & soil health and biodiversity

These initiatives, while strengthening agriculture and allied sectors, aim at promoting **Decarbonisation pathways in Agriculture based on Natural climate solutions (NCS)**—conservation, restoration, and land-management actions that increase carbon storage and/or avoid greenhouse-gas emissions. The initiatives offer a way to address climate change crisis by increasing farmers' resilience to the climate change.

The primary purpose of this study is to estimate reduction in GHG emissions and addition to carbon sequestration achieved through various Natural Resources Management and Climate Smart Agriculture related interventions driven by ITC MSK.

## 2. Objectives of the study

- To develop a methodology for estimation of carbon savings and sequestration based on the methodologies suggested by UNFCCC, IPCC, GHG protocol and Gold Standard.
- To estimate GHG (Carbon equivalent) savings and carbon sequestration for each activity in each state.

## 3. Scope of Work

This study will estimate GHG emission reduction and carbon sequestration achieved through its initiatives as compared to baseline/conventional scenarios through ongoing concurrent studies. The specific activities that are planned to be covered under the study are as follows –

1. Conservation Agriculture – Zero tillage method of sowing in wheat, Direct Seeding of Rice, and Broad Bed furrow method of soya bean cultivation;
2. Biomass and biodiversity conservation through commons restoration;
3. Soil Amendments through addition of organic matter to soil – tank silt and compost application to soil; and
4. Water Resources Augmentation and efficiency improvement - water harvesting, watershed treatment and micro irrigation (Drip).

For all of the listed initiatives, following estimates need to be calculated as applicable:

1. GHG (CO<sub>2</sub> equivalent) emission reduction because of resource-use efficiency;
2. Carbon sequestration in soil; and
3. Carbon sequestration in biomass.

## 4. Expected Outputs

### 1. Develop Methodology

- For the listed interventions, develop and/or finalise methodology for estimating carbon savings and sequestration based on the methodologies suggested by UNFCCC, IPCC, GHG protocol and Gold Standard.

### 2. State wise estimates for each of the activity

- Plan statistical modelling for each of the activity based on MSK's spread in the state with the previous year (2020-21 in this case) as the base year.
- Post finalisation of sampling units, agency through its own team, to collect all necessary data (baseline/control/project, etc.) and calculate representative estimates for each activity in each of the state separately.
- Post the estimates, calculate total GHG (carbon equivalent) savings and sequestration achieved in the corresponding year through extrapolation of the averages for all activities state wise.
- Arrive at national average for each intervention that can be used for estimating savings/sequestration in the states where the work is on a small-scale.
- Submit report to ITC
- Orient ITC teams in the methodology and data collection processes for future.

## 5. Spread and Coverage

**Table: Spread and Coverage**

Activity	Major States Covered	2020-21 coverage
Conservation Agriculture		
1. Zero tillage method of sowing in wheat (Hectares covered)	Bihar, Punjab and UP	Bihar-40,439; Punjab-18,012; UP - 4,158; Total- 66,514
2. Direct Seeding of Rice (Hectares covered)	Bihar, Punjab and UP	Bihar-5,555; Punjab-2425; UP - 554; Total-14,846
3. Broad Bed furrow method of Soyabean cultivation (Hectares covered)	Madhya Pradesh, Rajasthan and Maharashtra	MP-3,435; Raj-11,500; Total-16,295
Biomass and biodiversity conservation done through commons	Rajasthan, Maharashtra and Andhra Pradesh	Cumulative coverage - Raj-5,669; Mah-3,687;

restoration (Hectares covered cumulatively)		AP- 1,536; TN-1046; Total-13,959
Direct addition to soil Organic carbon		
1. Tank silt application (Tons)	Andhra Pradesh and Karnataka	AP-12,614 Tons; Kar-71,954 Tons; Total-92,594
2. Compost addition to soil (No. of units)	Madhya Pradesh, Rajasthan, UP, Telangana, AP and Tamil Nadu	AP-295; MP-245; Raj-743; UP-153; TS-206; TN-41; Total-1,824
Water Resources Augmentation and efficiency improvement		
1. Water harvesting (cu.m of water)	For 1 & 2 - Bihar, Punjab, UP, Madhya Pradesh, Rajasthan, Maharashtra, AP, Telangana and Karnataka, Tamilnadu,	Bihar-36,39; Punjab-1,387; MP-3,15727, MH-54,880; AP-1,77,938; Telangana-53,651; Kar-92,756; TN-1,54,538; Total-23,65,249
2. Watershed treatment (hectares covered)	For Micro Irrigation – Maharashtra, Tamilnadu and Karnataka	Bihar-547; Punjab-29; MP-1,174; MH-4,728; AP-5,760; Telangana-1,668; Kar-1,261 and TN-2,314; Total-21,710
3. Micro Irrigation – Drip (No. of units)		Mah-405; TN-178; Kar-137; Total-1,406

Note: The area provided is till December end and will change by the end of 2020-21.

Combination of each state with an activity is to be considered as a unit for field work spread and budgeting. There are thus, a total of 33 units as per the table above, taking watershed and water storage as one exercise.

## **6. Approach and Methodology**

The agency should propose a suitable approach and methodology for developing a detailed methodology for estimation of carbon savings and sequestration as well as for actual implementation of the same.

The agency may consider adopting a mix method involving secondary and primary data collection and analysis to meet the objectives and scope of work of the study. The agency may propose a detailed methodology with proper justification for the same. Attention is to be paid to innovative and technically robust approach and methodology for the study.

### **a. Sampling Design**

The agency should propose a sampling methodology which is statistically valid for the nature of the study. Each state and each activity is to be covered and treated as individual units for estimation of reduction in GHG (CO<sub>2</sub> equivalent) and carbon sequestration.

The sampling methodology should take care of neutralizing all external factors so as to ensure that the results are as accurate as possible. Sample selection from control areas might be considered by the agency as a part of the methodology and sampling design, if seems relevant to the study.

### **b. Research Tools**

Research tools suitable to meet the study's objectives will be required to be developed by the agency and finalized in discussion with ITC before start of fieldwork and should be part of inception report.

Data collection is to be taken up as per the plan developed and shared with ITC and conducted through structured questionnaires, guides and checklists.

### **c. Data Analysis**

The agency is required to propose the tentative data analysis plan for the estimation of GHG reduction and carbon sequestration.

## **7. Implementation Plan**

The agency is required to propose a detailed implementation plan for the assignment. It must be noted that implementation plan should account for each unit covered; that is, each activity in each state (one activity in one state is one unit).

If deemed appropriate, the agency may conduct a preliminary visit to the project areas to understand the programmes in detail. Based on the observations, the agency may develop the estimation methodology, sampling methodology, tools for field interviews & discussions and logistics (translator etc.).

## **8. Team Composition**

The agency is required to present the structure of the team proposed for the assignment with snapshot on years of experience, areas of expertise, roles and responsibilities assigned to each of the team members. Detailed CVs are to be attached as annexure.

## **9. Requirements from the agency**

- i. The agency should have at least 5 years of expertise in undertaking similar assignments and have prior experience in NRM studies of similar nature as well as in carrying out documentation & research, and data collection, collation, compilation and analysis.
- ii. The agency should deploy a team having experience and expertise in carrying out assignments of similar nature with a team leader having strong Natural Resource Management experience.
- iii. The agency will be required to share emerging data and trends based on field data with ITC from time to time.
- iv. The agency will be required to submit draft report and final reports with all raw data backups and analysed data tables in excel spreadsheets, along with pictures to ITC.

## **10. Expected Deliverables**

- I. Inception report to be shared within 15 days from the date of signing the contract in consultation with ITC.
- II. Field data files to be submitted in excel files along with all output tables.
- III. Draft report to be shared covering all scopes. Report to be finalized after incorporating changes suggested by ITC.
- IV. The final study report will be submitted in 2 hard copies (A4 Size preferably with bond paper and coloured prints) and soft copy in form of CDs/pen drives. All field data back-up to be submitted along with analytical tables.
- V. The agency to deliver a final presentation to ITC explaining the findings, recommendations and way forward based on the study.
- VI. The data and information collected during the study, including photographs, will be the property of ITC Limited and the agency shall not use it in any form without the written permission from a competent authority in ITC.

## **11. Payment Conditions**

The payment of fees will be made on job completed basis of the agreed sum, subject to achievement of mutually agreed progress milestone. The agency may submit its proposal on terms and conditions for payment.

## **12. Rejection Clause**

ITC reserves the right to accept or reject any and all proposals, to negotiate contract terms with various proposers, and to waive requirements at its sole discretion.

ITC also reserves the right to reject the offer without assigning any reason if found that the party has submitted false information or found to promote vendors.

## **13. Contact Details**

For submission of RFP or any further queries all correspondence may be directed to: [itcmsk@itc.in](mailto:itcmsk@itc.in)

## **Annexure 1: Format for Submission of Technical Proposal**

### **1. Agency Details**

- a) Name of agency, address, Web site address and telephone number.
- b) Number of the principal office that will manage this project.
- c) Brief background of the agency and history. Include years in the sector/business and number of employees and details of projects handled.
- d) Experience details highlighting the experience and expertise of the agency relevant to the current assignment.
- e) A copy of the agency's most recent Annual Report or Financial Statement, and/or any other documentation that demonstrates financial solvency to be attached as annexure.
- f) Any additional information that agency considers to be relevant.

### **2. Technical Approach and Methodology**

- a. Detailed approach and methodology for undertaking the study including technical aspects; strategies; sampling methodology; research design; tools & techniques to be used; statistical or economic model (*if any*) to be used for collecting, collating and analysing the data, etc.

### **3. Implementation Plan and Team Structure**

- b. Detailed implementation plan with all the phases, activities and timelines (including preparatory phase visit)
- c. Team structure and snapshot of experience, expertise, roles and responsibilities assigned for the proposed study.

### **4. Please specify the primary Executive point of contact for the work stated in this RFP.**

## Annexure 2: Format for Submission of Financial Estimate

It must be noted that financial estimates are to be submitted for each unit covered that is each activity in each state (one activity in one state is one unit)

Sl. No.	Particulars	UoM	Units (Nos.)	Unit Cost (Rs.)	Total Cost (Rs.)
1	<b>Methodology finalisation for each activity as per prescribed standards</b>	Rs.	9		
2	<b>Service Charges</b>	Rs.			
	a. Printing charges	Rs.			
	b. Stationary, telephone, and other miscellaneous expenses	Rs.			
	c. Others: CAPI	Rs.			
3	<b>Professional Charges</b>	Rs.			
	a. Resource Type 1:	Person-days			
	b. Resource Type 2:	Person-days			
	c. Resource Type 3:	Person-days			
	d. Resource Type 4:	Person-days			
	e. Resource Type 5:	Person-days			
4	<b>Estimate excluding travel (1+2+3)</b>	Rs.			
6	<b>Travel Expenses</b>	Rs.			
	a. Outstation travel	Person-days			
	b. Local Travel	Person-days			
	c. Accommodation	Nights			
	d. Food	Days			
	<b>Total Estimate with travel (4+5)</b> (GST rates will be extra and applied as prevailing at the time of invoicing)	Rs.			
	<b>Timeline</b>	weeks			

**Note:**

- The agency will submit final bills as per the agreed unit rates as mentioned above.
- In case of Travel, Boarding and Lodging Expenses, costs will be reimbursed based on submission of actual bills. The upper limit for reimbursement to be restricted to the budgeted limit mentioned in the estimate.
- Taxes will be paid extra as applicable.