



Indian Council of Forestry Research and Education

(An Autonomous body of the Ministry of Environment, Forest and Climate Change, Government of India)

P. O. New Forest, Dehradun – 248 006 (Uttarakhand), INDIA

Expressions of Interest (EOI) for ‘Developing an online National Reporting Database for Capturing Trends and Status of Key Progress and Performance Indicators on Land Degradation and Desertification’ under the World Bank/GEF assisted Project on Ecosystem Service Improvement Project

Indian Council of Forestry Research and Education, Dehradun intends to engage a nationally reputed consultancy organization/institution (“Consultants”) for ‘Developing an online National Reporting Database for Capturing Trends and Status of Key Progress and Performance Indicators on Land Degradation and Desertification’ under the World Bank/GEF assisted Ecosystem Service Improvement Project (ESIP).

The consultants would need to look into the current state of institutional and policy arrangements in India and how these may be required to be realigned and /or what policy reforms and changes are required to mainstream SLEM practices in making investments choices etc. The implementation period of the assignment shall be six months from the date of award of the contract. TOR for the assignment is given Annexure - I.

Interested consultants should provide information demonstrating that they have the required qualifications and relevant experience to perform the services. Proposal so submitted should include the organization’s mandate, its past experience and credentials (with relevant documentation) and with justification as to why it should be considered as a suitable organization for undertaking such a study.

Eligibility Criteria: Reputed organizations/ institutions having atleast 10 years of professional experience in research, consulting, report writing on issues of national relevance. Experience should include covering policy and institutional issues in different sectors. Familiarity with converting policy reforms related recommendation into specific actions.

Consultants may associate with other firms in the form of a joint venture or a sub-consultancy to enhance their qualifications.

A Consultant will be selected in accordance with the CQS method set out in the World Bank’s Guidelines: Selection and Employment of Consultants. Further information can be obtained at the address given below during office hours (09.00 to 17.30 hrs).

Interested parties may submit the Expressions of Interest (in person, or by mail, or by post) to the following on or before **10 September 2015**.

Assistant Director General (Biodiversity and Climate Change) &

Project Director, ESIP Project, Room No: 42

Indian Council for Forestry Research and Education

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TERMS OF REFERENCE

for

‘Developing an online National Reporting Database for Capturing Trends and Status of Key Progress and Performance Indicators on Land Degradation and Desertification’

Background

In India almost 47% of land is under cultivation, about 70% of population dependent on agriculture, 69% of the country is dry land i.e. arid, semi-arid and dry sub-humid, 24.8% area is undergoing desertification, and more than 32 % of India's total land area is affected by land degradation. While 72% of India's population is rural and depends mainly on land and water resources, almost 80% of all Indian farmers are under the poverty line. The major causes for land degradation are unsustainable water management, poor agricultural practices, human and livestock pressure on land, deforestation, climate change and industrialization.

In India, there is a major focus on reducing poverty through enhanced productivity from irrigated as well as dry land ecosystems, which requires an approach with adequate emphasis on conservation of natural resources. There are significant opportunities for improving land management practices in order to improve productivity and reduce land degradation. Profitable and sustainable land use and ecosystem practices can be the principal means for protecting India's significant environmental assets and alleviating poverty in the largest and poorest segments of Indian society.

Despite considerable financial investments, studies indicate that the rate of degradation of land in rainfed areas in the 1990s is likely to have proceeded at more than twice the rate observed in the earlier years. Further, our agricultural land is also shrinking at a faster rate due to urbanization and developmental activities. The over exploitation of ground water has become serious problem not only in dry states but also in food producing states like Punjab and Haryana. Appropriate land use and sustainable management of the country's natural resources and agro-ecosystem are the avenues to meet the challenges and to sustain environmental services. Given this background, the Eleventh Five Year Plan of the Government has placed high priority on raising agricultural productivity to achieve an annual agricultural growth of more than 4.1 percent. The XIth Plan acknowledges that this goal cannot be achieved with the ongoing shrinking and degradation of the country's natural resources, and therefore, stresses upon conservation, harnessing and developing of natural resources. This will require that we move away from

existing inefficient use of land and water resources, including ground water mining, recognize the additional challenges resulting from current climate variability, and expected extreme climate conditions.

Desertification along with climate change and the loss of biodiversity were identified as the greatest challenges to sustainable development during the Rio Earth Summit in 1992. The dry areas of the world, which are the most vulnerable to desertification, land degradation and drought, directly affect food security, rural incomes and national economies. The recent Millennium Ecosystem Assessment Report indicates that desertification threatens over 41% of the Earth's land area and almost 20–70% of drylands are already degraded, resulting in a decline in agricultural productivity, loss of biodiversity and the breakdown of ecosystems. Land degradation, Desertification, and drought (DLDD) impacts millions of people globally and along with climate change and the loss of biodiversity, is a major global concern. Desertification is not simply a force of nature, it is caused by a combination of multiple social and biophysical factors that can be grouped into two categories: those due to climatic and natural causes including variations in climate (drought), wind and water erosion, and those due to human activities including overgrazing, deforestation, intensification of agriculture, salinization, urbanization, pollution and conflicts.

ICFRE has implemented the World Bank/GEF assisted SLEM project and now, ICFRE is one of the implementing partners of the World Bank/GEF assisted project on 'Ecosystem Improvement Project (ESIP)' and may implement one of the component of, *i.e.*, Scaling up of Integrated Sustainable Land and Ecosystem Management (SLEM) Approaches for Reducing Land Degradation and Desertification: The main objectives of this component are to prevent land degradation and desertification and increase above-ground forest carbon stock through a combination of investments to implement and scale-up tried-and-tested SLEM best practices, increase national capacity for monitoring land degradation and track associated indicators and generate knowledge exchange on SLEM approaches so as to benefit small and marginal farmers and other rural poor. These activities are designed to overcome the twin challenges of arresting land degradation and meeting food security targets. In particular, this component will draw heavily from the lessons and best practice approaches to sustainable land and ecosystem management that were developed and piloted under the GEF financed SLEM project.

All parties have adopted the UNCCD's PRAIS online reporting model for the National reporting which is indicator based and requires information for measuring, monitoring and assessment and

evaluation. The online PRAIS system provides opportunity to upload information in desired formats which are later analyze and generate reports by the system. This provides opportunity for effective review the implementation of the UNCCD Strategy and the Convention, based on a new methodological approach, which envisages reporting on performance and impact indicators, best practices and financial flows. The National Reports of India therefore provide information on:

1. Impact/ progress indicators (four year basis)
2. Performance indicators (developed to measure the progress of the five operational objectives of the 10 Year Strategy (Bi-annually))
3. Financial flows (through the Financial Annex (FA) and Programme and Project Sheet (PPS)
4. Best practices on sustainable land management (SLM) technologies, including adaptation
5. Feedback on indicators and methodologies applied in this reporting and review process, as well as other pertinent information that reporting entities may wish to provide to the COP.

The present assignment on developing an online National Reporting Database for Capturing Trends and Status of Key Progress and Performance Indicators on Land Degradation and Desertification and for up-scaling and mainstreaming SLEM best practices will help in strengthening the India's reporting to UNCCD and combating DLDD in India. The database will be used by number of stakeholders including various Central Ministries/ State Governments, NGOs and others.

OBJECTIVE OF THE ASSIGNMENT:

Developing an online National Reporting Database for Capturing Trends and Status of Key Progress and Performance Indicators on Land Degradation and Desertification and mainstreaming of the same for enhancing ecosystem services and combating DLDD under the Ecosystem Services Improvement Project.

SCOPE OF THE ASSIGNMENT:

The main objective of the assignment is to develop a interactive web-based platform for data hosting with respect to India' national reporting to UNCCD with direct access. The web-based database platform will work as a repository of information on desertification, land degradation and

drought as well as the best practices in the field of natural resource management. This will help in increasing national capacity for monitoring the status of land degradation and desertification and SLEM outcomes, as well as the results of UNCCD action programs at the country level. It would also facilitate reporting on key indicators under the UNCCD. Current capacity to prepare National Reports (NR) to report back to the Conference of Parties (COP) on the National Action Plans (NAPs) is limited. This would help develop and implement a web based national MIS that would allow capturing trends and status of key impact and process indicators on land degradation and desertification. The data input would be collected at the sub-national and local level and would be consolidated at the national level through the project. This would improve the timeliness and quality of the NR to UNCCD.

TASKS TO BE UNDERTAKEN:

1. To develop national database on SLEM practitioners for the development of institutional and individual networks.
2. To develop web based data management system for India's national reporting to UNCCD. It should provide online space to upload required information for UNCCD reporting purpose with the logins id which will be generated by the approval of database administrator. It should also generate report as per the UNCCD reporting formats.
3. Develop an interactive web-based platform with direct access and use at the farm level with help from extension services.
4. The database should promote and mainstream SLEM best practices through a network of excellence, including and using the extension services networks of both agriculture and forest sectors.
5. Provide links and virtual access to repositories of best practices and analytical reports.
6. The knowledge network should help in developing a community of practice by connecting stakeholders with common interests in adopting and expanding SLEM approaches.
7. It should help in organizing and implementing learning events at the interface of the community, farm and common lands through the web-based platform.
8. A user friendly web-based platform which can work offline and online.

TEAM COMPOSITION AND QUALIFICATION OF THE KEY EXPERTS

S no.	Key Experts	Qualifications and Experiences
1	Team Leader	<ul style="list-style-type: none">• Post Graduation in the relevant field• Minimum 10 years experience in developing databases related to natural resource management, rural livelihood, land degradation and science & technology in India.• Experience in developing web-based systems on issues related to land management, biodiversity conservation and climate change adaptation. Preferably on land degradation.• Proven experience in developing MIS at national level.
2	Software Expert	<ul style="list-style-type: none">• B. Tech./ MCA/ M.Sc. in Computer Science or IT• Minimum 8 years experience in developing web-based applications.• Experience in developing and maintaining virtual, interactive web-based database systems.
3	Networking Expert	<ul style="list-style-type: none">• B. Tech./ MCA/ M.Sc. in Computer Science and IT• Minimum 8 years experience in developing and maintaining web-based and offline database systems.
4	Natural Resource Management Expert	<ul style="list-style-type: none">• Post Graduation in the relevant field or doctorate degree• Minimum 8 years experience in natural resource management and issues related to land governance, protected areas management, climate change adaptation etc.

Consultants are free to propose additional experts as they deems necessary for the fulfillment of the assignment.

ESSENTIAL REQUIREMENTS

- Minimum of 10 years of professional experience in developing web-based database systems and MIS.
- Experience should include developing interactive and user friendly database for natural resource management, climate change adaptation and related field.

- Familiarity with natural resource management knowledge management systems.

DELIVERABLES

1. Inception report and template of web-based database within 30 days of contract signing
2. Interim progress report along with interactive database and linking domains on 60th day from contract signing
3. Rough web-based and offline database on 120th day
4. Final tool (web-based database) after incorporating the suggestions/ comments raised by ICFRE.
5. One national level dissemination and demonstration workshop of the web-based and offline database with presentation (*This output/ deliverable could be beyond the 4 month contract period and subject to the time given by Ministry of Environment and Forest*).

TIME SCHEDULE

The implementation period of the assignment shall be four months from the date of award of the contract.

PAYMENT SCHEDULE

Deliverables	Payment Schedule
Site map and template of web-based database within 30 days of contract signing	20%
Interim progress report along with interactive database and linking domains on 60 th day from contract signing	20%
Rough web-based and offline database on 120 th day	20%
Final tool (web-based database) after incorporating the suggestions/ comments raised by the ICFRE	20%
One national level dissemination and demonstration workshop of the web-based and offline database with presentation (<i>This output/ deliverable could be beyond the four month contract period and subject to the time given by Ministry of Environment and Forest</i>).	20%