



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

No. 3/2018/ESIP/BCC/ICFRE/

Dated: 05/09/2022

REQUEST FOR EXPRESSIONS OF INTEREST (Individual Consultant - Selection)

COUNTRY: INDIA

NAME OF PROJECT: ECOSYSTEM SERVICES IMPROVEMENT PROJECT

Grant No.: TF0A3990

Assignment Title: Selection of Carbon Monitoring Consultant

Reference No.: IN-ICFRE-304314-CS-INDV

The Government of India has received financing from the World Bank toward the cost of the Ecosystem Services Improvement Project (ESIP), and intends to apply part of the proceeds for consulting services.

The consulting services ("the Services") include engagement of Individual Consultant (IC) for implementing one of the components of ESIP *i.e.* Strengthen capacity of government institutions in forestry and land management programs (Sub-component: Forest carbon stocks measurement, monitoring and capacity building). The consultant would need to look into the carbon sequestration/ climate change related activities of ESIP in the States of Chhattisgarh and Madhya Pradesh. The duration of the contract for this assignment will be up to 30 July 2023. Terms of Reference for selection of Consultant is given in Annexure-I.

The Indian Council of Forestry Research and Education (ICFRE), Dehradun now invites eligible individuals to indicate their interest in providing the services. Interested individuals should provide information demonstrating that they have the required qualifications and relevant experience to perform the Services. The shortlisting criteria are:

1. Educational Qualification: Postgraduate degree in Natural Resource Management/ Forestry/ Ecology/Environmental Science/Climate Change/ GIS & Remote Sensing or equivalent and desirable qualification is doctorate degree in the relevant field.
Experience: More than 10 years upto 15 years of experience in the field of forestry/ Environmental Science/ Ecology/ Climate Change / GIS & Remote Sensing.
2. Well versed with eddy covariance system/ carbon flux towers and having experience of working in government sector will have an advantage.
3. Extensive knowledge of IPCC methodologies and other methodologies for forest carbon stocks measurement and monitoring and conventions on climate change, combating desertification and biodiversity (UNFCCC, UNCCD and CBD).
4. Proven record of scientific peer-reviewed publications.

5. Knowledge of and experienced in project cycle management and well versed in logical frameworks.
6. Fluent in speaking and writing English.
7. Computer skills and the applications of carbon sequestration/ carbon measurement/ carbon monitoring, climate change modeling and GIS & Remote Sensing.
8. Ability to work effectively in a team interacts persuasively with a range of stakeholders, and travel extensively.

The attention of interested Consultants is drawn to paragraph 1.9 of the World Bank's *Guidelines: Selection and Employment of Consultants [under IBRD Loans and IDA Credits & Grants] by World Bank Borrowers [Government of India, 16 August 2017]* ("Consultant Guidelines"), setting forth the World Bank's policy on conflict of interest.

A Consultant will be selected in accordance with the Selection Based on the individual consultant selection method set out in the Consultant Guidelines.

Further information can be obtained at the address below during office hours [0900 to 1730 hours].

Expression of interest (with individual CV to be furnished as per Annexure-II) must be delivered in person or by post or by email to the address below on or before 19 September 2022 (1730 hrs):

Project Director
Ecosystem Services Improvement Project
Room No: 143
Indian Council for Forestry Research and Education
P.O. New Forest, Dehradun, Uttarakhand-248006 (INDIA)
Tel: +91-135-22248331, 2224803, 2224819, Tele Fax: +91-135-2750296
Email: projectdirectoresip@gmail.com, Website: www.icfre.gov.in

**Terms of Reference
(Carbon Monitoring Consultant)**

1. Background

The Government of India has received financing from the World Bank toward the cost of the Ecosystem Services Improvement Project. Indian Council of Forestry Research and Education (ICFRE) is one of the implementing partners of 'Ecosystem Services Improvement Project (ESIP)'. ESIP has following three components:

i. Strengthen capacity of government institutions in forestry and land management programs in Madhya Pradesh and Chhattisgarh: The objective of this component is to enhance the capacity and skills of the State Forest Departments, Forest Development Agencies, and local communities for improving management of forest and land resources and ensuring the delivery of sustainable benefits to local communities that depend on these resources. This component provides technical assistance to: (i) build institutional capacity and capability for planning and efficient delivery of forest ecosystem quality improvement and land management programs; and (ii) develop, test, and pilot nation-wide systems for measuring and monitoring forest carbon stocks.

ii. Investments for improving forest quality in selected landscapes: The objective of this component is to improve the quality and productivity of the existing forests so as to ensure sustained flows of ecosystem services and carbon sequestration, and to ensure the sustainable harvesting and value addition of NTFP to provide economic benefits to forest dependent communities that promote conservation and improve ecological connectivity between critical biodiversity areas.

iii. Scaling up sustainable land and ecosystem management (SLEM) in selected landscapes: 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, to increase national capacity for monitoring land degradation and track associated indicators, and to generate knowledge exchange on SLEM approaches.

The higher-level objective of the project is to contribute to increasing global carbon sequestration, reversing land degradation, and conserving globally significant biodiversity. This project will treat 50,000 ha of moderately dense forest and 50,000 ha of degraded open forest in selected landscapes of Madhya Pradesh and Chhattisgarh. ESIP will monitor the carbon sequestration for 100,000 hectares of forests supported and will also support to measure carbon sequestered over 1 million hectares of forests.

2. Objective(s) of Assignment

To ensure timely collection, compilation and analysis of flux related data, interpreting the field-based data along with carbon flux data to better understand the forest carbon dynamics of the ESIP areas of Madhya Pradesh and Chhattisgarh. Additionally, to ensure smooth functioning of eddy co-variance systems/carbon flux towers along with the capacity building of stakeholders and measurement & monitoring of the forest carbon stocks.

3. Scope of Services, Tasks (Components) and Expected Deliverables

(a) Scope of Services, Tasks (Components)

1. Develop, test, and pilot nationwide systems for forest carbon stocks measurement and monitoring.
2. Measurement/ recording of data on carbon flux from ESIP areas of states of Chhattisgarh and Madhya Pradesh on periodical basis
3. Compilation and analysis of carbon flux data
4. Organisation of capacity building on carbon measurement through eddy covariance system in the state of Chhattisgarh and Madhya Pradesh
5. Collection of data for measurement & monitoring of the forest carbon stocks of the project areas of Chhattisgarh and Madhya Pradesh through conducting field surveys.
6. Provide technical support for activities related to forest carbon stock measurement and monitoring.
7. Support in preparation of relevant guidelines, operational manuals, training manuals, documents for forest carbon stocks measurement and monitoring
8. Building national capacity for forest carbon stocks measurement and monitoring.
9. Support the Project Director and Project Manager in implementation of the project, preparation of progress reports and other documents related to project.
10. In addition to the above listed tasks, the consultant may be called upon to assist in any other tasks (related to project) assigned by Project Director and Project Manager of ESIP related to the core expertise of the consultant.

(b) Expected Deliverables

1. Generate data of carbon fluxes of the ESIP areas of Madhya Pradesh and Chhattisgarh.
2. Analyse the carbon flux data and quantify carbon exchanges between terrestrial ecosystems and the atmosphere of the ESIP areas of Madhya Pradesh and Chhattisgarh.
3. Contribute to developing, testing, and piloting nationwide systems for forest carbon stocks measurement and monitoring. Analysis of field-based carbon assessments along with eddy covariance flux measurements will help in better understanding of forest carbon dynamics and its productivity in broad spatial extent.
4. Contribute to installation and commissioning of a carbon monitoring system in the states of Madhya Pradesh and Chhattisgarh.
5. Identify and develop innovative methods and models for forest carbon stocks measurement and monitoring.
6. Prepare framework documents of the project related to forest carbon measurement and monitoring.
7. Prepare regular progress report of the project with respect to carbon fluxes in the forests.
8. Prepare technical reports, operational manual, training manual, technical papers and approach papers related to forest carbon measurement and monitoring.
9. Any other tasks (related to project) assigned by Project Director and Project Manager of ESIP.

Data and documents/ reports /papers etc. generated by the consultant under ESIP will be the sole property of ICFRE. Consultant should ensure to hand over print and electronic copies of data and documents/ reports /papers to the Project Manager of ESIP before completion or termination of the contract.

Performance of the consultant will be measured against assigned work plan and it will be updated every six months. Consultant will submit quarterly progress reports stating her/his accomplishments against the agreed work plan and also submit any other reports as required by the project management authorities.

4. Qualification Requirements

9. **Educational Qualification:** Postgraduate degree in Natural Resource Management/ Forestry/ Ecology/Environmental Science/Climate Change/ GIS & Remote Sensing or equivalent and desirable qualification is doctorate degree in the relevant field.

Experience: More than 10 years upto 15 years of experience in the field of forestry/ Environmental Science/ Ecology/ Climate Change / GIS & Remote Sensing.

10. Well versed with eddy covariance system/ carbon flux towers and having experience of working in government sector will have an advantage.

11. Extensive knowledge of IPCC methodologies and other methodologies for forest carbon stocks measurement and monitoring and conventions on climate change, combating desertification and biodiversity (UNFCCC, UNCCD and CBD).

12. Proven record of scientific peer-reviewed publications.

13. Knowledge of and experienced in project cycle management and well versed in logical frameworks.

14. Fluent in speaking and writing English.

15. Computer skills and the applications of carbon sequestration/ carbon measurement/ carbon monitoring, climate change modeling and GIS & Remote Sensing.

16. Ability to work effectively in a team interacts persuasively with a range of stakeholders, and travel extensively.

5. Client's Input and Counterpart Personnel

(a) Services, facilities and property to be made available to the consultant by the Client:

1. Furnished office room
2. Computer, internet facility
3. Relevant documents required for imparting services.
4. @ 1days leave per month
5. Any other services required.
6. Traveling expenditure as per Government of India norms for the consultants/ contract personnel.

(b) Professional and support counterpart personnel to be assigned by the client to the Consultant's Team: Nil

6. Duration and Location

Duration of the contract for this assignment will be up to 30 July 2023. However, performance of the consultant will be reviewed six monthly basis. In case of unsatisfactory performance

during the period, contract can be terminated by giving two months' prior notice to the consultant. The consultant will report to the Project Director and Project Manager of ESIP. Consultant will be based at ICFRE, Dehradun. However, contracts involve extensive long duration touring in the project areas under the states of Chhattisgarh and Madhya Pradesh for execution of project activities.

7. Remuneration and Payment Terms

The consolidated remuneration of the consultant will be INR 1,00,000/- per month and TDS will be deducted as per the Income Tax Norms. Travel expenditure, to the travel undertaken by the consultant for project works will be reimbursed as per the norms of the Government of India/ICFRE. No other allowances would be reimbursed or paid to the consultant.

Annexure-II

Format for Submission of Proposal of Expression of Interest for Selection of Carbon Monitoring Consultant under Ecosystem Services Improvement Project

1. Name of Candidate (in block letters) :
2. Father's Name :
3. Permanent Address :

Self Attested
Passport Size
Photograph

4. Full Postal Address for Correspondence :

5. Mobile No.: Telephone No.:

6. E-mail ID :

7. (a) Date of Birth :

(b) Age as on 31.08.2022 :

8. Nationality :

9. Educational Qualifications (Graduation onwards)

Examination passed	Subjects of Examination	Name of Board/University	Year of Passing	Division

10. Relevant Experience in the field of field of forestry/ Environmental Science/ Ecology/ Climate Change

Name of Employment/ Designation	Name of the Organisation where worked	Duration of Experience		Year of Experience	Nature of Duty Performed
		From	To		

- 11. List of Published Peer Reviewed Documents/Reports/ Papers:
- 12. List of Forestry Projects handled/ executed (in chronological order):
- 13. Training Programmes Attended:
- 14. Computer Skills:
- 15. Communication Skills:
- 16. Other Professional Skills:
- 17. Two References:
- 18. Justification as to, why he/she should be considered as a suitable candidate for engaging as a Carbon Monitoring Consultant?

Declaration

I affirm that all information supplied by me as stated above is true and correct, I also fully understand that if any stage, it is discovered that any attempt has been made by me to wilfully conceal or misrepresent the facts, my candidature is liable be summarily rejected. Curriculum vitae and self attested copies of all the necessary documents are enclosed for proof of age, essential qualifications and relevant essential experiences.

Place:

Signature of the candidate

Date: