

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. 12/2018/ESIP/BCC/ICFRE/424

Dated: 14/02/2020

REQUEST FOR EXPRESSION OF INTEREST (CONSULTING SERVICES – FIRMS SELECTION)

Country: INDIA

Name of Project: Ecosystem Services Improvement Project

Grant No.: TF0A3990

Assignment Title: Developing an interactive web-based platform & mobile application with direct access and use at the farm level with help from extension services for dissemination of SLEM best practices to the end users

Reference No.: IN-ICFRE-154302-CS-CQS

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 development of Developing an interactive web-based platform & mobile application with direct access and use at the farm level with help from extension services for dissemination of Sustainable Land Ecosystem Management (SLEM) best practices to the end users. The interactive web-based platform therefore provides information on Ecosystem Services Improvement Project (ESIP) and SLEM best practices, information on natural resource management best practices through a network of excellence, including and using the extension services networks of both agriculture and forest sectors, linking with database of SLEM practitioners and mobile app facilitates to connect stakeholders with common interests in adopting and expanding SLEM approaches.

Terms of Reference for Developing an interactive web-based platform & mobile application with direct access and use at the farm level with help from extension services for dissemination of SLEM best practices to the end users is given in Annexure - I.

The Indian Council of Forestry Research and Education (ICFRE), Dehradun now invites eligible consulting firms ("consultants") to indicate their interest for Developing an interactive web-based platform & mobile application with direct access and use at the farm level with help from extension services for dissemination of SLEM best practices to the end users. Interested consultants/consulting firms should provide information demonstrating that they have the required qualifications and relevant experience to perform the services.

The short listing criteria are:

- 1. The Consultant must have been in operation for a minimum of 05 years
- 2. Professional experience in developing web-based database systems, mobile application and and MIS
- 3. Experience of the consultant in developing interactive and user-friendly database for natural resource management, agriculture, forestry or related field
- 4. Experience in developing geoserver based application
- 5. Familiarity with natural resource management knowledge management systems
- 6. Annual turnover of consultant during last three financial years should be Rs. 2 Million and above.
- 7. The consultant must have handled at least one assignment of Rs. 1 Million and above in the last three financial years
- 8. Qualification and experience of the key professionals
- 9. Proposed methodology and work plan for implementation of the assignment

ICFRE reserves the right to accept or reject all EOIs.

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.

Consultant 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 Consultant Qualification Selection (CQS) method set out in the Consultant Guidelines.

Expression of interest must be delivered in a written form to the address below (in person, or by post or by email) on or before 05 March 2020 (1500 hrs). The document should be clearly marked as Request for Expression of Interest for Developing an interactive web-based platform & mobile application with direct access and use at the farm level with help from extension services for dissemination of SLEM best practices to the end users:

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

The following documents (as given in Annexure-2) are to be furnished with Expression of Interest by the consultant as part of the Expression of Interest:

a) Signed (and scanned, if submission via email) copy of Letter for Expression of Interest

- b) Signed (and scanned, if submission via email) copy of filled FORM 1- Details of Consultant/ Consulting Firm
- c) Signed (and scanned, if submission via email) copy of filled FORM 2- Compliance to Eligibility Criterion along with documentary evidence
- d) Signed (and scanned, if submission via email) copy of details of the experience as per FORM 3 along with documentary evidence as indicated in FORM 2
- e) Signed (and scanned, if submission via email) copy of declaration as indicated in FORM 2
- f) Qualification and experience of the key professionals to be provided in FORM 4
- g) Proposed methodology and work plan for implementation of the assignment to be provided in FORM 5

Further information or clarification on REOI can be obtained at the contact details given below during office hours [0900 to 1730 hours]:

Project Director Ecosystem Services Improvement Project Room No: 143 Indian Council for Forestry Research and Education P.O. New Forest, Dehradun, Uttrakhand-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

Developing an interactive web-based platform & mobile application with direct access and use at the farm level with help from extension services for dissemination of SLEM best practices to the end users

1. BACKGROUND

The World Bank funded Ecosystem Services Improvement Project (ESIP) supports the goals of Green India Mission by demonstrating models for adaptation-based mitigation through sustainable land- and ecosystem-management and livelihood benefits. ESIP will introduce new tools and technologies for better management of natural resources, including biodiversity and carbon stocks. ESIP will change the way of monitoring land degradation and desertification at the national level by setting up a web-based national system. ESIP is being implemented in the states of Madhya Pradesh and Chhattisgarh based on projected vulnerability of forest grids to climate change impacts.

ESIP is covering the forest quality improvement, scaling up of identified, tested, proven sustainable land and ecosystem management (SLEM) best practices. Objective of the project is to improve forest quality; land management and non-timber forest produce benefits for forest dependent communities in selected landscapes in Madhya Pradesh and Chhattisgarh.

The project has following four components:

- Strengthen capacity of government institutions in forestry and land management programs in Madhya Pradesh and Chhattisgarh
- Investments for improving forest quality in selected landscapes
- Scaling up sustainable land and ecosystem management in selected landscapes
- Project Management

Direct beneficiaries of the project include about 25,000 people, comprising of forest dwellers, small landholders, marginal farmers, and landless livestock holders at the community level in the states of Madhya Pradesh and Chhattisgarh. The indirect beneficiaries include larger population in these states which will benefit from improved forest quality and ecosystems services such as improved water flows, climate amelioration, and land productivity. At the district/block level, the Forest Development Agencies are the key beneficiaries of capacity enhancement and supporting tools. At the state level, the State Forest Departments is the main beneficiary of strengthened institutional capacities, new technologies, and enhanced carbon measurement and monitoring systems.

Indian Council of Forestry Research and Education (ICFRE) is one of the Project Implementing Agencies. Director (International Corporation) is Nodal Officer and Project Director, ESIP at ICFRE to anchor and steer the ICFRE component of the project.

The Interactive Web based platform therefore provides information on:

1. Information about Ecosystem Services Improvement project and SLEM Best Practices

- 2. Information on Natural Resource Management (NRM) best practices through a network of excellence, including and using the extension services networks of both agriculture and forest sectors
- 3. Linking with database of Sustainable Land Ecosystem Management (SLEM)practitioners
- 4. Management Information System of ESIP-ICFRE components including physical and financial progress of the project activities with analytical reporting formats.
- 5. Linked dashboard of mobile application ESIP-ICFRE for geotagging photographs of project activities
- 6. Interactive interface for Best Practices on sustainable land & ecosystem management (SLEM)
- 7. The Web based platform should promote and mainstream NRM best practices through a network of excellence, including and using the extension services networks of both agriculture and forest sectors.
- 8. ESIP Mobile app should be ease to use interface facilitates to connect stakeholders with common interests in adopting and expanding SLEM approaches.

2. A PRECISE STATEMENT OF OBJECTIVES

- 1. Developing an interactive web-based platform and mobile application with direct access and use at the farm level with help from extension services.
- 2. To promote and mainstream NRM best practices through a network of excellence, including and using the extension services networks of both agriculture and forest sectors.
- 3. Providing links and virtual access to repositories of SLEM best practices and analytical reports.
- 4. Developing Project Management Information System & real time database to capture physical and financial activities of project
- 5. Developing a community of practice by connecting stakeholders with common interests in adopting and expanding SLEM approaches.
- 6. Organization and implementation of learning events at the interface of the community, farm and common lands through the web-based platform.
- 7. Deployment of web based platform including mobile application online with maintenance

3. AN OUTLINE OF THE TASKS TO BE CARRIED OUT (SCOPE OF THE SERVICES)

The main objective of the assignment is to develop an interactive web-based platform & mobile application, with direct access and use at the farm level with help from extension services for dissemination of best practices to the end users. The web-based platform should have detail information on Ecosystem Service Improvement Project (ESIP) and Sustainable Land & Ecosystem Management (SLEM) Best Practices i.e. location, activities, usefulness, applicability etc. It should have database of SLEM best practitioners. It should also have

Project Management Information System (MIS) to capture the physical and financial progress with analytical reports. Web based platform should promote and mainstream NRM best practices through a network of excellence, including and using the extension services networks of both agriculture and forest sectors. It also has interface to solve and clear doubts of stakeholders. ESIP Mobile app should be ease to use interface facilitates to connect stakeholders with common interests in adopting and expanding SLEM approaches. Mobile App should also capture geotagging photographs of project activities and beneficiaries database. Web based platform also have dashboard of Mobile application to show real time progress. It would also deploy web-based platform online and maintenance and update of web server, database server etc.

Following tasks to be carried out:

- 1. To develop online Web portal of ESIP and should provide online space to upload required information for ESIP (About Project, project location, activities, others, MIS, links etc)
- 2. It should help to promote and mainstream SLEM best practices through a network of excellence, including and using the extension services networks of both agriculture and forest sectors
- 3. Database of Sustainable Land Ecosystem Management (SLEM)practitioners
- 4. To develop an interface to clear queries and doubts of users regarding SLEM Best practices.
- 5. To develop Project Management Information System with login id and restricted access at different level to input physical and financial progress of project, it should also have report generate facility in different formats and periodicals.
- 6. To develop a user friendly multilingual ESIP Mobile application with default "Guest" and restricted "Member" login facility. "Guest" member could access information about SLEM Best practices and clear their doubts to interact with experts while "Member" could be able to send the progress of activities with geotagging photographs.
- 7. To Develop a database with real time dashboard embedded on web portal to capture the information send by the Mobile application.
- 8. The database should have a public interface where any user can access data information/report as marked 'public' by administrator
- 9. Deployment of database server, web server and all link related to web portal.
- 10. To organize training programmes on the use of web portal and mobile application to the concerned department and officials.

4. SCHEDULE FOR COMPLETION OF TASKS: The implementation period of the assignment shall be three months from the date of award of the contract.

5. DATA, SERVICES AND FACILITIES TO BE PROVIDED BY THE CLIENT:

Relevant documents (Project Appraisal Document, Project Implementation Plan, Progress Report, Audit Reports) required for developing interactive web-based platform.

6. FINAL OUTPUTS (i.e., REPORTS, DRAWINGS, etc.) THAT WILL BE REQUIRED OF THE CONSULTANT

- 1. Inception report and template of Interactive web-based platform and Mobile application within 30th days of contract signing.
- 2. Interim progress report along with demonstration of test website with MIS & mobile application and linking domains on 60^{th} days from the contract signing.
- 3. Final web-based platform after incorporating the suggestions/ comments raised by the experts, consultants and officials of ESIP-ICFRE on 90th days from contract signing.
- 4. Detailed Training Manuals of all modules (Mobile App, MIS etc) for the users.
- 5. Source code, Database script, content and important documentation to the client.
- 6. Adequate support in Web application hosting, web server maintenance, database server maintenance and backup of database
- 7. Schedule of training programmes for trainers, consultants, experts on the use of Web based platform and Mobile application

7. COMPOSITION OF REVIEW COMMITTEE TO MONITOR CONSULTANTS WORK:

- Project Director, ESIP, ICFRE: Chairman
- Head, Information Technology Division, ICFRE: Member
- Scientist (2 Nos.), Information Technology Division, ICFRE: Member
- Project Manager, ESIP, ICFRE: Member
- Project Coordinator, ESIP, ICFRE: Member
- Technical Manager, ESIP, ICFRE: Member
- Monitoring and Evaluation Consultant, ESIP, ICFRE: Member Secretary

8. PROCEDURE FOR REVIEW OF PROGRESS REPORTS, INCEPTION, STATUS, FINAL DRAFT AND FINAL REPORTS

The review committee constituted for monitoring of works of consultant shall periodically review the progress of the consultant against the deliverables.

9. LIST OF KEY PROFESSIONAL POSITIONS WHOSE CV AND EXPERIENCE WOULD BE EVALUATED

The Consultant must have been in operation for a minimum of 05 years with professional experience in developing web-based database systems, mobile application and MIS. Experience should include developing interactive and user-friendly database for natural resource management, agriculture, forestry or related field. Experience in developing geoserver based application. Familiarity with natural resource management knowledge management systems.

| S. No. | Key Position | Area of Specific | Minimum Qualification and Professional |
|--------|-----------------|--------------------|------------------------------------------|
| | | Expertise desired | Experience Desired |
| | Team Leader | Expertise in | • B. Tech./ MCA/ M.Sc. in Computer |
| | | handling of | Science or IT |
| 1 | | project related to | • Minimum 05 years of experience in |
| | | web-based | developing databases related to natural |
| | | system(s) and | resource management, rural livelihood, |
| | | mobile app as | land degradation and science & |
| | | team leader | 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. |
| | | | Proven experience in developing Mobile |
| | | | application |
| 2 | Software Expert | Expertise in | • B. Tech./ MCA/ M.Sc. in Computer |
| | | developing web- | Science or IT |
| | | based system(s) | • Minimum 05 years of experience in |
| | | and mobile app | developing web-based applications. |
| | | | • Experience in developing and |
| | | | maintaining virtual, interactive web- |
| | | | based database systems. |
| | | | • Experience in developing Geo server- |
| | | | based application using leaflet, mongo |
| | | | DB or similar) |
| | | | • Experience in developing and |
| | | | maintaining Mobile application and |
| | | | linking with remote server/ cloud |
| | | | services. |
| 3 | Networking | Expertise in | • B. Tech./ MCA/ M.Sc. in Computer |
| | Expert | developing and | Science and IT |
| | | maintaining | • Minimum 05 years of experience in |
| | | web-based and | developing and maintaining web-based |
| | | offline database | and offline database systems. |
| | | system | • Experience in configuring webserver, |
| | | | geoserver and database server |
| | | | • Experience in synchronizing mobile |
| | | | application with remote server/ cloud |
| | | | services |

Details of key professionals are as under:

The successful Consultant (consulting firm) may engage more experts if required to fulfill the assignment in a time bound manner on his own without any additional financial burden implicated on Client (ICFRE). Sub-contracting shall not be permitted.

Annexure-2

Documents to be furnished with Expression of Interest

The Expression of Interest for Developing an online National Reporting Database Portal for Capturing Trends and Status of Key Progress and Performance Indicators on Land Degradation and Desertification must be submitted along with the following documents:

- a) FORM 1: Details of Consultant/ Consulting Firm
- b) FORM 2: Compliance to Eligibility Criteria
- c) FORM 3:Credentials/ Past Experiences for projects cited under eligibility criterion 4
- d) FORM 4: Qualification and experience of the key professionals
- e) FORM 5: Proposed methodology for implementation of the assignment

FORM 1: Details of Consultant/ Consulting Firm

| Sect | Section1: About the Consultant/ Consulting Firm | | |
|------|---------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|--|
| 1 | Name of Consultant/ Consulting Firm | | |
| 2 | Details of the Consultant/ Consulting Firm | Address of the Registered Office: Telephone: Facsimile: Website: | |
| 3 | Information about Consultant/ Consulting Firm | Year of Establishment: Status of the Consultant/ Consulting Firm (Govt/Public Ltd./Private Ltd./LLP/Others): | |
| 4 | Name and designation of the person authorized to make commitments to the O/o Project Director, ESIP, ICFRE | Name: Designation: E-mail: Contact Number: | |
| 5 | Annual Turnover of the last three Financial Years | Financial YearsAnnual Turnover (Indian Rupees)2016-172017-182018-192018-19 | |

| 6 | Number of Personnel | • Total employee strengths of the Consultant/ Consulting Firm as on 31.12.2019 | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|-------------------------------------------------------------------------------------------------------------------|--|
| | | • Number of professionally qualified key professionals working in the area related to Natural Resource Management | |
| Section 2: Consultant/ Consulting Firm needs to mention its core expertise areas and any | | | |
| other relevant details/experience of the Consultant/ Consulting Firm in a descriptive format. Consultant/ Consulting Firm needs to mention its Technical and managerial capability for | | | |
| executing each component of the indicative scope of works as per Terms of Reference. | | | |
| Discon movide details (in not more than 2 mones): | | | |

Please provide details (in not more than 2 pages):

FORM 2: Compliance to Eligibility Criteria

- The Consultant must have been in operation for a minimum of 05 years
- Professional experience in developing web-based database systems, mobile application and MIS
- Experience of the consultant in developing interactive and user-friendly database for natural resource management, agriculture, forestry or related field
- Experience in developing geoserver based application
- Familiarity with natural resource management knowledge management systems
- Annual turnover of consultant during last three financial years should be Rs. 2 Million and above.
- The consultant must have handled at least one assignment of Rs. 1 Million and above in the last three financial years
- Qualification and experience of the key professionals
- Proposed methodology and work plan for implementation of the assignment

| | Eligibility Criteria | Compliance (Yes/ No) | Documentary Evidence Provided |
|---|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | The Consultant/ Consulting Firm must be a registered legal entity and should have been in existence for at least 05 years as on 31 December 2019 with professional experience in developing web-based database systems, mobile application and MIS | | Copy of Certificate of registration issued by relevant authority in country of establishment |
| 2 | Average annual turnover in last 3 years should be not be less than Rs. 2 Million. In case of Joint Venture, the requirement needs to be fulfilled by the lead Partner. | | Statutory Auditor's certificate (for FY 2016-17, FY 2017-18, FY 2018-19) that provides the information explicitly as per the specific requirement of the criterion. OR Financial statements duly certified by the Chartered Accountant (for FY 2016-17, FY 2017-18, FY 2018-19) clearly indicating the turnover of the firm |
| 3 | The Consultant/ Consulting Firm must have handled at least one assignment of Rs. 1 Million for developing web based database system, mobile application and MIS for natural resource management, agriculture, forestry or related field in the last three financial years | | Statutory Auditor's certificate that provides the information explicitly as per the specific requirement of the criterion OR Self-certification from authorized signatory on letter head of Consultant/ Consulting Firm stating information explicitly as per the specific requirement of the criterion |

| 4 | Experience developing web | Details of the experience should be |
|---|------------------------------|---------------------------------------|
| | based database system, | submitted as per format in FORM 3 |
| | mobile application and MIS | along with the following details: |
| | for natural resource | 6 |
| | | For completed projects: |
| | management, agriculture, | a. Copy of Purchase Order / Contract |
| | forestry or related field in | AND |
| | the last 5 years | b. Copy of the Completion Certificate |
| | | from the client. |
| | | OR |
| | | Certificate from authorised signatory |
| | | on letter head of Consultant/ |
| | | Consulting Firm indicating that the |
| | | project has been successfully |
| | | completed. |
| | | For on-going projects: |
| | | a. Copy of Purchase Order / Contract |
| | | AND |
| | | b. Certificate from authorised |
| | | signatory on letter head of |
| | | Consultant/ Consulting Firm |
| | | indicating the activities completed |
| | | under the assignment and the |
| | | amount of payment received |
| 5 | Other relevant documents | |
| 3 | Other relevant documents | |
| | | Consulting Firm is not black- |
| | | listed by any Government |
| | | agencies in India |
| | | b. Declaration that the Consultant/ |
| | | Consulting Firm does not have |
| | | any conflict of interest in terms of |
| | | taking any assistance/ support |
| | | from individual/ ICFRE who have |
| | | been part of ESIP or the EOI |
| | | publication process |

| Assignment Name: | Country: | |
|-----------------------------------------------|------------------------------------------------|--|
| | Location within the country | |
| Name of Client: | Address: | |
| | | |
| Name of the Legal Entity in whose name | Duration of assignment (months): | |
| the contract is: | | |
| | | |
| No. of man months of the assignment: | Start date (Month/year): | |
| | Completion date (Month/year): | |
| Approx. value of the overall | Approx. value of the services provided by your | |
| contract (in Indian Rupees): | firm under the contract (in Indian Rupees): | |
| | | |
| Name of associated organizations, if any: | Role of Consortium member: | |
| Narrative description of the Project: | | |
| 1 J | | |
| | | |
| | | |
| Detailed Scope of services, coverage and rele | evance to this project: | |
| | | |
| | | |
| | | |
| Copy of Purchase Order / Contract attached? | YES / NO | |
| | | |
| Copy of completion certificate/ Certificate | YES/NO | |
| from authorized signatory indicating the | | |
| current status of the project attached? | | |

FORM 3: Credentials/ Past Experiences for projects cited under eligibility criterion 4 of Form 2 (Maximum 2 pages per credential)

<u>FORM 4</u>: Qualification and experience of the key professionals

<u>FORM 5</u>: Proposed methodology and work plan for implementation of the assignment