

Rajasthan Agricultural Competitiveness Project

REQUEST FOR EXPRESSION OF INTEREST

FOR

**Hiring Services of Software Providers for Preparation of
Management Information System (MIS) under RACP**

July, 2017

Rajasthan Agricultural Competitiveness Project
Second Floor, SIAM Academic Block, Durgapura, Tonk Road, Jaipur-302018 (Rajasthan)
Telephone: 01412554218/2554215 Fax : 01412554214 Email; pd@racpmis.com
Website: <http://www.agriculture.rajasthan.gov.in/content/agriculture/en/RACP-dep.html>

RAJASTHAN AGRICULTURAL COMPETITIVENESS PROJECT

REQUEST FOR EXPRESSION OF INTEREST (REOI)

Hiring Services of Software Providers for Preparation of Management Information System under RACP

REOI No. IN-PMU-RACP-1684-CS-CQS /2017-18/3635

Date: 3.7.2017

The Rajasthan Agricultural Competitiveness Project Management & Implementation Society (RACP-MIS) has received credit (Credit No.5085 IN) from World Bank towards the cost of RACP and intends to apply part of the proceeds for consultancy services.

The Rajasthan Agricultural Competitiveness Project Management & Implementation Society now invites eligible **Software Providers for Preparation of Management Information System (MIS) under RACP** to indicate their interest in providing the Services. Interested Agencies should provide information demonstrating that they have the required qualifications and relevant experience to perform the Services. The details of EOI including Scope of Work may be viewed on link <http://www.agriculture.rajasthan.gov.in/content/agriculture/en/RACP-dep.html>

The attention of interested agencies 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 [World Bank's Procurement Guidelines January 2011] ("Consultant Guidelines"), setting forth the World Bank's policy on conflict of interest.

Software Providers may associate with other Agencies in the form of a joint venture or a sub consultancy to enhance their qualifications. Software Providers will be selected in accordance with the CQS method set out in the Consultant Guidelines.

Expression of Interest must be submitted latest by 31.07.2017 at 15.00 PM at the address given below.

-sd-

(Dr. Om Prakash)

Project Director

Rajasthan Agricultural Competitiveness Project

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Durgapura, Jaipur - 302018

Phone: 0141 - 2554215, 2554218

E-mail: pd@racpmis.com

REOI- Hiring Services of Software Providers for Preparation of Management Information System under RACP

Brief Background Information

1. The Government of Rajasthan (GOR) is executing & implementing the World Bank assisted Rajasthan Agricultural Competitiveness Project (RACP) (Credit No. 5085-IN) in the state of Rajasthan.
2. Rajasthan Agriculture Competitiveness Project Management and Implementation Society (RACPMIS) is a registered Society which is implementing the World Bank funded Rajasthan Agriculture Competitiveness Project (RACP).
3. The Project Development Objective of the RACP is to establish the feasibility of sustainably increasing agricultural productivity and farmer incomes through a distinct agricultural development approach by integrating agriculture water management and agricultural technology, farmer organizations and market innovations in selected locations across the eight agro-ecological zones of Rajasthan.
4. The guiding principles under the project are: sustainable and efficient use of water resources, including improved on-farm water use efficiency, reduced water-intensive cropping patterns, and using the resultant savings of water from agriculture sector for economic purposes outside of agriculture in support of the state's water policy objectives; increased private sector participation in the development of value chains in processing and marketing in support of the state's agro-processing and agri-business policy; and improved public sector capacity in delivering agriculture support services.
5. The project will be executed and implemented in about seventeen (17) clusters representing eight (8) "Agro-Ecological Zones (AEZs)" of the state of Rajasthan with application of location-specific menu of approaches and interventions. In all the clusters except in Mokhampura, implementation of activities will be carried out by the concerning line departments with the support of Non-Governmental Organization (NGO).
6. Each cluster will have a defined theme and demonstration objective. The relevant hydrological catchment area / command area will provide basis of water resource management activities. Each of the clusters will address sufficient quantity of cultivation for the lead commodity identified and selected for the "Value Chain Development (VCD)".
7. Key Project Interventions are 1. Improved Water Use Efficiency; 2. Technology Transfer and Market Led Advisory Services; 3. Livestock Support Services for Small Ruminants (Goats); 4. Agri Business Promotion Facility; 5. Market Information and Intelligence Services

8. Management Information System:

RACP is looking for Software Service Providers to provide integrated Software as a Service (SAAS). The software will act as a powerful Information collection, monitoring, evaluation and decision support tool for RACP. The software will be useful for the effective Monitoring and Implementation of the entire project. The software will be hosted and maintained by the Service Provider and RACP will pay for software development. All the required functions of MIS will be available through the software. Service and hosting, upkeep and maintenance are service provider's responsibilities. Service Provider should setup the software for use after making required changes if any. Users will access the software over web, after getting the required authentication from the authority, for performing the required functions.

Purpose of the Software Services is to facilitate easier monitoring of all the Project Interventions at cluster level for decision and support purpose and also to monitor project related activities like Procurement, Recruitment, Training, fund flow, social development, environment support etc. The overall supervision and monitoring of the project at PMU, PIU and DPMU level.

In the implementation of software, a national or international firm will be hired to develop an automated simplified tool to support the work of Rajasthan Agriculture Competitiveness Project (RACP) operational area to perform the different processes: store the data of all farmers, identifying the beneficiaries, activities related to all 6 line departments, compliance monitoring, payment cyclical generation, decision support system and other support for the overall administration of the project. Upon this exercises, a full fledge MIS needs to be developed to support the operation of this project in all 17 clusters. Finally, the firm will also provide technical support and maintenance of the MIS software application in all points where the system will be installed i.e. at PMU, PIU, DPMUs and all the clusters.

The following are the key points in the objective of Consultancy

1. Develop tools and mechanism to collect and analyze data necessary for the design for software required for RACP.
2. Identification of the modules developed under software for MIS/ICT/ABPF.
3. Design and development of a modern, web enabled, comprehensive software solution to provide accessibility and management for Management Information System (MIS), Information Communication Techniques (ICT) and Agri-Business Promotional Facility (ABPF) for Rajasthan Agriculture Competitiveness Project (RACP) for realistic data collection, monitoring, evaluation and decision making of project activities under RACP.
4. Implement the approved design of software after finalization of modules.
5. Install and operationalize the approved software in all 17 clusters.
6. Provide the training to the RACP officials for use, perform operation of software.
7. Provide technical support up to the project period i.e. March, 2022.

QUALIFICATION CRITERIA

1. The applicant Software Provider must be a legal entity registered in India under Companies Act/ Partnership Firm/ LLP/ Proprietor with a registered office in India and must have been operational in India for at least past five years.
2. The applicant Software Provider should be a specialized consultancy firm having proven track record of at least 5 years in handling similar projects of Management Information System. In case of joint venture, lead and partner agency both should have proven track record of at least 5 years in handling similar projects of Management Information System.
3. The applicant organization should not have been Black listed by any Govt. Authority or by any Donor Agency.
4. The applicant organization should have certified copies of Audited Annual Accounts and Annual Audit reports for the last three (03) financial years ended on March 31, 2016.
5. The applicant organization Should have their I.T. returns for the last three (03) financial years ended on March 31,2016
6. The applicant organization should have minimum annual turnover of INR 300 Lakh in last three financial years from the year 2013-14 to 2015-16. In case of joint venture, the minimum turnover of lead agency and partner agency should be INR 300 Lakh and INR 100 lacs for each of the three financial years from the year 2013-14 to 2015-16.
7. The applicant organization should have well qualified and trained staff. The agency should submit the list of their employees along with the valid proof of their educational qualification and experience.
8. The applicant organization should have their own office in Jaipur or should set up their own office with well-equipped infrastructure, in Jaipur, Rajasthan, if it get selected as a consultant in RACP.

REOI- Hiring Services of Software Providers for Preparation of Management Information System under RACP

INSTRUCTIONS TO THE APPLICANTS

1. Applicant(s) must read all the "instructions to applicants" very carefully. Applicant(s) must submit its expression of interest (EOI) **strictly in the prescribed format only**. *Experience of working in Rajasthan will have to be provided separately in the same format (in form no 07&08).*
2. The objective is to solicit EOI from eligible agencies for consideration of short-listing,
3. This request for expression of interest (REOI) expressly intends to qualify the suitable submissions of expressions of interests for shortlisting exclusively on the basis of details and information furnished by the applicant(s) without being influenced by any other extrinsic factor.
4. Applicant(s) must note that this REOI does not intend to invite any curriculum- vitae (CV) of any professional' or expert. Applicants should note that the EOI submitted should not contain any CV or any proposal for professionals with or without names in any way.
5. Applicant(s) must ensure that the EOI submitted should include only required documents, details, and information. In no case, there should be an attempt to make it a bulky document with undesired documents and other unwanted details. The project is not obliged to consider such details that are not related with this REOI.
6. Details of project(s)/past experience should be provided **strictly in the "Prescribed Format" along with supporting documents/ evidence substantiating the experience of the applicant(s)**.
7. Applicant(s) must ensure that each page of the EOI submitted in the prescribed format as well as all enclosures and annexures are signed by **the duly authorized signatory of the applicant**. All signatures must be dated.
8. All witnesses and sureties shall be person of status and probity and their full names and addresses shall be stated below their signature. Applicant(s) must furnish the "Power of Attorney" in prescribed format for the authorized signatory specifying acts, deeds and things as may be necessary in connection with the EOI. The "Declaration" submitted by the applicant(s) must be in accordance with the prescribed form and must be signed by the authorized signatory with competent power of attorney.
9. Any Software Provider applying as Individual or as Joint Venture should have minimum five years' experience separately.
10. The EOI submitted by Software Provider will be evaluated/shortlisted on the basis of evaluation criteria.
11. Applicant(s) may clarify their doubt(s) (if any) by contacting the authorized official(s) of the project communicating through telephone, facsimile or email.

REOI- Hiring of Services of Software Providers for Preparation of Management Information System under RACP

**Form No.- 01
APPLICANT'S EXPRESSION OF INTEREST**

(Applicants- must submit **their** expression of interest (EOI) on official letter head of the organization enclosed in sealed envelope)

To,

**The Project Director
Rajasthan Agricultural Competitiveness Project (RACP),
Second Floor, Academic Block, SIAM Campus Durgapura, Jaipur-302018 (Rajasthan)**

Subject: RACP-Expression of Interest (EOI) for Hiring Services of Software Providers for Preparation of Management Information System under RACP

Reference: Your Request for Expression of Interest (REOI) No. (*Insert EOI NO. here*) published on (*insert date*)

Dear Sir,

We (name of organization) intend to submit an expression of interest (EOI) as **Software Providers for Preparation of Management Information System under RACP** in response to the request for Expression of Interest (REOI) published on (*insert date here*).

We, the undersigned applicant, have read and examined in detail your solicitation of expression of interest (EOI). We are submitting our Proposal in association with [*Insert full name and address of associated, if any*].

We are submitting all the required credentials/information as prescribed in your solicitation of EOI in prescribed formats.

We confirm that the information contained in this expression of interest or any part thereof, including its exhibits, and other documents submitted or to be submitted to RACP is true, accurate, verifiable and complete. This response includes all information necessary to ensure that the statements therein do not in whole or in part mislead the project in its short-listing process. If any of the information provided here is found to be misleading the short listing process or unduly favours our Agency in the short listing process, we are liable to be disqualified and rejection from the shortlisting.

We understand that this expression of interest is liable to be rejected from the shortlisting process if it is revealed that there exists any conflict of interests.

It is hereby confirmed that I/We are entitled to act on behalf of our Agency and empowered to sign this document as well as such other documents, which may be required in this connection.

Dated this, _____ Day of July, 2017

(Signature)
(In the capacity of)
Duly authorized to sign the EOI for and on behalf of
(Name and Address of Market Resource Agency) Seal/Stamp

REOI- Hiring of Services of Software Providers for Preparation of Management Information System under RACP

**Form No.- 02
POWER OF ATTORNEY**

FORMAT FOR POWER OF ATTORNEY FOR SIGNING OF EOI
(To be executed on Non Judicial Stamp paper of appropriate value)

Power of Attorney

Know all men by these presents, we (name and address of the registered office) do hereby constitute, appoint and authorize Mr / Ms(name and residential address) who is presently employed with us and holding the position of as our attorney, to do in our name and on our behalf, all such acts, deeds and things necessary in connection with or incidental to our "EOI for Hiring Services of Software Providers for Preparation of Management Information System under RACP.

We hereby agree to ratify all acts, deeds and things lawfully done by our said attorney pursuant to this Power of Attorney and that all acts, deeds and things done by our aforesaid attorney shall and shall always be deemed to have been done by us.

For -----

(signature)

(Name, Title and Address of the Attorney)

Note:

(1) The mode of execution of the Power of Attorney should be in accordance with the procedure, laid down by the applicable law (2) Separate power of Attorney in case of associate in favour of same signatory will be required.

REOI- Hiring of Services of Software Providers for Preparation of Management Information System under RACP

Form No.-03 - PARTICULARS OF APPLICANT ORGANIZATION			
Name of Applicant Organization			
Address (Head Office and / or Registered Office)			
Phone Number(s)		FAX	
Email		WEBSITE	
Authorized Contact Person			
Name			
Designation			
Address			
Office Telephone Number(s)	Cellular(Mobile) Number(s)	FAX Number(s)	
Email		Website	
Engagement of Partner/ Associate Partner AGENCY			
Partner Agency Name	Partner's Experience (No. of Years)	Period of Association With Applicant Agency (Years)	Brief Description of Capacity of Engagement/ Association

Applicant must furnish brief profile of the engagement partner/associate partner Agency including its post-qualification experiences and its roles and responsibilities in not more than 100 words.

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Form No. - 4 LEGAL STATUS			
Establishment/Incorporation Date (for applicant organization)			
Registration Authority	Date of Registration	Registration Number(s)/Reference	Registration Under Act/Rules/Provision
<i>Applicant must furnish the Memorandum of Association, legally valid Registration certificate issued by the competent authority and it must be annexed accordingly.</i>			
Service Tax Registration			
Registration No.	Registration Authority	Validity of Registration	Registration Certificate/Document
<i>Applicant must furnish the legally valid Service Tax Registration document (certificate etc.) issued by the competent authority and it must be annexed accordingly.</i>			
Income Tax			
PAN Number		Income Tax Authority (Circle)	
<i>Applicant must enclose the PAN number document.</i>			
FCRA Registration			
Registration No.	Registration Authority	Validity of Registration	Registration Certificate/Document

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Form No. -05- ANNUAL FINANCIAL CAPACITY (TURNOVER) STATEMENT

(The Applicant(s) shall necessarily furnish details about its Annual Turnover for past three (03) years based on the Audited Annual Financial Statements)

Financial Year	ANNUAL TURNOVER (INR)		
	Applicant (Lead) Agency (Name_____)	Associate Partner Agency (Name_____)	Associate Partner Agency (Name_____)
2015-16			
2014-15			
2013-14			
<p><i>1. Applicant(s) must enclose Certified Copy of Audited Annual Accounts and Annual Audit Reports for the last Three (03) Financial Years ended on March 31, 2016 ,</i></p> <p><i>2. Applicants, including each associate partner(s) Agency must furnish financial information supported by audited statements. Each applicant or partner Agency shall fill in this form. If necessary, use separate sheets to provide complete information.</i></p>			

Form No - 6 STAFFING STATUS			
Contractual Staff			
Name	Qualification	Experience	Period of Association with organization
Part Time Staff			
Name	Qualification	Experience	Period of Association with organization

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Form No.-07 - On Going Assignments (Point No.2 of Qualification Criteria)					
Title of Assignment	Name of Client/ Organization	Period From - end date	Total Value of Assignment	Nature of Assignment	Details (<i>Documentary Evidence</i>)
Form No.-08 Assignments Completed During Past five Years (Point No.2 of Qualification Criteria)					
Title of Assignment	Name of Client/ Organization	Period From - end date	Total Value of Assignment	Nature of Assignment	Details (<i>Documentary Evidence</i>)
Brief Description of Experience (about 100 words only)					
<i>Applicant organization will necessarily furnish the documentary evidence (contract award letter) issued by the client clearly specifying terms & conditions of the contract along with the performance certificate.</i>					

REOI- Hiring of Services of Software Providers for Preparation of Management Information System under RACP

Form No.-09 : DECLARATION BY THE APPLICANT

(Declaration must be on the official letter head duly signed by the authorized/competent signatory)

1. We hereby confirm that we (name of the applicant Organization) are interested in submission of our expression of interest (EOI) for the hiring of **Software Provider** for RACP.
2. We confirm that all information contained in this, Expression of Interest (EOI) and subsequently provided / clarified are in good interest and faith. All the information provided herewith is genuine and accurate.
3. We understand that this is not an agreement and is not an offer or invitation to enter into an agreement of any kind with any party.
4. We hereby confirm that our **Agency** is independent from the project and there is no Conflict of interest. We also confirm that our organization is completely independent of the entity (RACPMIS). Neither the **Agency** nor its Partners or Associates have any financial interest in the business of the RACPMIS.
5. We confirm that no partner of the organization or any qualified employee of the organization is related to any member of the Governing Body/Executive Committee/ or any of the senior management of the RACP-MIS and RACP. The term "Relative" here means husband, wife, brother, or sister, or any lineal ascendant or descendant.
6. We confirm that our organization has never been and is not under a Declaration of Ineligibility for corrupt or fraudulent practices or blacklisted by any Govt. Authority or donor agency
7. We confirm that in case of any further changes which affect this declaration at a later date; we would inform the project appropriately.

Dated this, Day of July, 2017

(Signature)

(In the capacity of)

Duly authorized to sign the EOI for and on behalf of

(Name and Address of **Software Provider**) Seal/Stamp

LIST OF ENCLOSURES/ ANNEXURES

S. N.	Brief Description of Enclosure/Annexure	Enclosure/Annexure Reference Number	Page Number
1			
2			
3			

Tentative Scope of Assignment – for information only

Brief Description of the Project:

1. Project Development Objective (PDO):

The proposed Project Development Objective (PDO) is to establish the feasibility of sustainably increasing agricultural productivity and farmer incomes through a distinct agricultural development approach by integrating agriculture water management and agricultural technology, farmer organizations and market innovations in selected locations across the ten agro-ecological zones of Rajasthan. The aim is for the state to help farmers get more rupees per unit of water in compensation for farmers using fewer units of water.

2. The guiding principles under the project are:

- (a) sustainable and efficient use of water resources, including improved on-farm water use efficiency, reduced water-intensive cropping patterns, and using the resultant savings of water from agriculture sector for economic purposes outside of agriculture in support the state's water policy objectives;
- (b) increased private sector participation in the development of value chains in processing and marketing in support of the state's agro-processing and agri-business policy; and
- (c) improved public sector capacity in delivering agriculture support services.

3. Project Beneficiaries

Primary beneficiaries are smallholder farmers with an actual or potential commercial outlook, brought together through collective action towards achieving economies of scale, e.g. water user groups i.e. Farmer's Organizations, canal water management communities, livestock herders/goat farmers, farmer producer organizations etc. of watershed/aquifer/command areas and villages of the cluster. In addition, secondary beneficiaries will comprise other farmers obtaining better access to water through improved groundwater recharge or better water distribution at the tail-end of command areas, as well as agricultural labourers through increased wages.

The project targets to sustainably increase the productivity of natural resources and farmer income through efficient surface as well as ground water management, crop management and animal husbandry practices as well as improved produce marketing. Project activities including planning and implementation of activities in RACP clusters in 17 districts of Rajasthan will be undertaken by the concerning line departments i.e. Watershed Development and Soil Conservation, Ground Water, Water Resources, Agriculture, Horticulture and Animal Husbandry Departments.

The details of clusters are as under:

S. No.	Name of Cluster	Panchayat Samiti	District
1.	Mokhampura	Dudu	Jaipur
2.	Ladnu	Ladnu	Nagour
3.	Bansur	Bansur	Alwar
4.	Dooni-Deoli	Deoli	Tonk
5.	Bari	Bari	Dholpur
6.	Manoharthana	Manoharthana	Jhalawar
7.	Kushalgarh	Kushalgarh	Banswara
8.	Pisangan	Pisangan	Ajmer
9.	Bonli	Bonli	Swaimadhapur
10.	Sangod	Sangod	Kota
11.	Gudha	Hindoli	Bundi
12.	Orai+Bassi	Chittorgarh	Chittorgarh
13.	Jakham	Dharyawad	Pratapgarh
14.	Z-Distributary	Sriganganagar	Sriganganagar
15.	Phoolasar	Kolayat	Bikaner
16.	Kheruwala	Jaisalmer	Jaisalmer
17.	Palaiitha	Anta	Baran

4. PDO Level Results Indicators

Key performance indicators (KPIs) will measure (a) reduction in water used in agriculture; (b) increase in water use efficiency in agriculture; (c) increase in agricultural productivity; (d) increase in gross margins from crops and livestock products; (e) increase in the share of producer price in wholesale price; and (e) farmer satisfaction with project deliverables.

Intermediate Level Key Indicators are (a) Increase in ground water recharge; (b) Reduced siltation in the catchment; and (c) increasing the efficient use of conserved moisture.

5. Scope of Assignment

Although detailed scope of work to be made available in Terms of Reference (TOR) but following important activities, including others but not limited to, are to be performed by Software Provider.

1. RACP would require a web based Management Information System (MIS) software including MIS module, Information Communication Technology (ICT) module, Monitoring & Evaluation (M&E) module, Procurement module, Finance module, which would be customized as per the RACP requirements.
2. The above web based MIS software will be developed in Java, Node JS, Mongo DB, Android, IOS or other advance technology. All the modules should be original (genuine). For preparation of the modules the Software provider should consult Project Monitoring Unit including Agribusiness Promotional Facility, Monitoring and Evaluation Agency, Internal Auditor and Line departments.
3. The Service Providers is required to provide fully integrated range of MIS functions which are required for management.
4. The scope of services is not exhaustive and can be further decided after discussions and consultation with the selected firm

5. Technical Requirements for MIS & ICT Modules:

The proposed software should contain the following technical Requirements or functionalities, but not limited to:

- a. User Responsive Web Design technologies,
- b. Implement data validation for both client and server
- c. Don't Repeat Yourself (DRY) principle in coding is recommended
- d. Implement Search, Create, Read, Update, Delete (SCRUD) operations
- e. Adopt Role-Based Access Control (RBAC) to authorize system resources allocation to users based on roles.
- f. Ensure compatibility to all the browsers (Mozilla Firefox, Internet Explorer, Google Chrome, Opera, Safari, etc.);
- g. Software should be scalable and upgradeable as and when the number of users, clusters, activities and contents increases;
- h. Maintain and ensure that the web-based software system supports maximum concurrent users;
- i. The portal should run optimally (page load time below 30 seconds) on a PC connected to a network with minimum bandwidth of 512 kbps;
- j. Image and other content customization features should be inbuilt within the system (if any) to allow standard content sizes (e.g. standard image sizes for easy uploading and processing.
- k. The web-based software should have provision to support bilingual (English and Hindi) and interactive maps. This requirement can be provisioned both from front-end APIs and backend database system design by incorporating appropriate UTF based locale support.
- l. The web-based software should have the link to connect/interface with Global Positioning System (GPS), Geographical Information System (GIS) for realistic monitoring, Systematic Tracking of Exchange in Procurement (STEP) etc.

6. Technical requirements for Website and Android/iOS application:-

The proposed web-software should contain the following technical requirements or functionalities, but not limited to:

- a. The software will be hosted and maintained by the Service Provider and RACP will pay on the basis of usage of the software.
- b. All the required functions of ICT will be available through the software. Service and hosting, upkeep and maintenance are service provider's responsibilities.
- c. Service Provider should setup the software for use after making required changes if any. Users will access the software over web, after getting the required authentication from the authority, for performing the required functions.
- d. User Responsive Web Design technologies,
- e. Implement data validation for both client and server
- f. Implement Search, Create, Read, Update, Delete (SCRUD) operations

- g. Adopt Role-Based Access Control (RBAC) to authorize system resources allocation to users based on roles.
- h. Ensure compatibility to all the browsers (Mozilla Firefox, Internet Explorer, Google Chrome, Opera, Safari, etc.);
- i. Software should be scalable and upgradeable as and when the number of users, clusters, activities and contents increases;
- j. Maintain and ensure that the web-based software system supports maximum concurrent users;
- k. The portal should run optimally (page load time below 30 seconds) on a PC connected to a network with minimum bandwidth of 512 kbps;
- l. Image and other content customization features should be inbuilt within the system (if any) to allow standard content sizes (e.g. standard image sizes for easy uploading and processing).
- m. The web-based software should have provision to support bilingual (English and Hindi) and interactive maps. This requirement can be provisioned both from front-end APIs and backend database system design by incorporating appropriate UTF based locale support.

7. Security Requirements:

The consultant shall adhere to following security requirements:

- a. The software should provide audit trails and logs mechanism for monitoring content changes performed by system users.
- b. Maintain time series data so that certain information is not lost with passage of time and repeated updating.
- c. Include up-to-date CAPTCHA program as a remedy to stop spam and other intrusions wherever required.
- d. Handle Session Hijacking, session replay, etc.
- e. Input Validation to prevent attacks such as buffer over-flow, cross-site scripting, SQL Injection, etc.

8. Report to be generated :

To keep track the record of the problems/solutions various reports to be generated by the web based software solution:

- a. Category wise problem and solution report
- b. Expert reports with the solution provided by them
- c. Cluster wise problem and solution report
- d. Monthly/Quarterly/Six monthly/Yearly problem/solution report (cluster wise)
- e. Monthly/Quarterly/Six monthly/Yearly problem/solution report (All Cluster)
- f. Weekly/Monthly handled, unhandled problem/solution report (Cluster wise)
- g. Weekly/Monthly handled, unhandled problem/solution report (All Cluster)

- h. The concerned user will be in the loop of the software through these instruments and also share the information etc.

6. Period of the Assignment:

Although the agency shall be appointed for a maximum period of 4 months but it would provide technical support up to the project period i.e. up to March, 2022. The module would be delivered on deliverable basis as per Terms of Reference (TOR). The extension of the contract is subject to approval by PMU-RACP on mutually agreed terms and conditions. The performance of the consultants will be closely monitored and reviewed on periodic basis and in case the performance is found unsatisfactory, action pursuant to the terms and conditions of the contract shall be put in force by the client.