

**Terms of Reference for Development of Web Based Management Information System (MIS)**  
**with Geo tagging and mobile application (Android) for Livelihood Projects in Punjab,**  
**Gujarat and Madhya Pradesh**

**Tenure of Contract:**

The contract tenure shall be 3 months for implementation from the date of acceptance of issue of Letter of Award by the Successful Agency.

**Key features of the project required:**

1. An easy to use mobile app (with offline capabilities) for surveying
2. Online report builder system corresponding to the data collected through mobile app, with features to filter data using date, state, district, block etc.
3. Real-time dashboards for showing progress on key indicators
4. User levels for the project will be as following:
  - a. Admin (Web access)
  - b. Economic Development Unit (Web access)
  - c. Regional Hub (Web access)
  - d. Project team (Web access)
  - e. Village coordinator / CRPs (Web access, Mobile Access)

Each user level will have access to forms & data for all products.

- a. Screening Form - Approx. 50,000 households data to be collected (one time)
- b. Baseline Form count - Approx. 50,000 (one time)
- c. Planning form count - Approx. 100 (monthly)
- d. Implementation Form count - Approx. 50,000 (Monthly)

Dashboard for the project will be dynamic in nature and have key indicators related to monthly interventions & outputs across each product.

**Required features**

- i) Design, develop, implement and maintain the Management Information System (MIS), web interface and mobile application (Android & iOS)**
  - a. A Graphical User Interface (GUI) based system where all CARE India's users are able to view/ save/ download/ schedule/ update various parameters/reports/dashboards and their summary without any programming efforts
  - b. Capable to add/modify/delete all key business parameters-based data as needed by CARE India
  - c. Capable to pull the report for a specified performance period in specified formats as per user role requirement

- d. Capable to achieve the data with time stamp in case of any addition/modification/deletion to data.
- e. Capable to provide intuitive structuring of Menus and navigations, user-friendly UI/UX.
- f. Capable to provide secure login to business users located at central and various levels
- g. Capable to generate alerts over various modes e.g. SMS, email
- h. Efficient and quick data storage and retrieval with encryption techniques
- i. Geo tagging feature for mapping location of infrastructure, households, and project key locations
- j. Bulk upload of data using CSV formats

**ii. Data Entry of content in the system**

- a. System to be capable of addition of data as per sub-heads e.g. Project detail, Years of implementation, donor name, State, District, Block, village along with state profile pages, Financial data, document library etc.
- b. Capable to allow users to add/modify/delete project data as needed
- c. Capable to add/modify/delete images/ multimedia (videos or audio) /documents/ location-details through mobile app/web interface
- d. Capable to have bi-lingual – Punjabi, Hindi, Gujarati
- e. Generate the content for GIS based MIS with boundary marking of projects, tagging of project location, create events related to projects/events, location survey data, data collection from the field in an online or offline (in case of no connectivity with MIS server), add new infrastructure like roads, buildings, add components (e.g. toilets, smart solar sites, smart parks, panic buttons, dustbins etc.) of projects on map, project output measurement (before / after based on date or location), location-based analytics of project KPIs, Real-time maps Geolocation

**iii. Survey forms**

- a. Capable to create surveys for specified stakeholders and getting response for the survey questions/requisite data
- b. System should have an approval mechanism of addition/change/deletion of data at various user levels
- c. System should track all revisions being undertaken at various levels with timestamp details

**iv. Report and analytics**

- a. Capable to deliver online reports with defined formats as per defined time- frequency

- b. Capable to deliver custom reports with option to select fields and provide calculation summary
- c. Capable to provide analytics as per fields/rules/calculations
- d. GIS based MIS – Map view of projects and their attributes with geo-tagged contents.
- e. The system to generate report with various parameters in a chart or graphical format with advanced visualization tools
- f. The reports generated should have feature “Export to PDF” “Export to Excel”, “Export as CSV (Comma separated values)” or “Export as picture” few reports might be required with “Export to MS word format”
- g. 360-degree search for various fields from record

**v. Access Management**

- a. Secure login for users
- b. System should support view/modify/delete access of data as per the user id logged into system
- c. User-id based system functionality access to be available to the user
- d. User management to be done through front-end of system by the super-user
- e. Single sign on with Azure AD

**vi. System functionalities**

- a. All the application, system events to be logged with timestamp onto the system, super-user to have access of such logs
- b. The system should be capable of saving the change in the data with timestamp and user-id to ensure availability of historical data
- c. The systems logs should be maintained for at-least 6 months
- d. Any security related observations noted by client or stakeholder, will have to be remediated by the agency. Vendor has to provide information related to support and remediation process.
- e. Vendor has to provide all patches and upgrades. Also, details on how these patches and upgrades will be made available and plan of installation of such patches and upgrades will be provided.
- f. Any change to the system or application that may affect working of system or any part should be done during night hours or defined change management window with a prior permission of client.
- g. Efficient and quick data storage and retrieval with encryption techniques.
- h. Deployment of application on cloud hosting servers and maintenance for the 9months
- i. Comprehensive data Security. Stress testing to support Pan India Inspections

- j. High availability, redundant setup ensuring and back-up
- k. Web portal should work on every Web Browser - Firefox, Internet Explorer, Opera Mini, Safari, Chrome etc.
- l. System administration features with user account creation/ user privileges/authorization's etc.
- m. Provide necessary framework to collect, compile and manage data/information related to the activities being done at various levels.
- n. Vendor should provide full Administrator access along with Conduct Training sessions for the users for updating data, content adding/editing, etc.
- o. The platform should be designed to be deployed on cloud servers, it should be designed with future scalability requirements without change in core architecture. It should be developed with micro service architecture in mind.
- p. The application should be designed to prevent from SQL injections. User interface/Front-End should be HTML injection proof.