REQUEST FOR PROPOSAL

SELECTION OF IMPLEMENTING AGENCY FOR DESIGN, DEVELOPMENT, IMPLEMENTATION AND MAINTENANCE SUPPORT OF STATE DIGITAL CROP SURVEY WEB PORTAL & MOBILE APPLICATION (IOS & ANDROID)
FOR
DIRECTORATE OF AGRICULTURE & FOOD PRODUCTION, GOVERNMENT OF ODISHA

RFP No.: OCAC-SEGP-SPD-0018-2024-24047

Volume II	**Terms of Reference**

ODISHA COMPUTER APPLICATION CENTRE

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1. Project Vision

Digital Crop Survey initiative seeks to provide an accurate assessment of the crops being cultivated across all farmlands during various agricultural seasons. The primary objective is to establish a reliable and verified source of information concerning farmers and their crop-sown data leveraging the use of technology and digital platforms.

Digital crop survey would involve the use of mobile applications, Geographic Information System (GIS) technology and other digital tools. Agricultural extension workers or surveyors can use mobile devices to input data directly into a digital platform, eliminating the need for physical paperwork and streamlining the information gathering process.

Benefits of digital crop surveys include:

- Real-time Data Collection: Digital surveys enable real-time data collection, allowing stakeholders to access up-to-date information on crop conditions and other relevant factors.
- Accuracy and Precision: Automation reduces the likelihood of errors associated with manual data entry, ensuring more accurate and precise data.
- Geospatial Analysis: Integration of GIS technology enables the collection of location-specific data. This geospatial information can be crucial for understanding regional variations in crop performance.
- Efficiency: The use of digital tools streamlines the survey process, saving time and resources compared to traditional methods. Data can be processed faster, leading to quicker decision-making.
- Accessibility: Digital survey data can be easily shared and accessed by relevant stakeholders, including government agencies and policymakers, fostering collaboration and informed decision-making.
- Integration with Other Systems: Digital crop survey data can be integrated with other agricultural systems and databases, contributing to a more comprehensive and interconnected agricultural information ecosystem.

Adoption of digital crop surveys would serve as an advanced approach to agricultural data collection, contributing to improved productivity, resource management, and decision support in the farming sector.

2. Scope of Work

The primary objective is to provide an exact replica of web and mobile-based solution that enhances and updates the current central application to meet the specific requirements of state. This aims to ensure data authenticity, accountability, transparency, and facilitate data-driven decision-making for improved human resource utilization through a more effective and timely monitoring approach.

2.1. Requirement Study and Taking over State Instance of Reference Application

The Selected Agency shall perform the detailed assessment of the solution requirements as mentioned in this section. Based on the understanding and its own individual assessment, the Selected Agency shall develop & finalize the System Requirement Specifications (SRS) in consultation with Directorate of Agriculture & Food Production, Government of Odisha /OCAC. While doing so, Selected Agency is at least expected to do following:

a) The Selected Agency shall liaise with Directorate of Agriculture & Food Production, Government of Odisha officials, Govt. of Odisha.
b) The Selected Agency shall consult with the Central team for Knowledge Transfer (KT) on the existing State Instance and with domain experts for State specific customization to finalise the System Requirements. KT will be facilitated with the Central team.
c) The Selected Agency shall facilitate a seamless transition, involving the takeover of the existing instance, incorporation of specific Odisha-centric modifications and development of the new Application.
d) The Selected Agency shall follow standardized template for requirements capturing
e) The Selected Agency must maintain traceability matrix from SRS stage for the entire implementation

2.2. Design

a) Selected Agency shall be responsible for the preparation of System Requirement Specification (SRS) document covering all modules & features planned to be covered as specified based on the outcome of detailed System Study.
b) Selected Agency shall demonstrate the SRS including screen templates, reporting requirements, process flow, and new features suggested for review and shall incorporate all the suggestions / modifications for approval by Department.
c) Selected Agency is required to update the SRS documents as and when any enhancement/ modifications is made into the module/ system till the duration of contract.

2.3. Development

The Selected Agency shall design and develop the State Digital Crop Survey Web Portal & Mobile Application (IOS & Android) with components / functionalities to address the requirements of Directorate of Agriculture & Food Production, Govt. of Odisha including but not limited to the approved SRS, Solution Architecture & Standards as specified in this RFP document. The Selected Agency shall supply the following documents along with the developed components:

a) Business process guides
b) Data model descriptions
c) Sample reports
d) Frequently asked question (FAQ) guides
e) Any other documentation required for usage of implemented solution

2.4. Integration

The Selected Agency shall enable integration with Krushak Odisha portal , Farmer Unified Portal, Aadhaar , Third Party Payment Gateway, SMS, eMail etc. The system should support both push and pull of data from systems proposed to be integrated. The SI will have to co-ordinate with the designated nodal agencies for integration and DA&FP /OCAC will facilitate this process

2.5. Testing

a) The Selected Agency shall design the testing strategy including test cases and conduct testing of various components of the solution developed. The solution testing shall at least include Unit Testing, System Integration Testing, Performance Testing, and User Acceptance Testing (UAT).
b) The Selected Agency shall perform the testing of the solution based on the test plan, document the results, fix the bugs found during the testing and take remedial action based on outcome of the tests.
c) The Selected Agency shall ensure that each module & features developed under this RFP is tested as per the latest version of the IEEE 730 (Software Quality Assurance Processes) standards and shall comply with GIGW guideline.
d) Selected Agency must ensure deployment of necessary resources, tools and related logistics during the testing phases.

2.6. Security Audit

a) The Selected Agency needs to ensure that the solution is in compliance with the CERT-In Security Policy and Guidelines.
b) The Selected Agency shall appoint CERT-In empaneled auditor who shall be responsible for performing the Security Audit of the solution.
c) The cost of audit & rectification of non-compliances shall be borne by the Selected Agency.
d) The agency shall carry out Security audit before Go-live of application to obtain the Safe-to-host certification
e) Perform Periodic audit & certification as and when it is required as per policy.
f) The audit shall be performed at least on the below mentioned aspects.
   - Functional Testing
   - Accessibility Testing
   - Application Security Audit
   - Vulnerability Testing

2.7. SSL Certification

The Selected Agency shall carry out SSL certification, as per requirement.

a) Secure connection between Client and Server through Secure protocol HTTPS

b) Encryption of Data during transmission from server to browser and vice versa

c) Encryption key assigned to it by Certification Authority (CA) in form of a Certificate.

d) SSL Security in the application server

2.8. Deployment & Configuration

a) The Web portal is proposed to be hosted on the infrastructure to be arranged by Directorate of Agriculture & Food Production, Government of Odisha /OCAC after successful UAT.
b) The Selected Agency will be responsible for configuration, installation and hosting of the Web application in High Availability mode over the hardware infrastructure provided.
c) The Selected Agency shall be responsible for the end-to-end management of hosting and deployment of the application.
d) Post award of contract, the Selected Agency will be expected to furnish detailed hardware & software sizing including server, storage, security devices and related

system software required for operationalization of the solution. Based on sizing submitted by the Selected Agency, the required hardware & software will be arranged.

e) The Selected Agency shall carry out necessary installation, configuration, maintenance & support for the Application production environment to ensure that the services are made accessible to the users.

f) The Selected Agency will be required to develop the solution in their own test environment.

2.9. UAT and Go Live

a) After completion of the development work for application, Directorate of Agriculture & Food Production /OCAC will conduct the reviews of development work performed by the Selected Agency as UAT. OCAC / Department may constitute a UAT committee for this purpose.

b) The Selected Agency shall be responsible for:

- Preparation and submission of test strategy, test cases and test results
- Demonstration of module-wise functionalities/ features before the Directorate of Agriculture & Food Production /OCAC in staging environment
- Support Directorate of Agriculture & Food Production /OCAC and its designated authority for conducting the testing and provide access of the systems as required by them.
- Rectification in the new application for any issues/ bugs/ and improvements/ Enhancements / upgradations suggested Departments (if any) during the UAT without any additional cost.
- It would be Selected Agency's responsibility to ensure that all issues raised during UAT are closed and signed-off from respective authority

c) After incorporation of the suggestions made during the UAT phase, the Selected Agency shall host the application in the production environment and Go-live of the system will be declared.

d) After the Go-live, the application will be rolled out for Operation and Maintenance.

2.10. Training

a) The Selected Agency` is required to undertake training in the technical and process aspects of the application.

b) The schedule / training calendar and the training material for imparting training shall be developed by the Selected Agency in consultation with Directorate of Agriculture & Food Production. It is also proposed that the training contents / User Manuals be made available to Users in downloadable (PDF) format so that the Users may refer / download it for their own personal reference as and when needed

2.11. Operation and Maintenance Support

Operation & Maintenance Support will be for a period of THREE YEARs from the date of Go-Live of the application. This support encompasses timely resolution of technical issues, troubleshooting, required customisation and proactive identification and mitigation of potential challenges. The agency shall maintain a dedicated Technical Support Team, as defined at clause 1.12, accessible through agreed-upon communication channels. The support services should adhere to predefined service level agreements (SLAs), ensuring that any reported issues are addressed promptly and efficiently.

The agency shall provide support services during the Operation & Maintenance Support phase as indicated below.

2.11.1. Application support

Application support includes, but not limited to, production monitoring, troubleshooting and addressing the functionality, availability and performance issues, implementing the system change requests etc. The Selected Agency shall keep the application software in good working order; perform changes and upgrades to applications as requested by the DA&FP team. Key activities to be performed by Selected Agency in the application support phase are as follows:

i. Enhancement of MIS report as per the requirement
ii. Database query report management on emergency
iii. Optimization of the already developed reports
iv. Database & System Administration
v. Tuning of transactions
vi. User & access management
vii. The selected Agency shall ensure compliance to SLAs as indicated in this RFP and any upgrades / major changes to the software shall be accordingly planned by selected Agency ensuring the SLA requirements are met at no additional cost.

2.11.2. Software Maintenance

i. The Selected Agency shall provide unlimited support through Telephone/Email/Video Conferencing/ Installation Visit as required.
ii. The Selected Agency shall address all the errors/bugs/gaps in the functionality in the solution implemented by the Selected Agency (vis-à-vis the SRS signed off) at no additional cost during the support phase.

iii. Any changes/upgrades to the software performed during the support phase shall subject to the comprehensive and integrated testing by the Selected Agency to ensure that the changes implemented in the system meets the specified requirements and doesn't impact any other function of the system.

iv. Tuning of products/ applications, databases, third party software's and any other components provided as part of the solution software including reconfiguration of the system in the event of any hardware/ network/ software failures or replacement, shall be the responsibility of the Selected Agency.

v. Issue log for the errors and bugs identified in the solution and any change done in the solution shall be maintained by the Selected Agency and periodically submitted to the Department.

2.12. Project Team Structure

The Selected Agency shall allocate resources having specialized skills, education and relevant experience for successfully implementing the project within time while meeting the scope and quality. The skills required for the Operations and Maintenance phase would be different. Continuity of these resources in both the phases shall play a key role in meeting the project objectives.

In the above context, the Selected Agency is instructed to propose a Team for Implementation Phase and Operations and Maintenance phase.

a. The Selected Agency shall form a team for his project and identify a Single Point of Contact (SPOC) to resolve and attend to all the issues raised by the User Department during Implementation Phase and Operation & Maintenance phase as and when required.

b. The Selected Agency would maintain the continuity of the SPOC, however, in case of replacement of any team member, it would be the responsibility of Selected Agency to inform the User Department/OCAC in advance and propose a replacement member who shall be equally qualified having similar experience.

c. The escalation process and matrix will be finalized during approval of Project inception report and communication strategy. The Selected Agency will adhere to this escalation process during the Operation support.

d. Technical Support Unit :

   The agency shall deploy a dedicated Technical Support Unit (TSU) consisting of 5 resources to work onsite under the supervision of DA&FP and Co-ordinate with the department for successful project implementation. The TSU resources (one Project Manager, two Technical and two hand-holding support) shall have relevant skills, education & experience for delivery of the following services:

- Address the application related functional queries raised by officials of the Department.
- Address all types of issue management/redressal in relation to the application software, MIS reports etc. as and when required during conduction of survey.
- Provide assistance and technical support to end users for efficient use of the system
- Escalation of issues to backend software team to provide continuous technical support as per requirement of the Department
- Provide training to departmental users
- Furnish periodic reports on the number of issues received vis-à-vis resolved related to software.
- Analyse feedback received from users (surveyors/officials)

Note:

1. The TSU shall be deployed in the Department initially for a period of two years after Go-Live of the Application. Thereafter, depending upon the requirement, further extension of the TSU may be considered
2. All recurring and fixed cost related to the project team shall be borne by the service provider.
3. The Nodal officer from Department will coordinate with the team for the suggested changes/enhancements from time to time
4. Required software licenses, network, computing infrastructure, etc. for creation of development environment, testing environment and staging environment for the TSU shall be set-up by the bidder

3. Functional Requirement

The proposed solution will have the subsequent functional elements outlined within the following modules.

i. Web Portal
ii. Crop Survey Mobile Application (Android & IOS)
iii. Mapping of plots
iv. Legacy Data Management
v. Notification Services
vi. Analytical Dashboard
vii. MIS Reports

3.1. Web Portal

The government aims to obtain comprehensive information about the crops cultivated and the irrigation methods utilized across all agricultural lands in the state. The project's vision is to establish a unified and authenticated source of farmer and crop data in the state, serving as a reliable resource for multiple departments and stakeholders in the ecosystem, including banks, insurance agencies, and others. The objective is to guarantee timely access to precise and current farmer and crop data across all systems.

List of web applications/forms within the operational services of Crop Survey:

- A provision will be made for an admin panel that allows customization of specific aspects of the mobile application to align with on-the-ground requirements. To ensure seamless operation, features such as crop master, land classification, and role-based user access will be customizable at the state level through the admin panel.
- Creation and Assignment of Surveyors for Village Surveys using the district-block-GP-village approach.
- Supervisor's role involves creating and allocating villages for the verification of surveyed/re-surveyed farmers plots by surveyors
- Provision will be available for viewing crop survey information based on village survey numbers.
- Utilizing Google Maps to track surveyed plot locations by village, including surveyed information and crop photos.
- Handling farmer objections to surveyed crop data through web forms.
- Managing Crop Surveyed plots data for Early Kharif, Late Kharif, Rabi, Summer Seasons, and subsequent Kharif.

- A comprehensive payment module/interface will be provided for compensating surveyors engaged in the DCS, incorporating their performance assessment. Payments will be calculated based on this assessment by district/state government officials to ensure smooth and flawless incentive distribution. The Department will provide specific details during the system requirement study phase.
- Creation of various Management Information System (MIS) reports.
- A distinct version of the module will be established in web portal to display analytics and reports derived from crop survey data collected by surveyors through the app. Access to this web portal will be extended to all designated government officials, ensuring effective monitoring.

3.2. Crop Survey Mobile Application (Android & IOS)

- The mobile app will have provisions to function in both online and offline modes.
- The mobile survey app is intended for use by surveyors to conduct crop surveys and define configurable boundaries, ensuring GPS accuracy within 30 meters, for collecting crop information, as well as for uploading surveyed data.
- The farmer's information will be fetched automatically by using their KO ID from the Krushak Odisha portal, assuming they are already enrolled in Krushak Odisha Portal. This connectivity will be facilitated through an API linked to the portal.
- For farmers whose information is not present in the Krushak Odisha database, surveyor will collect their required data using a separate application format through the DCS mobile app, which includes Aadhaar verification. Subsequently, department officials will utilize this collected information to enroll the farmer into the Krushak Odisha Portal in the future.
- Integration of GPS capabilities in the mobile app enables geo-tagging of survey locations, capturing image and mapping of crop fields. This enhances the accuracy of data collection and allows for precise monitoring of crop growth and distribution.
- The app can be designed to allow for offline data collection in areas with limited or no internet connectivity. Data collected offline can be synchronized with the central database once internet connection is available.
- After approval by the Supervisor, the crop survey data collected on the forms will be transformed into reports and dashboards according to the department's requirements and wireframes. These reports will display aggregated data at various geographical levels, encompassing both revenue and administrative perspectives.

- In the Re-survey module, the surveyor will receive village-wise surveyed data for re-survey, specifically focusing on plots that were rejected by the supervisor for reasons such as insufficient information, incorrect data entry, unclear crop images, and other related issues.
- The mobile app verifies that the user is within the selected survey number boundary (configurable) for both crop information collection during Survey and Re-survey activities.
- A feature will be provided for generating MIS reports village-wise, displaying Pending Survey numbers, collected Surveyed Data, and Uploaded Data.

3.3. Mapping of plots

The allocation strategy for surveyors for the upcoming Kharif 2024 state government survey will adopt a district-block-GP-village approach (In Kharif 2023, the Government of India reference app had divided plots on the basis of sub-districts). Plots as allocated by ORSAC, Govt. of Odisha following the current revenue terminology, geo-referencing of village maps and digitised Record of Right (RoR) with ownership extent shall be shared to the bidder. However, the distribution of these plots to surveyors will be based on District-Block-GP-village mapping for practicality on-site. The MIS system (web portal) should offer visualization options based on both revenue terminology and administrative (District-Block-GP-village) terminology.

3.4. Legacy Data Management

- The software facilitates the management of legacy data by enabling the upload of documents containing historical records of survey details, slot mapped, and inspection data from the user's end.
- Concurrently, the system possesses the capability to integrate a data entry interface for inputting legacy data in both online and offline modes.
- The system permits the implementation of a checkpoint to verify the accuracy of uploaded data, accompanied by remarks to indicate the verification status.

3.5. Notification Services

- This system will use for notifications for handling pending tasks, overdue approvals, booking cancellations, and notifications for re-allotments, and so forth.
- Integration of notification services will be implemented to enable the delivery of push notifications, SMS, emails, and Enable mass delivery of WhatsApp notifications to a large number of users simultaneously.

3.6. Data Visualization - Reports & Dashboards on Web Portal

The selected vendor will be required to visualise all data collected on the crop survey forms in the form of reports and dashboards as per the requirements and wireframes shared by the department. The reports will show aggregated data at different geographical levels in both revenue and administrative parlance.

A separate instance of the web portal will be developed showing the analytics and data contextualised to Odisha. Access to the web portal shall be given to all designated field officials for effective decentralized monitoring. Screenshots attached below are indicative, and wireframes for dashboards will be finalised with the third-party vendor at the time of development.

3.6.1. Dashboard functionalities:

- Provision to represent information through graphical data
- Inspection completion status compared to pending assessments
- Graphical visualisation representing the ratio of annual report submissions
- Status of outstanding completions
- Analysis of Survey creation versus completed versus pending status
- User-specific View
- Inclusion of filters for customized data viewing.
- Indicative Dashboard functionalities:

3.6.2. Data Reports

Data Reports should be available for download in both Excel and PDF formats. Other customized reports based on specific needs will be created as necessary. Some indicative reports are:

- Survey Completion & Achievement Report: A report for department officials to monitor the real-time status of survey completion. This dashboard will show the real time plot-wise status of survey completion to the concerned officials. KPIs such as # of Plots Surveyed, # of Surveys Verified, # of Plots Pending for Survey, Average Survey Time per Plot, etc. will be showcased in this report for each primary user. The concerned department officials will be able to view the progress at a district, block, GP, or village level using cascaded filters. The dashboard should consist of relevant pie charts, bar graphs and other statistical graphs for analysing progress.

S.No	District	Block	Target	Achievement	Achievement (%)
1	ANUGUL	ANUGUL	6,008	4,076	68%
2	ANUGUL	ATHMALLIK	6,219	3,561	57%
3	ANUGUL	BANARPAL	7,436	5,000	67%
4	ANUGUL	CHHENDIPADA	10,272	5,211	51%
5	ANUGUL	KANIHA	7,181	2,768	39%
6	ANUGUL	KISHORENAGAR	4,465	2,211	50%
7	ANUGUL	PALALAHADA	8,547	3,895	46%

Target & Achievement Reports

- User Mapping Report: The department officials should be able to view the mapping of users for their respective villages. Each village from the geographical master will be mapped to an individual user, and a detailed report to showcase this mapping in real-time should be available for the department officials. The concerned department officials will be able to view the user mapping at a district, block, GP, or village level using cascaded filters.

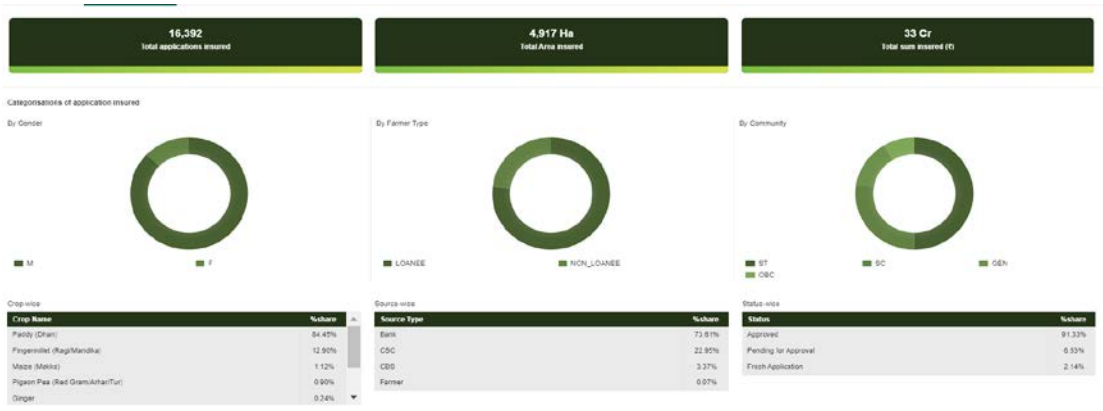
USERS

ADD USERS | UPLOAD USERS | DOWNLOAD SAMPLE

S.NO.	DIRECTORATE	USERNAME	NAME	DESIGNATION	PHONE NUMBER	ASSIGNED MODULES(S)	ASSIGNED ROLE(S)
1.	AGRICULTURE	EW11961	SUDHANSU SEKHAR GIRI	ATM	9437855925	GP Sitting, ACIM, Department News, Issues, Extension Management	VAWrole, Issue Resolution - Issues - GP
2.	AGRICULTURE	EW11960	MEGHAJIT SI	ATM	9437613625	GP Sitting, ACIM, Department News, Issues, Extension Management	VAWrole, Issue Resolution - Issues - GP

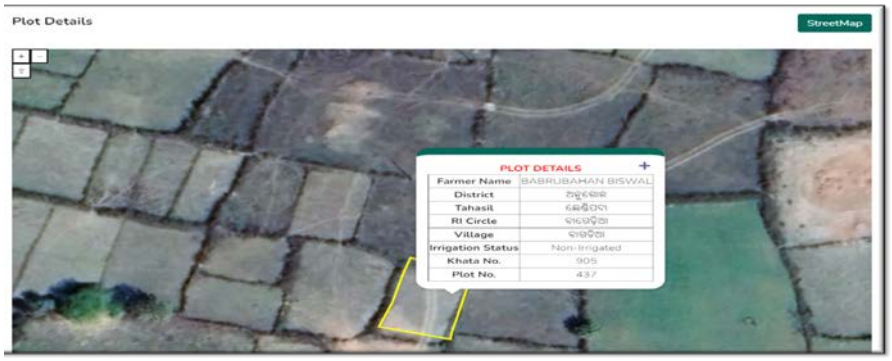
User Management Reports

- Crop Survey Analytics Reports: The ongoing crop survey will give department the access to new and relevant agricultural data points such as # of Crops, Crop types, Cultivation area, Sowing date, Farmers per plot, etc. These data points can be visualised to create different analytics reports at the district, block, GP, or village level. The Implementing agency should be able to create such analytics reports based on the wireframes and requirements shared by the department.



Crop Analytics Reports (Example)

- GIS Map View Report: On completion of the crop survey for every plot, the data server will have at least 4 geo-coordinates stored for the particular plot. A map view depicting the plot boundaries will have to be developed for all land plots where survey is completed on the Mobile App. The plot boundaries will be formed based on all geo-coordinates recorded against a single plot. The map view report should also show the relevant land details, farmer details, and crop details, along with the plot boundaries.



GIS Map View

3.7. Payment module for manpower engaged in the Digital Crop Survey

The Implementing Agency shall develop a comprehensive payment module/interface for the manpower engaged in the DCS which will reflect their performance to facilitate district officials for smooth and flawless payment of incentives. The exact details will be given by the Department at the time of development.

3.8. Admin Panel Development

The Implementing Agency shall develop an Admin panel through which certain aspects of the mobile application can be customised to suit the needs on the ground. To ensure smooth functioning, elements such as the crop master, land classification and role-based user access should be customisable at the state level through the Admin panel.

3.9. Grievance Redressal

The Implementing Agency shall develop a feature in the DCS Web Portal/Farmers' Unified Portal where farmers can check the status of their crop survey results once survey is completed. There should be a provision to escalate grievance of the farmer (if any) to proper authority in the Digital Crop Survey system for redressal which will be concurrent to the survey. System can also push SMS nudges to farmers once a survey is completed for a plot.

4. General

4.1. Adherence to Standards

a. The development of application should be done preferably using open-source platform. The Selected Agency is free to use the software available like application server, any third-party software etc. as per requirement of their proposed solution. If it is adopting and implementing any proprietary software, adequate license must be procured in the name of DA&FP, Govt. of Odisha and cost towards the same will be borne by the Agency.

b. The system shall ensure compliance with relevant defined industry standards (their latest versions as on date) wherever applicable. This will apply to all the aspects of solution including but not limited to its design, development, security, implementation, and testing. The proposed architecture shall be scalable & flexible for modular expansion and shall ensure ease of integration with other applications.

c. The solution architecture should thus have provision to cater to the evolving requirements of DA&FP, Government of Odisha.

4.2. Design Consideration

a. Application should be built with open standards and open APIs.

b. Mobile application should be compatible and accessible on major mobile device OS such as Android and IOS.

c. Application should provide an update feature in case of newly published version.

d. Application should be of responsive design that will automatically expand / compress itself as per the screen resolution.

e. Application should be capable to plug-in new technologies and components in a seamless manner.

f. Application should have capability to connect to the network in batches, in order to overcome the no network scenarios.

g. Application design should have capability to minimize its power and memory footprint during low memory scenario.

4.3. Security, Integrity & Confidentiality

a. Web Services Security: System shall comply to all the Web services including routing, management, publication, and discovery should be carried out in a secure manner. Those who are using the Web services should be able to utilize security services such as authentication, authorization, encryption and auditing. Encryption of data shall take place at client level itself. Application server shall provide SSL security.

b. Data Integrity and Confidentiality: Data integrity techniques need to be deployed to ensure that information has not been altered, or modified during transmission without detection. Similarly, Data confidentiality features are also to be applied to ensure that the data is only accessible by the intended parties.

c. Transactions and Communications: With respect to the Data Transactions and Communications, system needs to ensure that the business process is done properly and the flow of operations is executed in correct manner.

d. Database Controls: The system shall enforce database controls for online transaction processing systems like access to database directly, access to database through application, access to log files, access by the remote terminals, DBA controls, backup policy and backup procedures.

4.4. Intellectual Property Rights

The Intellectual Property Rights (IPR) of all software code, data, algorithms, documentation, manuals, digitized documents etc. generated as a part of implementation and O&M of this project shall solely vest with the Department. The Selected Agency will not have any right to share, use or disclose above mentioned components/artifacts. The source code of entire applications along with necessary documentations developed under this RFP/ Contract should be shared with Department/OCAC after Go-live of the application.

4.5. Exit Plan

a) The selected firm will provide systematic Exit Plan and conduct proper knowledge transfer process to handover operations to Department Team at least three months before project closure. All knowledge transfers should be documented.

b) Implementing Agency will ensure capacity building of Technical Team nominated by DA&FP, Government of Odisha on maintenance of the application software.

4.6. Project Documentation

The Selected Agency shall maintain & update System documentation and share below list of documents to Directorate of Agriculture & Food Production, Government of Odisha/OCAC during the project contract period.

i. Software Requirement Specification (SRS)
ii. Project Plan
iii. User Training Manual
iv. Application Installation & Configuration Manual
v. Report of Security Audit & Safe-to-Host Certificate
vi. Project Progress Report
vii. Source Code & Data Base of Web Application

5. Expected Project Timeline

Sl. No.	Activity	Deliverables	Completion
1.	System Study	- Team mobilization - Project plan - Requirement Gathering, KT from the Central agency & Documentation - SRS Approval	T0+4 Weeks
2.	Application Development	- Hosting in staging environment	T0 + 14 Weeks
3.	Testing and Audit Compliance	- UAT - Safe to host Certificate	T0 + 16 Weeks
4.	System Deployment	Deployment Over Hosting Infrastructure	T0 + 17 Weeks
5.	Training & Go-Live	- Application Demonstration & Training completion report - UAT Signoff - Go-Live	T0 + 18 Weeks = T1
7.	TSU support from the date of go-live	Deployment of 5 Resource onsite at DA&FP for two year	T1+24months
8.	Operation and Maintenance	Three Years after Go-Live	T1+36 months

*T0 = Date of issue of Work Order
*T1 = Date of Go-Live

6. Payment Terms

Sl.#	Category	Payment Terms
A.	Design, Development and Implementation	– 20% payment of Application development on SRS Approval – 40% payment of Application development oncompletion of UAT. – 30% payment of Application development onreceipt of security audit certificate and Go-Live Certificate. – Balance 10% of application development will bepaid after 3 months of successful running
B.	Security Audit & SSL	100% payment on submission of Safe-To-Host certificate
C.	SSL certificate	100% payment on submission of configuration report
D.	TSU support	Quarterly after receiving QPR
E.	Operation & Maintenance (Application Support & Software Maintenance)	100% cost of this item equally divided into 12 quarters

Note:

- Due payments shall be made promptly by the purchaser, after successful completion of the target milestones (including specified project deliverables).
- All payments are subject to the application of necessary penalties as required under the SLA.
- Taxes will be paid as per the rate prevalent at the time of billing

7. Service Level & Penalty

The Selected agency shall agree to the following Service Level Agreement (SLA), if it fails to deliver as per scope of work within the corresponding Delivery Period and any extension thereof. These SLAs shall be tracked on the basis of timeline and are envisaged to have penalty and/or liquidation damage clauses on non-adherence to any of them.

a) Maximum penalty capping is 10% of respective milestone.
b) In case, the delay is more than 28 weeks and the cause of delay is attributable to Selected Agency, authority reserves right to increase the penalty value and/ or take appropriate action against the bidder such as cancellation of contract, increase of penalty percentage etc.
c) Penalty will not be applicable if the delay is not attributable to the agency/ due to force majeure situation or due to OCAC's default. However, in such cases, the Selected agency has to communicate in writing the reason of delay. The decision of the Purchaser in this regard shall be final.
d) If at any time during the Contract, the Selected agency encounters conditions impending timely performance of service, then the agency shall promptly notify to OCAC in writing of the fact of the delay and its likely duration along its cause(s). As soon as practicable, after receipt of the agency's notice, OCAC shall evaluate the situation and may at its discretion waive the penalty on the request of the selected bidder.

The SLA parameters are divided into 2 (two) types: -

7.1. Implementation Phase

Sl.#	Major Area	Parameter	Requirements	Penalty
a)	Development & Implementation	Major milestone during development and implementation as per project timeline.	As per project timeline	Rs. 500/- per day delay
b)	Response time for bug fixing	Time taken (after the request has been informed) to acknowledge problem	Within 24 hours from the time the bug is reported.	Rs. 100/- per hour delay
c)	Resolution Time (Only for Bug fixing)	Time taken by the Selected Agency to fix the problem	Problems with severity within 48 hours from the time of reporting.	Rs. 500/- per hour delay
e)	Deployment of Support Resource	Start of service	As per project timeline	Rs. 1,000/- perday delay

7.2. Application Availability

The Application covering all the features shall remain operational during the scheduled operation time

Measurement	Reporting Period	Target	Penalty
Daily	Monthly	>= 98%	Nil
		>= 95% but <98%	0.5% of Quarterly billed value of Operation & Maintenance Support (As applicable)
		>= 90% but <95%	1.0% of Quarterly billed value of Operation & Maintenance Support (As applicable)
		<90%	2.0 % of Quarterly billed value of Operation & Maintenance Support (As applicable)

a. Performance of system refers to the proper and timely functioning of the system's functionalities. The application should be available and performing as per functionalities

b. The non-availability for application service is measured on monthly basis and excluding the scheduled maintenance shutdown and incidents.