



# Network Activities Group (NAG)

No.51, Shukhinthar Street, Rose Garden , Ward- 27, North Dagon Township, Yangon, Myanmar.  
Tel: 09-450694361~5, Email: info@nagmyanmar.org, Web: www.nagmyanmar.org

## REQUEST FOR PROPOSAL

### DEVELOPMENT OF CONTENT MANAGEMENT SYSTEM AND MOBILE APPLICATION FOR FARMERS

Reference No: NAG/ VA - SR - 121 - 2021

Date: 8<sup>th</sup> December 2021

<b>Organization</b>	Network Activities Group
<b>Country</b>	Myanmar
<b>Services/Work Description:</b>	Farmer Mobile Application Development by Consulting Firm
<b>Duration</b>	70 Days
<b>Location</b>	Home-based, but may require frequent consultations with key stakeholders
<b>Applications closing date</b>	As soon as possible
<b>How to apply</b>	Submit application together with “Consultancy services for Staff Capacity Building” in the subject line together with, 1. Proposal, both technical and financial 2. CV of experts proposed 3. Details on organizational profile if submitting through an institution to <a href="mailto:procurement@nagmyanmar.org">procurement@nagmyanmar.org</a> , <a href="mailto:recruitment@nagmyanmar.org">recruitment@nagmyanmar.org</a>
<b>Note</b>	Only short-listed candidates will be invited for the interview. <b>Please, do not send original documents as they will not be returned.</b>

#### I. Background of the Project

The project is to build the resilience of sesame and paddy farmers in two townships (Hpa-An and Hlaing Bwe) in Kayin State through empowering farmers to participate and benefit from the development of sesame and paddy crops value chain.

The objective of the project will be achieved through establishing farmer development initiatives, increasing the quality and productivity of sesame and paddy production, creating enabling environment for sesame and paddy farming and trading.

#### II. Objectives

The overall objectives of the assignment will be the following:

- Develop the content management system and native mobile applications (Android and iOS) to strengthen the on-farm knowledge and capacity of the farmers including women and disadvantaged groups.

#### III. Scope of Work

The scope of work can be categorized with the following tasks:

NAG will provide following supports to the vendor company;

- NAG will provide the necessary background data (field condition, localized metrology data, contact farmers for trainings).
- NAG will provide the Sustainable Rice Platform standards for rice and existing Log books formats to vendor company.
- NAG will provide staffs to assist the service provider in undertaking farmer trainings.



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Under the above-mentioned research study, the consultant will engage in the following activities;

- Conduct a needs assessment to prepare the precise System Requirement Specification (SRS), provide concrete development plan including context diagram of the proposed system, Sequence Diagram, Use case Diagram, and Process Flow Diagram.
- Design and develop Role-wise credential system incorporation for better user role management. System should support user registration in multiple ways including mobile number, Google ID, email, Facebook, etc.
- Develop a native android application (both Android and IOS) with features as required.
- The proposed application should have a robust multimedia content management system with support of video, audio, pdf, word, ppt, etc.
- The system should have provision for periodical & instant Data Backup & Auto Archiving System
- Mobile Applications should be responsive and graphically attractive.
- The developed system must support ZAWGYI and UNICODE enable font so that Myanmar content can be viewed properly from any device. The proposed system must facilitate for showing the content both in English and Myanmar Language.
- Vendor Company needs to ensure system to be tested. All necessary security test at application-level architecture needs to be followed and conducted by the vendor.
- Vendor Company needs to participate in a series of meetings organized by the NAG Team for designing and developing of mobile application.

The Following Context have to be covered under the features of Mobile Application

- Daily price updates, market price review, and weather predictions.
- Distribute advanced and/or improved on-farm adaptable technologies (GAP (Good Agricultural Practices), post-harvest technologies and SRP: Sustainable Rice Platform standards) to farmers with a special focus on rice and green gram.
- Transferring the technologies of producing value added products especially for rice and green-gram.
- Assisting farmers with more comprehensive and effective ways of problem solving.
- Understand and adopt peer to peer discussion habits for local on-farm problems.
- Building networks and friendships between farmers in the project area.
- Supporting Questions and Answers (Q&A) section for farmers by professional agriculture experts.
- Provide mobile-based farm income record books.
- Deliver day to day market price of agricultural products as well as the weather information.
- Link farmers to other value chain actors (input suppliers, finance service providers, rice mills, traders).

## IV. Support & Maintenance Requirement

The following are the support and maintenance requirements:

- Vendor Company shall take or advise server maintenance engineer to take timely backup of the entire database to meet up the challenge of system recovery, in case of any disaster or missing data.
- Vendor Company will work at their office premises, but in case of special requirement, they may work at the client's premises or any client designated location.

## V. Technological Specification

The technical specifications are as follow:

- Need to use Open-Source Development Platform.
- PHP based platform with tool architecture like Bootstrap, framework like CakePhp/Laravel/CodeIgniter can be used.
- Android and IOS apps should be developed in native android app development language.
- Future technology change, iterative prototyping, and agility in product design are the generic expectation.



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- Technology and all related design/data will be open to the Client.
- The vendor should follow any of the industry standard secure development methodologies such as (but not limited to) Comprehensive Lightweight Application Security Process (CLASP) by OWASP etc. The vendor should consider (but not limited to) common vulnerabilities such as SQL Injection, Cross Site Scripting (XSS), etc. The Vendor Company will undertake responsibility for Input Validation Controls, Authorization/Authentication Control and other security controls in place in both test and production environment of application.

## VI. Supervision and Performance Evaluation

Awarded vendor will be working with Program Officer and NAG IT team.

## VII. Project Management

The bidders are expected to provide a detailed project plan and an implementation strategy of the project. This plan is expected to include:

- Information regarding the development process (the bidder will comply with all standards)
- Application development tools, language, and database requirements
- Maximum lead time for delivery of services
- A development method and schedule with indicative timeline (Gantt chart)
- Risk management strategy and quality control mechanism
- Any development tasks or assumptions that may be required to render the solution fit-for-purpose
- Any anticipated integration tasks
- Comprehensive contingency plan

## VIII. Deliverables

The following are the main deliverables of the project:

- Develop an inception phase report, including: planned timeline, work plan and detailed methodology/approach
- Software Requirement Specification SRS
- Android and IOS Mobile App
- User Manual
- Source code & database
- Creating mobile farmer record book through CMS system
- Knowledge transfer through workshop/Training
- Regular monitoring reports (format to be developed by service provider in close consultation with the project staff)
- Project Completion report including upcoming challenges if any

## IX. Requirements

This contract is open to consultant firm with the following requirements:

- Must submit valid Company License
- Minimum 5 years' experience in Software development business
- Firm should have experience in e-learning/mobile application/ similar type of work
- The firm must have experience of managing web-based applications
- Firm must demonstrate its management capacity (website link/brochures and other documents describing similar assignments, experience, availability of appropriate professional staff and experience among applicant's staff, resources to carry out the assignment)
- Firm should demonstrate its logistical capability



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- IT Solution/Portal Development & deployment that works on public cloud List (Name, designation, years of experience, number of projects, expertise) of IT personals who can be engaged to perform the assigned task

## X. Expected Timeframe

Duration of this contract is around 2.5 calendar months. To be effective from the date of signing the contract.

SN	Activity	Time
1	Conduct background scoping and research work and finalizing the system Requirements	6 Days
2	Development of Mobile Application including interactive features, communication, etc. to incorporate client requirement	20 Days
3	Feedback collection and incorporation	2 Days
4	Testing, debugging, update	5 Days
5	Knowledge transfer through workshop/training	3 Days
6	Release base version for Minimum Variable Product (MVP)	2 Days
8	Development of Mobile Application – Record Book	20 Days
9	Feedback collection and incorporation	2 Days
10	Testing, debugging, update	5 Days
11	Knowledge transfer through workshop/training	3 Days
12	Delivery of the final version of the application along with all required documentation including source code, user manual and technical documentation	2 Days
<b>Total</b>		<b>70 Days</b>

## XI. Background of Network Activities Group

Network Activities Group (NAG) is a national registered non-profit organization in Myanmar. In fostering our vision “Emergence of a peaceful, prosperous and dignified society that values equity and diversity”, NAG focuses on the Governance Approach, intending to necessary changes of various stakeholders and existing practices towards good governance which is essential and core for the sustainable development and win- win solutions for all stakeholders. Accordingly, NAG has engaged stakeholders of all levels and different areas including local, regional and national government departments, trying to promote interaction, good relations, and eventually coordination and collaboration among them. Given that nature of facilitating and coordinating activities, and creating networks of development efforts with partners, and promoting governance among relevant stakeholders, NAG implements livelihood, natural resources management and rural development programs and projects in Central Dry Zone, Coastal and Delta, Hilly Region and South Eastern Part of Myanmar.