



भूमिकास्थान नगरपालिका नगर कार्यपालिकाको कार्यालय



Google Plus Code: X3HH+6P Sandhikharka

प.स. : २०८१/०८३

च.नं.:

नुवाकोट, अर्घाखाँची


लुम्बिनी प्रदेश, नेपाल



प्रथम पटक प्रकाशित मिति: २०८१/१२/२५

प्रस्ताव पेश गर्ने सम्बन्धी सूचना।

यस कार्यालयबाट चालू आर्थिक वर्ष २०८१/०८२ मा वार्षिक नगर विकास योजनामा विनियोजित बजेटबाट Establishment and Implementation of the Agriculture Information Management system (AIMS) to digitize and manage agriculture data for Bhumikasthan Municipality सफ्टवेयर जडान गर्नुपर्ने भएकोले उक्त सफ्टवेयर जडानको कार्य के कति दररेटमा गर्न सकिन्छ ? सो सम्बन्धमा सार्वजनिक खरिद ऐन, २०६३ को दफा ४१ र सार्वजनिक खरिद नियमावलीको नियम ८५ बमोजिम उक्त सफ्टवेयर जडान गर्न ईच्छुक यस कार्यालयमा सूचीकृत फर्म संस्थाले यो सूचना प्रकाशित भएको मितिले १५ (पन्ध्र) दिनभित्र आफ्नो दररेट सहितको आर्थिक प्रस्ताव पेश गर्नुहुन सम्बद्ध सबैको जानकारीको लागि यो सूचना प्रकाशित गरिएको छ । साथै उक्त कार्यको लागि निर्धारित स्वीकृत TOR यस कार्यालयको वेबसाईट www.bhumikasthanmun.gov.np बाट प्राप्त गर्न सकिने छ ।


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"कृषि, पर्यटन, उद्योग र स्वरोजगार, समृद्ध भूमिकास्थानको मूल आधार"

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Establishment and Implementation of the Agriculture Information Management System (AIMS) to digitize and manage agricultural data for Bhumikasthan Municipality

1) Background

The agriculture section of the Municipality needs to implement a web-based software application to keep/record data on the service provided by the section and task/activity performed by agricultural section to track the record and automate the service delivery. The system should help digitalize regularly produced data through a standard, common, centralized, comprehensive software system. As a consequence, it was required to build an integrated, centralized system to manage the data of budgetary plan and progress and record of the subsidy, training provided by agricultural section, data on distributed items, farmers inventory, automation of progress reporting, list of beneficiaries and many more in a centralized platform.

To fulfill this objective, Bhumikasthan Municipality needs to implement a web-based software application to integrate required features as per needs.

Objective

The main objective of this assignment is to establish and implement of Agriculture Information Management System (AIMS) and collect and digitally manage agricultural statistic of the palika to digitalize and automate the service of the agricultural section of the Bhumikasthan Municipality by implementing web-based software applications. Specific objectives of this task are (but not limited):

- To review, study, analyze, conceptualize and document SRS for web-based applications.
- Design the web-based applications as per the documented SRS as per the needs of the Municipality.
- To integrate business logic for the required features including user management, setup and configuration module, training management, subsidy management, monitoring and distribution management, production data management, farm/farmer registration, market dashboard, application submission and evaluation for subsidy and more.
- To integrate required reporting as per requirements.
- To collect agricultural data available in palika and digitalize them.
- Digitally manage the collected agricultural statistical data into the established AIMS.
- Integration of section-based login, dashboard, reporting, and data management facility.
- Provide capacity-building training to key officials and users.
- Prepare and provide an operational manual at least in Nepali Language.

2) Scope of Work (SoW)


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To complete the assignment, the consultant shall work closely with the key officials of the relevant section of the Bhumikasthan Municipality. The scope of the assignment will include but not be limited to the following:

- Discuss with the key officials of the Bhumikasthan Municipality to review, and understand the requirements
- Discuss with key officials of the Municipality to finalize the exact requirements to be integrated into the web-based system and document SRS for the proposed assignment.
- Design, and develop the required database as per requirements.
- Design, develop, test, and deploy a web-based system per the requirements.
- Establish and implement a web-based system.
- Collect historical agricultural data under the municipality.
- Digitalize the collected data and enter/import it into the established AIMS.
- Prepare user manual and operational manual.
- Provide operational training to key officials and users.

3) Actual task to be performed under this ToR

3.1. Establishment of AIMS integrating following Module

These are the following major modules of the proposed system:

3.1.1. User Management Module: This module is the backbone of authentication management for different types of users such as admin users, users from the agriculture section of the municipality, and users from the livestock section of the Bhumikasthan Municipality. It automates core user authentication functions such as user registration, permission assignment, permission removal, and many more. The system ensures user registration and management, permission assigned, user log management, and many more. It includes the following;

- User registration and management
- Permission management to the user
- Log management of the user

3.1.2. Training Management Module: The agriculture sections of the Bhumikasthan Municipality regularly conduct training for farmers and other beneficiaries. The training data such as participants' details, training inventory, and other training-related data will be recorded and entered into the system. It automates training activities of the agriculture section with its activity details, participants by name, gender, address, and many other information on the particular training activity that


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will be managed. It streamlines operations, reduces manual errors, and improves efficiency.

- 3.1.3. Subsidy Management Module:** This module focuses on managing and tracking the various subsidy-related information. The agricultural section of the municipality will provide different services, inputs, goods, and many more to the farmers, and agro-entrepreneurs each year. It's very important to track the record of these types of services provided by the section. The beneficiaries by subsidies in the particular fiscal year will be tracked into the system. It helps to manage subsidy distribution transparently and identify the history of beneficiaries for the Bhumikasthan Municipality.
- 3.1.4. Budgetary Management Module:** This module focuses on the import/registration activity-wise budget of the agricultural section and assigns the task performance by the activity. This module also helps to know the activity-wise progress and outcomes in real time.
- 3.1.5. Distribution Management Module:** This module focuses on managing and tracking the goods and inputs distribution information distributed by the agricultural section to the beneficiaries. Usually, the agriculture section of the municipality distributes seeds, fertilizer, seedlings, equipment, and many more to the farmers, and agro-entrepreneurs under the regular program of the Bhumikasthan Municipality. It helps to track all the information of beneficiaries such as full name, address, contact number, gender, and other details of the receivable items. It is another important module to maintain the better management of the service provided by the section.
- 3.1.6. Production Management Module:** This module focuses on managing and tracking the agricultural production produced by the farmers, and agro-entrepreneurs in the municipality in a particular fiscal year. This module helps to administration to estimate the production and plan against it to increase the productivity of each agricultural component.
- 3.1.7. Monitoring Management Module:** This module focuses on managing the monitoring information. The key person in the section will regularly conduct the monitoring of the business, services, producers, and farmers in order to measure the



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efficiency of the provided input services and control the quality. It's essential to track the monitoring record to enhance its effectiveness. It will help to track the date of monitoring, person monitored, farmers/business monitoring, and much more information.

- 3.1.8. Farm and farmer registration module:** This module focuses on the registration and management of the farmers/farm working in the agriculture sector under the territory of the municipality. This will help to maintain the inventory, service and input support to be provided and many more.
- 3.1.9. Subsidy application registration and evaluation:** This module is an automation of the entire process from participation to selection of special subsidies opened/run by the Municipality. The required indicators for any type of subsidy to be evaluated will be setup and management. The application submitted by the farmer will be registered into the system and the entire evaluation process automated to make it more transparent, and efficient. It will cover the entire process of application submission to the evaluation and selection of the applicant in particular activities.
- 3.1.10. Agricultural Market & Trade dashboard:** This module specially focuses on tracking, and visualizing the marketing, and trade of each farmer from Bhumikasthan Municipality. The agricultural trade and marketing record will be fed via other marketing platform and the concerned user from palika can be analyzed the trade and marketing information/data of each farmer by value-chain, time, fiscal year and many more. This module helps to identify the actual farmer by his trade and marketing various agricultural production.
- 3.1.11. Reporting module:** This module focuses on the generation of required reports as per the requirements of the agriculture of the municipality. Different types of reports will be designed and integrated as per requirements in the system under this module.

4) Collection and Management of Agricultural Statistical Data into AIMS

The additional requirements of this ToR are to collect agricultural data from each ward such as farmer, farms, their production and many more statistical data, digitalize collected data and upload/import them into the successfully established AIMS. The consulting firm should closely



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work with key persons of the section of Bhumikasthan Municipality to collect and manage statistical data of the agricultural section.

5) Client's input and counterpart personnel

The relevant section of the Bhumikasthan Municipality shall provide relevant reports and documents to the consultant on a return basis, and facilitate coordination between the consultants and concerned institutions as and when necessary. The Bhumikasthan Municipality will not provide any logistic support to the consultant firm during the execution of the consultancy service. The consultant firm is requested to propose the cost for necessary logistics support. Telephone, internet, and computers, required for performing installation and commissioning of web-based PAIMS will be provided by the client. If any bugs are found during the actual implementation of the software within the fiscal year 2081/82, the consultant must be responsible for fixing the bug.

6) Deliverables

The consulting firm shall be recruited for 1 month. The fully functional system will be deployed in the server provided by the Bhumikasthan Municipality within a period.

7) Support

- The prospective firm will be responsible for any system maintenance and support service in the software for the fiscal year 2081/082.
- The consultant should be available by email, call, or any convenient means of communication to provide support.
- The prospective firm has to fix any bugs if found in real-time.

8) Ownership and disclosure

All documents given by the client for the project development, deployed system, data and information shall be treated as confidential and shall not be made available to any third party without the written approval of the municipality office. In addition, the consulting firm formally undertakes not to disclose any parts of the confidential information to unauthorized parties. All the documents containing both raw data/materials provided by the municipality and the final report are to be returned to the client's office if any upon completion of the assignment.

9) Criteria/qualifications of consulting firms



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The consulting firm to be selected through the procurement procedure should meet the following criteria:

- The consulting firms shall be registered under the company registration office of Nepal to provide software development or ICT-related consulting services.
- Consulting firms must have tax clearance up to the fiscal year, according to the Government of Nepal.
- The consulting firms must not be blacklisted by any Government or private organizations.
- The consulting firms shall have similar past experience with the Government of Nepal.




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