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WORLD BANK/IFAD PROGRAM IMPLEMENTATION UNIT MINISTRY OF AGRICULTURE,  
REPUBLIC OF LIBERIA Rural Economic Transformation Project (RETRAP)  
1<sup>st</sup> Floor LIBSUCO Building Japan Freeway (Formerly Somalia Drive),  
Gardnersville – Monrovia, Liberia

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LOAN #: P175263; IDA: 69000

## **REQUEST FOR EXPRESSION OF INTEREST**

### **(CONSULTING SERVICES – FIRMS SELECTION)**

**Assignment Title: Procurement of Financial Management Software (Migration of financial management software)- ERP Consultancy Firm**

**REOI Reference No: LR-PMU-MOA-346113-CS-**

#### **CQS Background**

The Government of Liberia, through the Ministry of Agriculture (MOA), has received support from the World Bank, for the Rural Economic Transformation Project (RETRAP) and Smallholder Agriculture Transformation And Agribusiness Revitalization Project (STAR-P). The RETRAP seeks to increase the income of rural poor households through sustainable agricultural livelihood enhancements and improved rural access and agricultural marketing infrastructure services. The project supports the value chains of cassava, Rubber, Poultry & Pig husbandry Vegetables in selected counties of Liberia. The STAR-P seeks to increase agricultural productivity and commercialization of smallholder farmers for selected value chains in selected counties of Liberia and focuses on addressing critical market failures limiting the development of rice, oil palm, and horticulture value chains.

Ministry of Agriculture has embarked on the process of upgrading and migrating from an in-house standalone financial management and reporting system to a cloud-based Enterprise Resource Planning (ERP) system in order to streamline the business support processes to promote organizational collaboration and increase efficiency. Both past audits and the World Bank supervision missions' reports have recommended that the Ministry and Projects migrate to an ERP system to close the identified system reporting and functional gaps such as the disconnect between finance and procurement as well as the inability of the existing system to generate customizable reports and maintain financial audit trails. Furthermore, the process of compiling financial reports is largely manual, prone to error and causes delays in reporting. Migrating to an ERP system will help eliminate repetitive manual processes, eliminate data silos, enhance data integrity, improve data collection and access, increase data security and enforce regulation compliance e.t.c.

#### **Scope of Services**

The consultant will seek to design a strictly cloud-based Enterprise Resource Planning (ERP) system that streamlines the business support processes, promotes organizational collaboration and increase efficiency.

## Objective of the assignment

### Project Deliverables

The objective of this assignment is to develop, design and launch an ERP system to include: (a.) System Implementation: Successfully implement the application modules. (b.) Facilitate knowledge transfer to the designated users so they shall be better equipped to work flow diagram connecting all modules, provide application support, conduct acceptance testing, and provide training to all employed consultants.

The shortlisting criteria, based on Qualitative Assessment methodology, are:

- a) Core Business of the firm and Number of Years in Business
- b) Technical and Managerial Organization of the Firm
- c) Description of Similar Assignments (The firm must have demonstrable experience of 10 years in software design, engineering and development, custom web application and CMS development, ERP development/implementation. Also, the firm must have proven international track record of designing and implementing an ERP system in developing countries within the past five (5) years)
- d) The firm must be ISO 27001 compliant
- e) Experience in Similar Conditions
- f) Availability of Appropriate Skills among Staff or within the firm

The detailed Terms of Reference (TOR) for the assignment can be found at the following websites:

- a) [www.emansion.gov.lr](http://www.emansion.gov.lr)
- b) [https://vacancies & Career Opportunities | Ministry of Agriculture \(www.moa.gov.lr\)](https://vacancies&CareerOpportunities|MinistryofAgriculture(www.moa.gov.lr)) or it is directly requested via email from [dkulah@moa.gov.lr](mailto:dkulah@moa.gov.lr)

The attention of interested firms is drawn to Section III, paragraphs, 3.14, 3.16, and 3.17 of the World Bank's "Procurement Regulations for IPF Borrowers" dated July 2016, revised November 2017, and August 2018, setting forth the World Bank's policy on conflict of interest. Please refer to paragraph 3.17 of the Procurement Regulations on conflict of interest related to this assignment which is available on the Bank's website at <http://projects-beta.worldbank.org/en/projects-operations/products-and-services/brief/procurement-new-framework>

A consulting firm will be selected in accordance with the Consultants Qualification Selection (CQS) method set out in the Procurement Regulations.

Expressions of interest must be submitted electronically in a format that cannot be altered (pdf format is preferred) to the email address below by 20<sup>th</sup> July 2023 @ 5:00pm local time.

**Note:** All expression of interests MUST be submitted to the below email address:

**Galah Toto**

**National Program Coordinator**

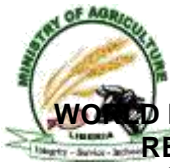
**Program Implementation Unit (PIU), Ministry of Agriculture**

**Smallholder Agriculture Transformation & Agribusiness Revitalization Project (STAR-P)/ Rural Economic Transformation Project (RETRAP)**

**1st Floor LIBSUCO Building, Japanese Freeway (Formerly Somalia Drive) Gardnersville – Monrovia, Liberia**

**Tel +231-777576980**

**Email: [retrapbids@moa.gov.lr](mailto:retrapbids@moa.gov.lr) with a copy to Email: [gtoto@moa.gov.lr](mailto:gtoto@moa.gov.lr)**



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LOAN #: P175263; IDA: 69000

## TERMS OF REFERENCE FOR ENTERPRISE RESOURCE PLANNING SYSTEM

Title: Recruitment of ERP Consultancy Firm

Location of Post: Project Management Unit, Ministry of Agriculture, Montserrado County

Contract Duration: 1 year

Reports to: Financial Management Specialist

Recruitment: Firm

### Background

The Government of Liberia, through the Ministry of Agriculture (MOA), has received support from the World Bank, for the Rural Economic Transformation Project (RETRAP) and Smallholder Agriculture Transformation Andagribusiness Revitalization Project (STAR-P). The RETRAP seeks to increase the income of rural poor households through sustainable agricultural livelihood enhancements and improved rural access and agricultural marketing infrastructure services. The project supports the value chains of cassava, Rubber, Poultry & Pig husbandry Vegetables in selected counties of Liberia. The STAR-P seeks to increase agricultural productivity and commercialization of smallholder farmers for selected value chains in selected counties of Liberia and focuses on addressing critical market failures limiting the development of rice, oil palm, and horticulture value chains.

Ministry of Agriculture has embarked on the process of upgrading and migrating from an in-house standalone financial management and reporting system to a cloud-based Enterprise Resource Planning (ERP) system in order to streamline the business support processes to promote organizational collaboration and increase efficiency. Both past audits and the World Bank supervision missions reports have recommended that the Ministry and Projects migrate to an ERP system to close the identified system reporting and functional gaps such as the disconnect between finance and procurement as well as the inability of the existing system to generate customizable reports and maintain financial audit trails. Furthermore, the process of compiling financial reports is largely manual, prone to error and causes delays in reporting. Migrating to an ERP system will help eliminate repetitive manual processes, eliminate data silos, enhance data integrity, improve data collection and access, increase data security and enforce regulation compliance e.t.c.

## Scope of Services

The consultant will seek to design a strictly cloud-based Enterprise Resource Planning (ERP) system that streamlines the business support processes, promotes organizational collaboration and increase efficiency.

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## Project Deliverables

The major deliverables for the ERP system should include: (a.) System Implementation: Successfully implement the application modules. (b.) Facilitate knowledge transfer to the designated users so they shall be better equipped to work flow diagram connecting all modules, provide application support, conduct acceptance testing, and provide training to all employed consultants. Below is the proposed project deliverable table:

### No. Deliverables

1 Submission and Approval of Inception Report

2 Completion and acceptance of Assessment and Establishment  
of Business Needs

3 Completion and Acceptance of Configuration, Customization and Integration of  
EPR System to meet needs of Project

4 Completion and approval of Deployment of ERP System

5 Completion and acceptance of Staff Training and Submission  
of Training Materials and ERP System Manual

Approx. Duration	Percentage of Payment
1 Week	15%
1 Week	20%
6 Weeks	25%
2 Weeks	20%
4 Weeks	20%

## Technical specifications

### Financial management arrangements for the project

Accounting - the accounting system should contain: (a) charts of accounts and coding systems able to capture transactions classified by project components and IDA/IFAD disbursement categories; (b) use of the cash or modified cash method of accounting; (c) a double-entry accounting system; and (d) the production of annual financial statements and quarterly IFRs in a format acceptable to IDA/IFAD. Books of accounts will include a main cash book, ledgers, fixed asset registers, and contracts register.

Management Reporting - the project will use report-based disbursements through the submission of quarterly interim financial reports (IFRs) on the sources and uses of project funds. A forecast of the first six months expenditures will form the basis for the initial withdrawal of funds from the grant, and subsequent withdrawals will be based on the net cash requirements. At a minimum, the constituents of the IFRs will be: (a) a statement of sources and uses of funds for the reported quarter and cumulative period from project inception, reconciled to opening and closing bank balances; (b) a statement of uses of funds (expenditures) by project activity/component and by expenditure categories, comparing actual expenditures against budget, with explanations for significant variances for both the quarter and cumulative period; and (c) Designated Account Reconciliation Statement.

Project Financial Statements (PFS) will comprise:

- (i) A statement of sources and uses of funds/cash receipts and payments, which recognizes all cash receipts, cash payments, and cash balances controlled by the project entities and separately identifies payments by third parties on behalf of the project entities.
- (ii) A comparison of budget and actual amounts as either a separate additional financial statement or a budget column in the statement of cash receipts and payments.
- (iii) A statement of accounting policies adopted and explanatory notes. The explanatory notes should be presented in a systematic manner with items on the statement of cash receipts and payments being cross-referenced to any related information in the notes. Examples of this information include a summary of fixed assets by category of assets and listing individual withdrawal applications.

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### System Requirements

The Accounting Software must be a web-based ERP system (browser neutral). The System Security and Administration Module will be used to manage and maintain the system users' access rights and privileges.

The ERP system must be a Certified cloud-based system capable of integrating e-requisition, procurement and finance module

The ERP system must have the capacity to integrate internal audit advisory notification before disbursement of funds

The system must have the ability to integrate with third-party applications like point-of-sale and bank systems, inventory management software and different operating systems and mobile devices

The system must be capable of handling multiple currencies with transactions records using local currency and reporting in foreign currency.

The system must have the capability to map activity codes to project components/sub-components and World Bank disbursement categories.

The system must have the ability to generate custom reports and dashboards and support custom features, data migration and data sharing between multiple systems.

The system must provide advanced analytics and insights such as financial trends and projections and possess the ability to export data into other formats, such as CSV and PDF.

The system must be able to use web-service or application program interface (API) to seamlessly auto-populate the ledgers for timely, accurate and comprehensive whole financial reporting.

The system must provide data backup and disaster recovery capabilities.

The ERP system must have secured access controls using secured socket layer (SSL) security feature to allow authorized users to access the system through internet using an encrypted user ID and password with two-factor authentication. Confidentiality, Integrity, Authenticity and Non-repudiation of critical information during its transmission over un-trusted networks shall be maintained. Encryption algorithms such as Advanced Encryption Standard (AES) 128 or 256 as appropriate shall be implemented. Hash algorithms shall be Secure Hash Algorithm 3 (SHA-3). There will be logs of Audit Trails to track users' activities.

The ERP system should be scalable to handle multiple projects with a variety of funding sources. The key features, functions and reporting requirements are detailed below:  
Key Features

1. Mobility - access ERP data and tools anywhere, anytime via internet
2. Integration
3. Cross-department workflow management
4. Document Management
5. Built-in Intelligence Reporting engine

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6. Machine Learning
7. Application Programme Interface – easy integration with MOA website
8. Best Industry practice for modules in scope

## Functions

9. System Security
10. System Administration (including foreign exchange rate management)
11. General Ledger
12. Budget Controls (including upload from Excel Template)
13. Segregation of duties with workflow approval hierarchy
  
14. Receipt Management and mandatory document attachment with drill-down from transaction screen
  
15. Payment Management
16. Audit trails with drill-down for use by internal and external auditors
17. Bank Reconciliation
18. Purchasing and Contract Management
19. Advance Management
20. Imprest Management
21. Field Office Advance Management
22. Fixed Asset Management

## Reporting Requirements

1. Fiscal Summary Report (annual and multi-year)
  
2. Budget Execution Reports (BER) with drill-down to transaction level and source document
  
3. Interim Unaudited Financial Reports (IUFR) by project components and disbursement categories
  
4. Designated Account (DA) Activity Statement
5. Automatic journals for each transaction
6. Detailed General Ledger
7. Real-Time Trial Balance
8. Executive Dashboards and geo-maps
9. Bank Reconciliation Report
10. Statement of Contracts subject to Bank's Prior and Post Review
11. Statement of Expenditure (SOE) Report to settle advances
  
12. Payment Instruction List – by various payment types (e.g., Bank Advice, CQs etc)
13. Transactions pending approval
  
14. Deductions at source Report (e.g., Goods and Service Tax (GST), Withholding Tax (WHT))
  
15. Workflow Display
16. CoA Display
17. User Display
18. Statement of receipt and payment
19. Statement of resources and expenditure
20. Statement of cash flows

21. Statement of financial position
22. Statement of comparison of budget vs. actuals

## Other Requirements

### Operational

Item	Description
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### Accessibility

Response time ranges

### Security and Privacy Item

Identification and authentication

Single sign on

User Group Definitions

Database Security



## Confidentiality

Data Loss (Disclosure of information about individuals or entities)

## Data Encryption

System should be accessible using Desktop and Mobile devices using network cable, WIFI and/or 3G/4G

Front-end / host / back end: max 15 seconds.

## Description

Users must be assigned unique identities within the system, which clearly identifies who they are.

The system must only be accessed by legitimate and authorized users including users from external entities. The system must utilize username and password to authenticate users and support two-factor authentication to strengthen access control when necessary.

System user identities must automatically allow single sign on to the ERP system to access all the modules

Role-based access control shall be used to define content and functionality applicable to users.

This must be in line with the user's job function or role. Departments will define access rights and the ERP system administrator with permission from respective departments can only edit these access rights.

Segregation of duties rules must be enforced on a system level.

The database must be secured by allowing only authenticated and authorised users access to data.

The database must be secured by only allowing the Web applications to access data through a service account, which forms part of Windows authentication.

Data must only be accessed by authenticated and authorized users in line with their job function or role.

Data and Passwords must never be viewable at the point of entry or at any other time during the ERP processes lifecycle.

Security policies must be enabled to prevent leakage/disclosure of sensitive information to unauthorized users.

Users must be trained on the functionality of the system to understand their responsibilities to safeguard sensitive information.

All data flowing within internal and external ERP modules must be encrypted with the latest industry standard encryption technology.

All data utilised within the ERP system must be encrypted when in storage, or in transit.

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Data Integrity (Data Corruption)

Implementation and development lifecycle

Access Reports

Reliability

Item

Availability (Percentage of time available)

Audit Trail Failure

Hours of Use

Maintenance Hours

Mean Time to Repair (MTTR)

Mean time to Failure (MTTF)

Recoverability

Item

Update failure

Roll-back

All the information flowing within and across the ERP modules should be the same and not be altered throughout its lifecycle.

The information must not be compromised during changes and must still be intact after the changes or updates to the ERP system.

Only authorised users must be able to edit or make changes to data.

Development of the ERP applications must comply with Open Web Application Security Project guidelines and ISO 27001 standard.

Reports on user access and activities must be available to monitor policy violations

#### Description

100%

If the audit trail function fails before the user saves updates to the transaction, the system shall be able to recover all changes made in up to one minute prior to the failure.

Monday to Friday: 00h00 – 23h59

Saturday: 00h00 – 23h59

Sunday and public holiday: 00h00 – 23h59

Sunday: 10h00 –23h59

Critical: 1 hour

High: 1 hour

Medium: 1 hour

Low: 1 hour

ERP time out due to user inactivity shall be after 5min (with warning)

Upon timeout, System must cancel the transaction, and must allow the user to start over

The above exempts payment transactions while in progress.

#### Description

When an update failure is detected all updates performed during the failed session shall be rolled back to restore the data to pre-session condition

All data recovered in a roll-back condition shall be recorded for use in forward recovery under user control

## Safe mode

### Module/Function Failure

When operating after a failure the user must be informed that the application is operating in a “safe mode” and all data is available for review without update.

The system shall prevent access to failed module/s while providing access to all currently operational modules

## Firm qualification

1. The firm must have demonstrable experience of 10 years in software design, engineering and development, custom web application and CMS development, ERP development/implementation. Also, the firm must have proven international track record of designing and implementing an ERP system in developing countries within the past five (5) years.
2. The firm must be ISO 27001 compliant
3. The firm should have at least one (1) implementation within Africa.
4. The team of experts must have at least seven (7) years' experience in the design, development, and implementation of an ERP system and familiar with unique financial reporting requirements for donor-funded projects.
5. The team must include members with degree in computer science and certification in Information Technology Infrastructure Library (ITIL), knowledge of object-oriented programming with specific experience of Microsoft.Net Framework, and experience in developing Mobile Apps.
6. The team should provide local resources in Liberia for support and hands-on end-user training.

## Qualifications and Experience of Key Staff

### Lead ERP Consultant

Bachelor's degree in computer science, information technology, or similar preferred. A minimum of over ten (10) years experience as a lead ERP consultant in a similar industry, software development, web application development, cyber security, etc.

ERP certification(s).

Extensive knowledge of business processes, ERP development tools, and coding languages.

Exceptional interpersonal, collaboration, and communication skills. Superb problem-solving and analytical abilities.

Excellent time management and organizational skills.

Good knowledge in project management, business and strategic management, content management and communication.

Substantive knowledge of the Government of Liberia's organizational structures and operations, particularly MOA.

Working knowledge of the operational modalities of national and international NGOs is desirable.

ERP Consultant/Specialist 1

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Bachelor's degree in computer science, information technology, or similar preferred. A minimum of over seven (7) years experience as an ERP consultant/Specialist in a similar industry, software development, web application development, cyber security, etc.

ERP certification(s).

Extensive knowledge of business processes, ERP development tools, and coding languages.

Superb interpersonal, collaboration, and communication skills.

Extensive knowledge and experience in software development, web application development, multimedia design & production, web graphics & marketing.

Good knowledge in project management, business and strategic management, content management and communication.

Substantive knowledge of the Government of Liberia's organizational structures and operations, particularly MOA.

Working knowledge of the operational modalities of national and international NGOs is desirable.

ERP Consultant/Specialist 2

BS/BA degree in Accounting, Finance, Information Systems, Operations Management, or Engineering preferred. A minimum of over four (4) years experience as an ERP Specialist in a similar industry, software development, web application development, cyber security, etc.

ERP/Accounting software experience

Government/Donor Financial Management experience preferred.

Good knowledge in project management, business and strategic management, content management and communication.

Substantive knowledge of the Government of Liberia's organizational structures and operations, particularly MOA.

Working knowledge of the operational modalities of national and international NGOs is desirable.