

Social Development Foundation (SDF)

Terms of Reference (ToR)

Hiring consulting firm for Modification, Upgradation and Enhancement of Management Information System (MIS) Package #

1.0 Organization

Social Development Foundation (SDF), having its head office located at 22/22 Khilji Road Mohammadpur, Dhaka-1207 was established in 2001 as an autonomous not-for-profit organization under the Ministry of finance to empower the marginalized poor and extreme poor population particularly the women through building sustainable community institutions, building their capacity and ameliorating their livelihoods to ultimately their poverty. Since, inception SDF has been dedicatedly implementing programs for poverty alleviation, creating employment opportunities for un/under employed youths through providing skill development training , strengthening community level institutions, providing financial support for implementing Income Generating activities (IGAs) to improve livelihood status, help ensuring food security, constructing rural small infrastructures, livelihood development, of fisher's community in coastal districts, support health and nutrition, provide credit under stimulus package for the development of cottage, small and medium enterprise of the COVID-19 affected communities etc. With the vision to eradicate poverty, SDF has been predominantly assisting and Government of Bangladesh through implementing several flagship projects with the financial assistance of the Government of Bangladesh and The World Bank Group.

2.0 Background:

SDF has successfully implemented several pro-poor projects including Social Investment Program Project (SIPP-I), Monga Mitigation Initiative Pilot Program, Livelihood Restoration Strategy in Cyclone SIDR Affected Areas, Emergency Flood (2007) Restoration, and Recovery Program, Empowerment and Livelihood Improvement 'Nuton Jibon' Project (SIPP-II) with the financial assistance from Govt. of Bangladesh and World Bank which significantly contributed in attaining Millennium Development Goals (MDGs) and putting Bangladesh in a position of global role model. Considering to achieve the core targets of Sustainable Development Goals (SDGs) on-time, SDF revamped its strategic objectives and immediately started to implement 'Nuton Jibon Livelihood Implementation Project (NJLIP)' from 2015 covering 22 poorest districts. NJLIP project was successfully completed in June 2021 despite the COVID-19 pandemic.

3.0 The RELI Project:

The recent Corona Virus (COVID-19) crisis started from 1st quarter of 2020 in Bangladesh threatened to reverse the progress made by the country particularly, on rural poverty reduction and further undermined women's economic opportunities and outcomes. In the wake of the adverse effect of the pandemic on country's economy and livelihood, SDF, with the support from

Ministry of Finance and The World Bank initiated to launch the Resilience, Entrepreneurship, and Livelihood Improvement (RELI) project from 5th October 2021 to predominantly address the emergency economic initiatives of the GoB to fight the COVID-19 crisis and climate-induced events. Building on the successful experience of implementing rural poverty alleviation predecessor projects, for instance, SIPP-I, SIPP-II, and NJLIP, The RELI Project focuses on the livelihood support for the vulnerable and support for their recovery and resilience building, employment generation, entrepreneurship development, and post-crisis economic recovery preparation in the intervening areas. Whilst RELI's approach for livelihood improvement support to the rural poor and extreme poor is essentially similar to that of NJLIP, most project activities have been adjusted to provide a timely and effective response to the disruptions created by the COVID-19 pandemic, to support post-crisis economic recovery, and to ensure greater resilience of beneficiaries. The RELI project is for five years where the World Bank will provide USD 300 million as Credit through the Ministry of Finance, GoB will provide USD 40 million and beneficiary contribution will be USD 1 million making the total project cost USD 340 million.

PDO Statement

The Project Development Objective (PDO) of the project is *'to improve livelihoods of the poor and extreme poor, enhance their resilience and support rural entrepreneurship in project areas.'*

PDO Level Indicators

Key indicators to measure the achievement of the Project Development Objective (PDO) include: (i) Number of beneficiaries with an income increase of at least 30% from Income Generating Activities and increased employment (of which 90% female); (ii) Share of beneficiaries in RELI villages changing poverty status (of which 90% female); (iii) Share of beneficiaries who are satisfied with project activities; (iv) Number of producers and rural entrepreneurs with increased income of at least 40% (of which 90% female); and (v) Share of beneficiaries with improved resilience (of which 90% female).

Purpose of RELI Project

The project will provide immediate livelihood support for rural communities, primarily women, whilst contributing to building back better in a resilient way. The project adopts the approach of NJLIP, which documented great success in reaching the poor and poorest, and will tailor livelihood opportunities to respond to the following urgent needs: (a) respond to the impact of the COVID-19 pandemic and climate-induced events such as cyclone Amphan on the livelihood of vulnerable rural households and support recovery and resilience building, (b) help rural households graduate out of poverty through IGAs, as well as skills development and employment support, (c) support NJLIP's current beneficiaries who have fallen back into poverty because of recent crises, and (d) support rural entrepreneurship for sustained post-COVID-19 economic recovery.

Components

The project will have four components:

1. Component A: Community Institutions and Livelihood Development:
 - Subcomponent: Development and Strengthening of Community Institutions
 - Subcomponent: Financing of Community Plans
 - Subcomponent: Health and Nutrition Support
2. Component B: Business Development and Institutional Strengthening:
 - Subcomponent: Development and Strengthening of Second-tier Institutions
 - Subcomponent: Commercial Agriculture and Rural Entrepreneurship
 - Subcomponent: Employment Generation Support
3. Component C: Project Management, Monitoring and Learning; and
4. Component D: Contingent Emergency Response Component (CERC)

Project Beneficiaries and Coverage

Target project beneficiaries are the poor and extreme poor in the poorest districts (zillas) and sub-units of districts (upazilas) of Bangladesh. The RELI project is aimed to have 744,600 direct beneficiaries (489,600 RELI Project beneficiaries and 255,000 COVID-19 affected NJLIP beneficiaries), of which 90 percent will be women. The project will be implemented in 3,200 villages in 20 districts throughout the country. Out of the 20 districts covered by the RELI project, 12 districts have received prior support from SIPP-II or NJLIP: Barishal, Chandpur, Dinajpur, Khulna, Kurigram, Mymensingh, Naogaon, Nilphamari, Patuakhali, Pirojpur, Rangpur, and Sherpur. The 8 new districts are Chapainawabganj, Chattogram, Jhenaidah, Kishoreganj, Lakshmipur, Lalmonirhat, Magura, and Netrokona. The twenty (20) districts of RELI Project will be covered under 5 regions such as Jashore, Rangpur, Mymensingh Cumilla and Barishal. A total of 3,200 villages under 68 upazilas are targeted for intervention. In addition, twenty-five (25) villages will be organized under each cluster segmenting 3,200 villages under 128 clusters for intervention. Succinctly, the coverage is as follows:

- 1. Jashore region** (Altogether 5 districts, 15 upazilas, 800 villages & 32 clusters) - Magura, Khulna, Jhenaidah, Chapainawabganj and Naogaon districts
- 2. Rangpur region** (Altogether 5 districts, 17 upazilas, 625 villages & 25 clusters- Dinajpur, Kurigram, Rangpur, Nilphamari and Lalmonirhat districts
- 3. Mymensingh region** (Altogether 4 districts, 15 upazilas, 725 villages & 29 clusters)- Mymensingh, Kishoreganj, Netrokona and Sherpur districts
- 4. Cumilla region** (Altogether 3 districts, 9 upazilas, 500 villages & 20 clusters)- Chattogram, Chandpur, and Lakshmipur districts
- 5. Barishal region** (Altogether 3 districts, 12 upazilas, 550 villages & 22 clusters)- Barishal, Patuakhali, and Pirojpur districts

4.0 Credit Program under Stimulus Package (CPSP) program

Social Development Foundation (SDF) is currently implementing its Credit Program under Stimulus Package (CPSP) program of the Government of Bangladesh in selected areas in an attempt to ameliorate the livelihoods of the marginalised people severely affected because of the pandemic and to revive and expedite the village-level economic activities through supporting the cottage, small and medium enterprises. SDF started implementing its CPSP program from February 2021 covering the target people/sector/enterprises initially in 36 Upazilas under 13 districts. However, at present, another 15 Upazilas under 6 districts are brought under the coverage of the CPSP Program which expanded its coverage in 51 Upazilas of 19 districts altogether.

5.0 Objectives of the assignment

The main objective of the assignment is to modify, upgradation and enhancement according to the latest requirements and optimize the system performance of the existing “Management Information System” (MIS) of SDF by way of upgrading the existing MIS through adding, customized, bug fixing, list out observations and take action for system better performance, user-friendly and hands-on features that fits the bill of implementing the RELI Project with other existing and upcoming project and program properly and ensures achieving its Project Development Objectives on time whilst involves the participation of all stakeholders. The upgradation, modification and enhancement would help track and manage day-to-day project activities with appropriate information required for decision making, monitoring evaluation and learning.

The specific objectives include:

- Modification, upgradation, enhancement and fixation of bug of SDF’s web-based Management Information System (MIS) that consisting Financial Information System (FIS) Module including Payroll and Provident Fund Management System Module & HRM System Module including Leave Management, Online Performance appraisal and Attendant Management System Module.
- Modification, upgradation and enhancement of Project Management System (PMS) Module
- Modification, upgradation and enhancement of web-based Inventory Management System Module
- Developing separate module for Gratuity Provision and Fixed Asset
- Improving the interfaces and interlinks of existing SDF-MIS.
- Modification, upgradation and enhancement of various types MIS report formats based on specific needs. The report formats should include tables, charts, maps, photographs, descriptions/comments etc. with comparison of current status to historical progress and targets, and be in easy-to-understand layouts to facilitate status reporting and decision-making to a wide range of MIS stakeholders.
- Developing Dashboards for different levels including national, region, and district to demonstrate latest situation of different activities.

6.0 Scope of Work

For all the key activities and deliverables mentioned below, the consultant should discuss with the MIS development team of all levels, head of the department, and SDF management. For modification, upgradation and enhancement of existing modules, the consultant will discuss with the respective user of each module for requirement assessment. However, for developing new modules, the consultant shall use a modular approach of software development, in succession, where each module will follow a cycle of requirement assessment, designing and development, testing, integration, piloting and final roll out with training. Specific tasks of the Consultant (/Firm) will include but not be limited to the following:

Task 1: User Requirement Assessment

The consultant will

- **Improve familiarity with all project activities** through analyzing project documents, field visits, and discussions with stakeholders.
- **Determine detailed user requirements** for the MIS based on business requirements of SDF at various levels including community, cluster, district, region, and head quarter and related different tiers of management.
 - **For determine-**
 - MIS stakeholders (all who have a role in data acquisition, processing, reporting, or use/decision making)
 - Details of project management and tracking indicators
 - Various types of reporting content, formats, and frequency
 - Various types of information to be catalogued and stored in the MIS (e.g. alphanumeric data, location, reports, photographs, videos, etc.) relating to the status and effectiveness of various project activities
 - Basic information flow requirements (into, within, and out of the MIS)
 - Basic additional hardware/software/dataset requirements
- **Analyze and determine detail design recommendations in a Systems Requirement Specifications (SRS)** for the proposed modification, upgradation and enhancement of SDF-MIS. The design should be based on close interaction with the Client and flexible to incorporate changes in activities or future phases of the project/program.

Task 2: Modification, Upgradation and Enhancement of SDF-MIS

The MIS system should be modified, upgrade and enhance in web platform as per the business and users' requirements of ongoing Resilience, Entrepreneurship and Livelihood Improvement (RELI) Project and Program-Credit Program Under Stimulus Package (CPSP) with all provision for existing and upcoming project & program with separate screen for project and program & fund wise input and output (report) for all module. Accordingly, the consultant shall review the existing modules (technology and software requirements) and thus, modify, upgrade and enhancement of the SDF-MIS based on the requirements of both. These include:

A. Financial Information System (FIS)

At present, the FIS System is web based system platform. The consultant shall work to add and develop the following features which are not limited to:

- ✓ **Entry Form:** To be updated Voucher Posting with user defined Voucher Numbering Pattern, Village-wise Fund Disbursement, Budget Information, some Master Entry Forms such as Project List, Cost Center List, Category List project wise.
- ✓ To be implemented component/sub-component list project/program wise, Ledger Head (interlinked with Category) etc.
- ✓ To be implemented chart of account project and program wise.
- ✓ To be implemented separate screen for project and program and fund wise input & output (report) in FIS
- ✓ **Reports:** to be implemented Chart of Accounts project/ program wise, different Financial Statements (component-wise and cost center-wise), Reporting system should be multi-level including head office, region offices and district level offices.
- ✓ To be implemented direct print option for all report

B. HR & Payroll System

At present, HR & Payroll System is web based system platform. The consultant shall work to modify and upgrade the following features which are not limited to:

- To be upgraded Human resource management (employee database, personal information, educational background, competency management, people plan management)
- To be implemented separate screen for project and program & fund-wise input and output (report) for HR management System Module
- Training and organization development
- Foreign and local travel information of employees (purpose such as Field Visit, Seminar, Workshop, Conference, etc.)
- To be implemented the integrating Attendance module with Payroll management module
- Payroll management with configurable different salary structure of all existing projects and program with upcoming all projects and program
- To be implemented separate screen for project, program and fund-wise input & output (report) for payroll system module
- To be modified arrear calculation, generation of Income Tax, Income Tax Statement etc as per requirement.
- To be implemented Tracking progress of monthly & yearly reports
- Report system is to be multi-level based on head office, region offices and district level offices.
- Advance reporting with multiple "Slice & Dice" options to generate reports in flexible formats based on user specific needs.
- To be implemented loan related reports and separate screens for project and program-wise input/output (report) in Provident Fund Module

- To be implemented leave approval flow from cluster to head quarter for Earned Leave and separated screen for project and program wise input/output (report) in Leave Management Module
- To be implemented separate screen for project and program wise input & output (report) for online Performance appraisal module
- To be implemented separate screen for project and program wise input & output (report) and date range-wise employee attendance status in Biometric Attendance Management Module
- To be implemented features to reuse previous employee ID of discontinued/separated staffs of SDF
- To be implemented Letter formats (18 types) including Appraisal Note, Extension of Employment Contract etc. need to be incorporated in HR module. These are: **Letter for Extension of Employment Contract (Regular)**, **Letter for Extension of Probation Period**, **Appraisal Note- For increment**, **Increment Letter**, **No Increment Letter**, Letter for **Children Education Allowance**, **Nominee form- PF/GF/ELE** and others, Letter for **Promotion**, **Further Contract Renewal**, Letter for Notification **(NOC)- for Foreign Visits**, Letter for **Transfer Order**, LPC Form - **Last Payment Certificate**, Both Bengali & English Letter for **Resignation**, Both Bengali & English Letter for **Resignation Acceptance**, Bengali Letter- **for Employees' Agreement** for Financial Benefits, Letter for No Objection Certificate **(NOC) for Financial Benefits**, **Bengali Application for PF/GF/ELE** and others Letter for **Experience Certificate**
- To be implemented project and program wise employee service history
- To be implemented Pending staff list as a part of main list (like no actions were taken against those for long time absence in workstation or financial misappropriation) in HR module
- Resolve HR statistics report related problems
- To give training to all responsible staffs
- To be implemented- all type of notifications for all modules and notification will store in the user panel as well as send to user Mobile via SMS and email inbox via email, naming options in bangla, provision of consolidate salary, Project and Program-wise pay scale
- Resolve issues of e-mail of Pay slips, processing salary for all projects, employee-wise salary statement and yearly salary statement for NBR, employee entry and salary related issues of CPSP Program

C. Separated Module for Gratuity

At present, there is no separate module for Gratuity calculation and payment in the existing SDF-MIS. The consultant shall develop a separate module for Gratuity management in web platform with common features of a conventional Gratuity System. The entry form and report system are to be multi-level based on SDF's head office, region office and district level office. Separate screen for project and program-wise input & output (report) shall be incorporated for this module. Project & Finance-wise reports are required in Gratuity provision report as well.

The consultant shall work to add and develop the following features which are not limited to:

- Gratuity Registration (basic) information
- Dynamic Chart of Accounts
- Voucher Entry
- Gratuity Membership Entry (with Opening Balance)

- Gratuity Membership Information Entry (Excel)
- Gratuity Fund Investment Information Entry (with scheduling)
- Gratuity Month-End-Process
- Gratuity Discontinuation Process & Payment Process
- Individual Gratuity Details Statement/Report
- Gratuity Balance Sheet Report
- Gratuity Trial Balance
- Dashboard and Related Reports

D. Inventory System

This module needs to be upgrade and modified as per the business & users' requirements of RELI Project and CPSP program with provision of upcoming project and program. Separate screen for project and program-wise input & output (report) shall be incorporated for this module

E. Separate Module for Fixed Asset

At present, there is no separate module for fixed asset in SDF-MIS. The Consultant shall develop a separate module for fixed assets in web platform with the common features of a conventional Fixed Asset System. The entry form and report system are to be multi-level with based on SDF's head office, region office and district level office. Separate screen for project and program-wise input & output (report) shall be incorporated for this module.

The consultant shall work to add and develop the following features which are not limited to:

- Unique asset number
- Asset group and sub-group
- Calculation of depreciation
- Selection of depreciation method
- Mode of depreciation calculation
- Auto depreciation calculation
- Warranty / Guarantee information
- Asset disposal with computation of business loss
- Asset sale with computation of business loss/gain
- Insurance value check
- Vendor information
- Asset location and users' identification
- Asset transfer / tracking
- Asset not in use
- Printing of individual asset history
- Details of unclassified asset
- Group Asset Calculation
- Dashboard and Related Reports

F. Project Management System (PMS)

This module needs to be upgrade and modified as per the business & users' requirements of RELI Project with separate screen for different project and program-wise input & output (report) and have same provision for upcoming all projects. In this regard, the consultant shall review the existing modules (technology and software requirements) on the basis of business requirements of RELIP. The activities, to be performed under this module are as follows, but not limited to:

- Improve existing Interfaces and interlinks of existing Project Management System (PMS);
- Identify and fulfill the gaps/inadequacy of the PMS;
- Ensure multi-level user authentication that will contain all the privileges separate from user-end. This authentication must be extendable dynamically based on requirements from admin;
- Create opportunity of data insertion option multi-level pages based on access and information;
- To be implemented different MIS Reports on different thematic areas;
- Special reports on BI Tools;
- To be implemented-Bangla village matrix and Key milestone (KM), Management Matrix, Dashboard for HQ, Region, district and cluster, all member/beneficiary name in bangla in PMS and Loan Management System (LMS), NJCS and NJDCS- entry and report form, validation for avoid PIP duplication, API for data transfer from LMS to PMS, feature for include widow information, Cluster Facilitator (CF) Matrix, Independent PMS and LMS, User interface for NJCS-Monthly report (after phase out), Report Submission format of thematic report and KM from thematic including CO, Field visit feature, feature on Indigenous people with ethnic class, report on youth sustain at least one year, male and female for all report, youth age-wise reports, report on trade of youth, features for migrant people, GEMS(Geo Enabling Initiative for Monitoring and Supervision) will be integrated with PMS through API, various types of Governance Report formats, Field visit report format, additional fund for CISF, features for new poor, features for PIP card, Resilience Index Measurement and Analysis (RIMA).

Common requirement

1. Online based support center from vendor for faster problem solving, and managing log files (which will be need to submit during AMC bill submitting) of MIS software
2. To be implemented- Auto and Incremental data backup system, data security and data backup and recovery and front end backup and recovery, data archived system, huge data handling capacity and ensuring the audit log
3. To be implemented- all type of notifications for all modules and notification will store in the user panel as well as send to user Mobile via SMS and email inbox via email
4. Responsive UI/UX for all Devices (web and Mobile) and enhance the UX in accordance with the current framework and technology to reduce the user efforts.
5. Both English and Bengali language has to be supported in both Labels/Captions and Input/output Fields. Numeric figures also have to be supported in both English and Bengali.

6. For complex and analytic reports, have a plan to deploy separate report database server where the database will design depend on Online analytical processing (**OLAP**) system.
7. Performance Upgradation of MIS: For better performance, the system and database need to optimize.
8. Data migration from existing LMS/PMS to the updated LMS/PMS in accordance with SDF requirement and system compatibility (if required).

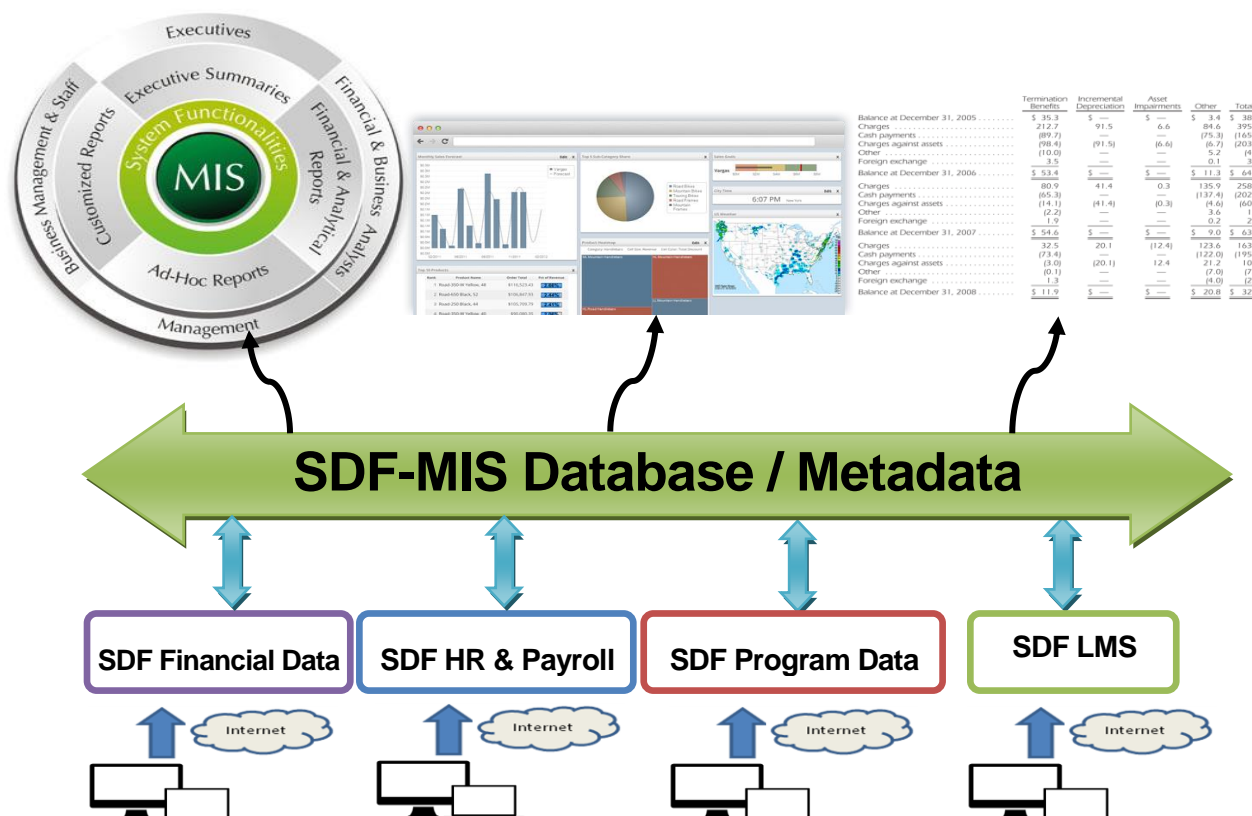
❖ Dashboard

Dashboard shall be designed in a manner that's depicts overall picture of all projects and status of microcredit program at a glance. At the same time, information of dashboard will ensure transparency and accountability as well. The system requires different dashboards for different level of management. Following are required for various category of Dashboards and every dashboard should have location-wise components showing i). Current usage of the system i.e. statistics of user using the system by location, and ii). Project Achievements.

- Dashboard for Cluster Offices
- Dashboard for District Offices
- Dashboard for Region Offices
- Dashboard for Head Office

Dashboard should present summary information along with relevant graphical representation in separate Tab. Final dashboard information is to be identified during system study.

The diagram of the proposed solutions framework is shown below:



❖ Administration

➤ Manage User

- **Define User Role** - User role and access permission to be defined in two steps. User role to be created and access permission to be defined as below.
 - ✓ Menu Level Permission
 - ✓ Action Level Permission for each menu
 - Add
 - Edit
 - View
 - Delete
 - ✓ Permission for Report Retrieval – Permission for all reports is to be assigned against every user role. In case of drilldown/interactive reports, all sub/sub-sub reports will get the permission automatically with the permission of main report.
- **Activate User** - A user may belong to multiple user roles for different office locations such as National/HQ, Region, District, and Upazila/Cluster.

Task 3: Institutional Capacity Building

The Consultant will develop documents both in hard and soft form for all aspects of the system modification, upgradation and enhancement & provide appropriate training to relevant MIS stakeholders. This will include on-the-job support and hands-on training (including in-person, telephone and on-line support) at regular intervals throughout this assignment. Design and develop interactive Training module (Manual and video), operation user manual, administrative user manual and technical user manual to provide SDF. Ensure Comprehensive Training of Employees for developed software as well as Training for Trainers (TOT) for specified user groups of SDF.

1. Technical Requirements:

The proposed system should contain the following technical requirements/functionalities, which are not limited to:

- Application must be web-based, and must not require any client software other than a web-browser to use it.
- Application should be preferably free from any proprietary software in its architecture.
- Implement data validation for both client and server (eg: AJAX technologies, Javascript, etc for web based application);
- Implement Search, Create, Read, Update, Delete (SCRUD) operations;
- Implement filter option to quickly reach to desired information for some pages;
- **Adopt Role-Based Access Control (RBAC) to authorize system resources allocation to users based on roles. User authentication is secured from every user-end, where super admin should have option to maintain the level of security. Option for maintaining User Access privileges based on Head Office, Region, District, and Cluster/Upazila level.**

- At the development stage, vendor must follow the standard code and naming convention, code level documentations, code level and other necessary documentation.
- Ensure compatibility to all major browsers such as Mozilla Firefox, Internet Explorer, Google Chrome, Opera, etc.
- Software should be scalable and upgradeable as and when the number of users and contents increases;
- Image and other content customization features should be inbuilt within the system to allow standard content sizes (eg. standard image sizes for easy uploading and processing)
- Other relevant work pertaining to efficient operation of online MIS.

2. Security Requirements:

The consultant shall adhere to following security requirements:

- The Information Management and Security Policy (IMSP) document during deployment.
- The software should provide audit trails and logs mechanism for content changes performed by system users.
- Maintain time series data so that certain information is not lost with passage of time and repeated updating.
- Suitable web security and data security from spams, virus, hackers, intruders, etc.
- Include up-to-date CAPTCHA program as a remedy to stop spam and other intrusions wherever required.
- Handle Session Hijacking, session replay, etc
- Input Validation to prevent attacks such as buffer over-flow, cross-site scripting, SQL Injection, etc.
- Mandatory Password reset option after a certain period.

3. Development Tools & Platform

Vendor must propose detail about development tools, platforms, methodologies, framework and RDBMS that will be used for the project with proper justification. Proposed technology and tools should be stable and robust enough to handle such a huge system at same time it should not be outdated or to be outdated in near future. Vendor must have proven track record and successful (developed & implemented) large software projects in operation at multiple client sites using the same technology & tools.

For modification, upgradation and enhancement of the software following tools/technologies are recommended:

- | | |
|------------------------------------|--|
| ➤ Type of Application | : Web based |
| ➤ OS Platform | : Open / Cross Platform (Windows/Linux) |
| ➤ Technology | : Open source languages with MVC based web framework |
| ➤ Database | : Open Source Database (MySQL/Oracle or any other compatible with the existing database) |
| ➤ Reporting & Dashboard | : Compatible |
| ➤ Web Server | : Apache Server or any other compatible with existing server |

At present the SDF-MIS uses the following tools and technology:

Name of Module	Type of Application	OS Platform	Technology	Database	Reporting
Financial Information System (FIS)	Web based	Open / Cross Platform	Open source languages with ASP.NET MVC based web framework	MySQL 5.6	Crystal Reports
HR & Payroll	Do	Do	Do	Do	RDLC Report
Procurement	Do	Do	Do	Do	RDLC Report
Inventory	Do	Do	Do	Do	RDLC Report
Project Management System (PMS)	Do	Do	Do	Do	HTML, JS

*Existing OS server: Windows Server 2016

Modification, Upgradation and Enhancement of Management Information System will be based on latest tools and technology.

▪ Operating and System Environment

The main components of the software will be web based application. It should be run in Windows/Linux operating system and Server operating environment will be Windows/Linux as well.

Alike the present system environment the ***Head Quarter (national) Unit would be expected to have a LAN installed with web-server/ client server technology. The region, district, and cluster offices would be expected to connect through internet connectivity using broad band/mobile Internet.***

7.0 Responsibility

Client

- Shall ensure bi-weekly updates are reviewed and comprehensive requirement specifications are provided within review period;
- Shall maintain the delay register and notify the vendor of all delays in writing;
- Shall appoint the point of contact or project focal person(s);
- Inform the stakeholders and arrange for joint sessions with consultant

Vendor/Consultant

- Must provide a detailed execution plan with deliverables list;
- Shall ensure timely delivery of deliverables;
- Since proposed modules are web-based software, the vendor will follow the home-based work modality using own space and equipment;
- Shall provide the development platform acceptable to client;
- Shall maintain the delay register and inform the client on the delays;
- Shall appoint a project manager who shall be the point of contact;

- Shall recommend suitable hosting environment (server specifications and similar) to host the application and database safely and efficiently;
- Data backup and archiving plan as well as network security plan with mention the probable risk/vulnerability factor and ensuring the audit log.

8.0 Deliverables and Timing

Stage	Key Activities and Outputs	Duration after signing contract
Stage 1	<ul style="list-style-type: none"> ▪ Inception report detailing schedule of work plan, key staff deployment, methodology, etc.) and Inception Workshop to discuss with Client. ▪ Review of existing system and project documents ▪ Review user requirements, carry out needs analysis and review existing MIS system and project scope 	1 st month
Stage 2	<ul style="list-style-type: none"> ▪ Present system design, software design and database design (with database structures), including System Requirements Specification (SRS) presenting Project management levels, performance areas, indicators, data sources, data destinations, periodicity, and instruments + procedures for collecting, recording, aggregating, filtering and transmitting data, etc.) ▪ Review and approval of SRS/system documents by SDF 	
Stage 3	<ul style="list-style-type: none"> ▪ System modify, upgradation and enhancement (module wise) 	2 nd month- 3 rd month
Stage 4	<ul style="list-style-type: none"> ▪ Testing phase ▪ Beta Test application software ▪ Performing all forms of Testing ▪ User Acceptance Test of all modules ▪ Install software ▪ Initial training for key users ▪ Prepare and finalize manuals 	4 th month
Stage 5	<ul style="list-style-type: none"> ▪ Incorporate suggested changes identified at Stage 4 	
Stage 6	<ul style="list-style-type: none"> ▪ Development of User Manuals ▪ Prepare MIS training modules for key user groups ▪ Train Project staff/users and select stakeholders at the national, regional, district and cluster levels on how to collect, record, aggregate, filter and submit data ▪ Train the Project's technical personnel on how to maintain the MIS, Data Export & Import and system backup and restore ▪ Ensuring knowledge transfer to SDF respected MIS personnel and training them up to fix any software related problem ▪ Install final software at the national, regional, district and cluster levels 	5 th month- 6 th month
Stage 7	<ul style="list-style-type: none"> ▪ Get final approval from the project ▪ Fine-tuning, adjustments and user support ▪ Source code with code documentation and relevant test reports. 	
TOTAL		6 Months

9.0 Annual Maintenance support

- i) The consultant will provide annual maintenance support services after consultancy period which will include bug fixing, fine tunings, slight modifications and addition & enhancements in the software application as well as database support with respect to cleaning of databases, rectifying errors and security issues, if any in person or through remote arrangements. A log file on maintenance has to be maintained and periodic report has to be submitted to the client.
- ii) After successful completion and rolling out of SDF-MIS, the Consultant will provide maintenance and support for next three Years (i.e. after rolling-out). Accordingly, the consultant will provide year wise budget line separately which will be renewed every year subject to client (SDF) requirement and the performance of the consultant. A log file has to be maintained capturing issues identified/ reported, solution provided, remarks along with date stamp.

10.0 Final Products or Services

- Approved URS (User Requirement Specification).
- Approved SRS (System Requirement Specifications), SDD (System Design Document).
- UAT (User Acceptance Testing) and SQA (Software Quality Assurance) Report.
- Approved final released version of the developed system.
- Source code with code documentation and relevant test reports.
- User Manual.

11.0 Procurement Method and Duration

QCBS (Quality and Cost Based Selection) procurement method shall be followed for this consultancy service. Total duration of the assignment is 6 (six) months in two phases. First phase i.e. 5 (Five) months for modification, upgradation and enhancement, testing, and roll-out and the 2nd phase i.e. next 1 (one) month will be assigned for post roll-out activities such as fine tuning, additional report preparation, modification, bug fixing etc.

12.0 Qualification of Firm/Agency

- The firm must be registered and affiliated in Bangladesh.
- The agency/firm must have at least 7 years of experience as a software development firm with experience of designing, developing, maintaining of at least 2 (two) similar computerized web based MIS/ERP system that is being used by some organizations from different office locations.
- The agency/firm must have appropriate professional and technical team with high level of competencies to handle tasks and responsibilities. Evidence of engagement of software development professionals should be in the regular payroll of the concerned firm.
- The firm/agency shall have an ISO 9001 and/or at least CMMI Level-3 Certification.

13.0 Team Composition

Position Title	Qualification & Experience
Project Manager / Team Leader	At least graduate degree in Computer Science or Information Technology; Should have at least 8-10 years intensive working experience in developing different integrated software and management information systems particularly 5 years experience in large designs and coordinating project teams in designing and developing web-based MIS software.
Software Architect/ System Analyst	At least graduate degree in Computer Science or Information Technology; Should have at least 5-7 years intensive working experience in developing different integrated software and management information systems. <ul style="list-style-type: none">• At least 3 years of UML experience• Must have good Analytical skill and knowledge in web-based applications development• working knowledge in handling large RDBMS etc.
Software Engineer	At least graduate degree in Computer Science, Information Technology (IT), or Masters in Applied Physics/Mathematics/Statistics; Person having good experience in handling large Database management will get preference. At least 4 to 5 years' experience in setting up and running individual systems confidently. <ul style="list-style-type: none">• Must have experience in designing and developing a robust and large web technology based solution.• Experience in working with MySQL or other open source RDBMS are desirable.• Good hands on experience in designing and developing different dashboard reports;• Good working knowledge in PHP MVC.net to migrate the existing system.• Ability to adapt to community based software solutions, provide solutions in local languages, meet deadlines and achieve desired results.• Ability to impart training and capacity building on the developed software
Web Developer	At least graduate degree in Computer Science, IT or Applied Physics or Mathematics or Statistics. Minimum 2 (two) years working experience on web programming with MySQL or any other open source RDBMS platforms.

14.0 Approval & Ownership

Approval: The Consultant's outputs will be accepted by SDF subject to the approval of the General Manager (M&EL) and Managing Director or MIS Monitoring Committee. SDF management may seek comments and feedback from external members/specialist, as required.

Ownership: SDF will be the sole and absolute owner of the MIS software, Source codes, Test

Specifications and results, technical documents, MIS design, data, reports, MIS training materials and modules, User Manual. These products shall not be reproduced for commercial purposes.