

**TERMS OF REFERENCE FOR HIRING OF AGENCY FOR
"CBO-MIS"**

1. BACKGROUND

Bihar Rural Livelihoods Project (BRLPS) is designed by Government of Bihar to address rural poverty in Bihar. The World Bank is extending financial assistance to this project. The project aims at enhancing social and economic empowerment of the rural poor by creating self-managed community institutions and enhancing income through sustainable livelihoods generation. Currently, BRLPS also known as JEEVIKA, is implementing a number of projects namely BTDP, NRETP, NRLM/ LSBA/ SJY/DDU-GKY etc.

BRLPS is operational in all the blocks of Bihar. More than 1 Crore rural poor families have been organized into more than 10 lac SHGs, more than 60 Thousand Village Organizations (VOs) and more than 1000 Cluster Level Federations (CLFs) and the numbers are still increasing. Number of staff supporting the project is around 6000 and large number of community professionals have been engaged for execution of different interventions initiated by different thematic heads across state.

2. Objectives of the Assignment

The objective of this assignment is to hire an agency to develop, customize and implement real time Decision Support System DSS of BRLPS for CBOs and its integration with ERP solution for HR, Procurement and Finance.

3. Business Requirement

The DSS-MIS of the project should be able to capture real-time and high quality data with validation of data and should be highly equipped and easy to use for data analysis (dashboards, indicators based reports, tabular reports, alerts, maps, drill down reports, etc.) which allows the user/management to use the data for day-to-day management and policy making of the project from the SPMU to BPIU and other stakeholders and equally at Community Based organizations (CBOs) level. The agency to be hired is expected to work closely with Project staff to understand and develop an effective Decision Support System for the Community Based Organizations. This will be achieved through a participatory system of agency with project staff at all levels to understand their data requirements and by training them to use of dashboards and other customized reports. The process will be iterative so as to improve the

use of data on targeted HHs, CBO's physical and financial transactions, conversion programs, Livelihood activities, skill development, social development etc. The project will also include the sharing of data to other stakeholders through APIs from time to time.

BRLPS is already having a functional online application referred to as CBO-MIS and Project MIS. The CBO-MIS is a customized application and has been developed on Java and Oracle with reports on Jasper and Project MIS is an Oracle ERP (E-Business Suite) having the modules for HR, Finance, Procurement and Project Management.

The agency shall conduct a study on the existing applications, processes covering the following aspects but not limited to:

- Details of the existing application
- Issue and problems while using the existing application
- Further scope of improvement
- Infra required for the new application

After the end of the study, agency shall segregate the existing applications in certain categories in respect to the status of modules in the application and will share the report to BRLPS.

Agency shall carry out following activities:-

1. Development of new Application

- A. Agency shall be responsible for development and implementation of new application with the modules in CBO-MIS and add on features as per the project requirement. The new modules will be rolled out in parallel with existing one until the new application is correct, completely tested, stable and consistent and with all the modules and its integration with other applications, if applicable.

The following activities will be carried out:-

- Preparation of System Requirement Specification (SRS) document
- Coordinate with BRLPS on finalization of SRS
- Develop and test the application
- UAT and deployment of newly developed application
- Development of dashboards and reports as mentioned and discussed time to time.

- Hand hold support and maintenance of the application.

Currently CBO-MIS is functional and allows digitization of several sets of data points including profiles of members and CBOs as well as Capacity Building module in the system. The CBO-MIS is functional and has undergone several changes over the period of time to meet the requirements the project. The changes in the existing architecture of the system will lead to more complexity. Therefore the new application is to be designed to provide a seamless environment for data capturing with all validations and alerts wherever required to enable decision making at all levels.

B. Keeping in view the current application and database of CBO-MIS, It is expected to use the similar database for development of DSS-MIS 2.0. The CBO-MIS 2.0 is expected to capture the data for all the modules running currently as well as it should be capable of adding on new modules which will be developed in due course as per the requirement of the project. The reports section has to be very dynamic, user friendly and to have alerts for proper monitoring of the progress at all levels. The report section will be very important part of the CBO-MIS 2.0 and is expected to meet the requirements of the project. There may be requirement of new reports in the entire duration of contract as well as modification in the existing reports; the agency will be responsible to complete the tasks. The CBO-MIS must be capable to perform secondary level data analysis with alerts, escalations etc. The triggering of alerts, escalations will be shared by BRLPS. The most of the reports will be in tabular format, to be drilled down from state level to root level i.e. CBO level. The data will be also represented through charts, Maps (GIS), etc. The data entry time and report generation time is expected to be minimum to increase the digitization pace.

Similarly, the agency will have to work on development of more robust system for data entry activity. As of now, nearly 550 users are performing the data entry work from all the districts and blocks of the state and several users are accessing the reports from the portal. The number of operators may increase depending upon the load of data entry and/or increase of modules in MIS in future. The agency shall work on all the areas to develop a robust system with the new technologies/tools available in the IT domain.

In addition, the organization is having several other web-based applications and mobile based apps as well to meet the specific requirements of the themes. The integration of these applications will be required to provide customized reports. The integration of ERP will be

crucial and is the need of the project too. The data to be shared through APIs will prepare reports in combination of CBO-MIS and ERP solution. The agency will have to develop required APIs for integration with external applications and internal apps and applications as and when required.

C. Requirement of Man-Power

The agency will have to provide qualified and experienced man-power at their locations. The team will provide support to the SPMU team of the agency and MIS team of BRLPS in all the activities related to applications. The resources will be on the client site to expedite the development and implementation of the CBO-MIS 2.0. The offshore team members will visit the client site as per the need in order to meet the requirement of the project.

The SPMU team will comprise of members as mentioned below:-

The agency will create a team at State Level comprising 2-3 members on need based. There will be onsite resource for the entire support phase.

Sl No.	Designation	Experience
1.	Project Lead	B.Tech/BE/MCA or equivalent with 10-15 years of Experience in Software Development, implementations etc.
2.	Business Analyst.	B.Tech/BE/MCA or equivalent with 8-10 years of Experience in software Development, Implementations
3.	Senior Programmer/ Programmer	B.Tech/BE/MCA or equivalent with 5-7 years of Experience in specific domain in software development and implementation.

D. Deliverables/output and Payment Schedule

The agency will be responsible for sharing the documents regarding SRS, Designing and development, customization, testing (System testing, functional testing, performance testing, load testing etc.) roll out and maintenance. The roll back strategy and recovery aspects of the entire application has also to be tested and documented as well. The test data and

results/outcomes are to be shared by the agency before the pilot/roll out of the application. The test data is to be finalized in coordination with the client.

The version maintenance will be crucial and to be regularly followed and documented by the agency. The release documents has to be maintained by the agency. The release document will include the user manual for the modules concerned. The user manuals for all the modules are one of the major requirements. The preparation of user manual and training materials would be the responsibility of the agency. The training material and user manual will include self-learning videos, flip charts etc. and it has to be shared to BRLPS during the roll out phase. The agency will be responsible for capacity building of staffs at all levels of the organization in respect to usage of applications as well as on technical training aspects of the application to BRLPS State MIS team for CBO-MIS solution.

The agency will carry out the activity of integration of applications as well as of data migration, if required. The agency will carry out maintenance/support services during the consultancy period including but not limited to bug fixing, fine tuning and enhancement in software as and when required. Technical support will be provided by the agency in respect to database related all activities including management, database tuning, roll back etc.

The agency will hand-over the entire source code, database backup and other assignment related documents to the client at the time of completion of project. The ownership of the source codes, documents as mentioned above will lie with BRLPS and any use or re-use of the same by the agency will require prior approval from BRLPS.

Sl. No.	Deliverables	Payment Schedule	Timeline
1	<p>System Study, System Requirement specifications, work plan and Resource deployment</p> <ul style="list-style-type: none"> • Submission of report on Existing System (CBO-MIS), Proposal for new application with Requirement Specification, Design Document (low – level and High-level), work plan with 	10% of the Total Project Cost.	1 month from kick off meeting/date of contract

	<p>timelines and deployment of key resources.</p> <ul style="list-style-type: none"> • Report on issues/bug fixing data migration/changes etc. in the existing application. 		
2.	<p>Design, development, customization of application</p> <ul style="list-style-type: none"> • Prototype Design of the proposed solution. • Development and customization of the proposed system. • System testing, Load testing etc. of the application on devices and browsers with test and LIVE data. Submission of the document of the activities conducted. • Piloting in selected locations on the proposed system. • Release documents along with user manuals (Hindi & English). • Submission of roll out plan. • Report on issues/bug fixing data migration/changes etc. in the existing application. 	20% of the Total Project Cost.	4 -months
3.	<p>Roll out of CBO MIS</p> <ul style="list-style-type: none"> • Roll out of the final application at all locations. • Dashboard and all reporting formats to be functional and accessible at all levels. • Customization of modules in Project MIS with reports and its roll out. • Technical Training and capacity building of BRLPS MIS team at state level. • Training and capacity building on usage of MIS for its operational efficiency. 	25% of the Total Project Cost.	7-Months
4.	Hand Hold Support		45%

A	<ul style="list-style-type: none"> • Report on Roll out of MIS applications. • Changes/update in the applications/reports to meet the requirement of the project. • Fine tuning, refinements etc. in the application. • Customization of Modules. • New report development. 	10%	18-Months
B	<ul style="list-style-type: none"> • Technical training on all the modules to the MIS team at SPMU. • Technical training of MIS team on the refinements in the modules/reports/functionalities in application. • Provision of customized query based reports as per the need of the project. • Submission of report on activities undertaken with respect to technical support for operationalizing MIS, fine tuning/ customization of application, bug/ issue rectification, training and capacity building, data validation undertaken on sample basis, data entry and report generation status, etc. 	10%	24-Months
C	<ul style="list-style-type: none"> • Technical training on all the modules to the MIS team at SPMU. • Technical training of MIS team on the refinements in the modules/reports/functionalities in application. • Provision of customized query based reports as per the need of the project. • Submission of report on activities undertaken with respect to technical support for operationalizing MIS, fine tuning/ customization of application, bug/ issue rectification, training and capacity building, data validation 	10%	30-Months

	undertaken on sample basis, data entry and report generation status, etc.		
D	<ul style="list-style-type: none"> • Refresher Technical training on all the modules to the MIS team at SPMU. • Refresher Technical training of MIS team on the refinements in the modules/reports/functionalities in application. • Provision of customized query based reports as per the need of the project. • Submission of report on activities undertaken with respect to technical support for operationalizing MIS, fine tuning/ customization of application, bug/ issue rectification, training and capacity building, data validation undertaken on sample basis, data entry and report generation status, etc. • K.T. Completion report with all codes and credentials. • All source codes and credentials to be shared with client. 	10%	36-Months

E. Project duration

Initially the contract period will be of 3yrs months from the date of contract. The project duration may be extended upon satisfactory performance of the agency and the need of the project and also in case of the project duration gets extended.

F. Project appraisal and Review

The Chief Executive Officer, BRLPS will designate SPM-MIS to supervise the assignment and carry out necessary interaction and exchange of information about the status of the project between the agency and BRLPS. All relevant projects related documentation will also be made available to the agency. The Chief Executive Officer, BRLPS may also constitute a review committee to monitor the progress and access the deliverables of the project. A committee may be formed comprising of senior officials from agency and BRLPS to review the progress every six months basis. The agency

will maintain the confidentiality of the data and under no circumstances will share the data to anyone external to BRLPS without prior approval from BRLPS.

This assignment is funded by BRLPS and therefore shall be the owner of the assignment output.

The Consultant will have no right of claim to the assignment or its outputs once completed.