1 Introduction

Drawing from the versatile experiences of developing microenterprises in Kerala, Kudumbashree was recognised as a National Resource Organisation and has been supporting other state rural livelihood missions in community-based enterprise promotion. Kudumbashree NRO develops customized approaches and strategies suited to the local context of the partner states. Over the years Kudumbashree-NRO has supported 14 states under MEC/SVEP/NRETP projects, support has been provided in establishing micro enterprises and capacity building of the state cadre and SRLM officials.

To effectively manage the multiple micro enterprise development projects that it runs simultaneously, Kudumbashree-NRO requires a robust and efficient management information system (MIS) that can track and manage data related to these enterprises, such as detailed profiles of the enterprises and entrepreneurs, financial information, and the performance of the enterprises. Therefore, Kudumbashree-NRO has planned to engage qualified software development agencies/firms to develop a Management Information System (MIS).

The platform should ensure the following key features:

- **A user-friendly interface:** The MIS should be easy to navigate and understand for users with varying levels of technical expertise.
- **Mobile compatibility:** Kudumbashree-NRO works with rural communities, and at times, team members may not have access to laptops or desktop computers. Therefore, the application should be designed to be easily accessible on mobile devices/devices of all screen sizes, ensuring accessibility of the services they need regardless of the device they have.
- **Optimization for low internet connectivity or offline:** Project implementation areas often have limited or patchy internet connectivity, making it difficult for the field team to access applications that require high-speed internet. The application should be optimized for low bandwidth environments to ensure that users can still access or should have the ability to save data in offline mode, which will be auto updated where there is a proper reception.

- **Data security:** The MIS should have robust security measures in place to protect sensitive enterprise data.
- **Data backup and recovery:** The MIS should have a reliable system in place for regular data backups and recovery in case of system failures.
- **Reporting and analytics:** The MIS should provide real-time reporting and analytics capabilities to help Kudumbashree monitor and evaluate the performance of the micro enterprises.
- **Back data upload:** Kudumbashree-NRO has been promoting micro enterprises since 2012, basic data of these enterprises are kept in spreadsheets, the system should have the provision to upload historical/past data.
- **Scalability:** The system should be scalable to handle an increase in the number of micro-enterprises, data, and users. It should also support scalability in terms of newer projects and its configuration which may come up in the future.
- **Subscription Mode:** System will operate in a subscription mode through which it will allow partner state to use the platform for a specified period of time.
- **Enterprise Tracking:** The application will have a comprehensive dashboard that will display various parameters such as the number of enterprises supported, their progress, and the amount of funding provided.
- **Data Analysis:** The application will have powerful data analysis tools that will help Kudumbashree NRO to gain insights into the performance of the enterprises and identify areas for improvement.

Key requirements are listed below:

2 Project Management

The system must have the capability to create, assign, and track various projects. This includes tracking project milestones, deadlines, and budgets. Users should be able to create projects with basic details such as the project name, partner name, project cost, Memorandum of Understanding date, and project duration. Kudumbashree-NRO is currently involved in supporting various projects, such as the SVEP, MED, NRETP, and NRETP-Food Cluster, each of which generates unique information that needs to be captured.

3 Human Resource Management

The system must have the capability to track and manage human resources, including information such as name, date of birth, role, date of joining, years of experience, highest qualification, certification, language expertise and domicile. Currently, human resources at Kudumbashree-NRO have different roles such as professionals, mentor core group, block anchor person, and mentor.

4 BRC/OSF Management

The Block Resource Centre (BRC) is established to serve as a one-stop solution for promoting entrepreneurship and addressing the needs and grievances of the community. It provides information, counseling, application processing, and documentation support. The BRC serves as a meeting place for community members, including CRP-EPs, Bank Mitras, Banking Correspondents, SHG/CBO leaders, and entrepreneurs, as well as other institutions that facilitate the implementation of government schemes.

The BRC is a physical office that includes pre-defined infrastructure, staff, and resource persons. The BRC management must have provision for capturing critical details about the BRC/OSF, including:

System should have the provision to define KPIs for the BRC or minimum requirement in each areas listed below so that performance can be analyzed

- **Basic Information:** Date of establishment, address, contact details.
- **Infrastructure:** Number of rooms (area sq. ft.), roof and flooring type, toilet, water connection, and electricity.
- **Assets:** Computer, Laptop, Printer, Registers, furniture etc.
- **HR:** BPM, Accountant, Office attendant, BEPC Members, CRP-EP, etc. These are BRC-specific HR and should be recorded along with their status (Active/Inactive).
- **Attendance:** The attendance of the above-mentioned HR (*BPM, Accountant, and Office attendant are the regular staff and their presence is needed on weekdays, whereas CRP-EP/BEPC report to the BRC based on needs, whenever there is a meeting*.) It is important to track their attendance from a project perspective.
- **CBMS:** Community-Based Monitoring System, a mechanism to track enterprises by community leaders, physically visiting enterprises and submitting a report on the

number of enterprises visited and their observations. The system should have an option to update the number of visits and observations.

- **DPR:** Baseline details of the block to be uploaded as benchmarking for the block.
- **Training and Capacity Building:** Training such as refresher courses for CRP-EP, BEPC, Skill Training, etc. should be recorded under this module. The details of training institution / trainer also need to be captured.
- **Exposure Visit:** Exposure visits are planned for CRP-EP and BEPC, and the system should have the provision to record and detail these visits.
- **Books of Records:** List of books of records maintained in the BRC and their status (Updated/Not Updated)
- **Resources:** A repository for documents, where the block team can upload scanned or other documents such as case studies, short videos.

5 Mobilization & Training

The mobilization and training process for promoting enterprise development includes several steps. The process begins with Cluster Level Orientation, followed by Village Organization Level Orientation, and then SHG Level Orientation. During these orientations, interested members are identified and called to attend a Triggering Meeting, where they are explained about different types of enterprises they can start. The next step is the General Orientation Training (GOT), where potential entrepreneurs gain a deeper understanding of entrepreneurship and different types of enterprises. After GOT, those who are still interested are invited to attend the Entrepreneurship Training Programme (EDP), where they further develop their understanding and finalize their business plans. The CRPs-EP helps them in checking the viability of the business and based on the viability the business plan is prepared.

To track the progress of the mobilization process that shall also helped in assessing the conversion ratio, the following information to be captured in the system:

- **CLF Orientation** – Provision to record the number of members in the CLF, number of people who attended CLF orientation, date, Name of CLF, Address, and oriented by details of the trainer.

- **VO Orientation** – Provision to record the number of members in the VO, number of people attended VO orientation, date, Name of VO, Address, place where orientation took place, and details of the trainer.
- **SHG Orientation** – Provision to record the number of members in the SHG number of people attended SHG orientation, date, Name of SHG(s), Address and place, and details of the trainer.
- **Triggering Meeting** – This meeting is attended by both CBO members and potential entrepreneurs hence Provision to record the number of people attended triggering meeting, date, Name of CLF, Address and place, and details of the trainer.
- **GOT** – General Orientation Training requires trainers to maintain attendance of all the potential entrepreneurs, at this level system should record the basic details of potential entrepreneurs who are attending GOT, details like (Full Name, DOB, Aadhar, SHG, VO, CLF, Contact Number etc.), attendance should be marked online.
- **EDP** – List of people who attended GOT should come listed under EDP and option to mark attendance should be made available.

Note: Information like CBO name, Address, CRP-EP, should be provided in dropdown option

6 Entrepreneur and Enterprise Management

The system should be designed to efficiently capture and maintain comprehensive information about entrepreneurs and their enterprises, including personal details, financial information, and business operations. There are some prerequisites for registering entrepreneur and enterprise in the system. System should have the data of Community Based Organization (CBO).

6.1 Entrepreneur Registration

The critical aspect of the entrepreneurship development ecosystem is to accurately record the details of potential entrepreneurs. This information will be utilized when the entrepreneur starts a business with support from the project. The required information to be entered includes the Name, Date of Birth, Village/GP/Pin, Current Occupation, Current Income, Expected Income, and Skills. It is important to note that the entrepreneur's basic information is initially collected during the mobilization and training process (GOT), and the same details can be reused here with additional information added.

6.2 Enterprise Registration

One of the vital functions of this system will be to record data about the enterprises. To achieve this, the system should have an option for enterprise registration, which enables the user to upload essential information about the enterprise, including its Name, Address, Start Date, Investment, and Enterprise Type. The enterprise should then be assigned one/or more owners from the list of entrepreneurs who have completed the trainings and due processes as laid out in the project guideline.

6.2.1 Business Plan Creation

A crucial feature that the platform must have is to allow users to create or upload a business plan for the enterprise. The business plan should be integrated with the reporting section where Break-even analysis and other benchmarking can be performed.

6.2.2 Performance Tracking System (PTS)

To effectively evaluate the performance of an enterprise, the collection and analysis of financial data is crucial. The platform should provide the option to document the financial information of the enterprise, including its revenue, expenses, profit margins, and cash flow. While CRP-EP typically gathers this data for the first 12 months, relying solely on this information may not provide a comprehensive picture of the enterprise's success or failure. Therefore, it is essential to have a module where entrepreneurs can enter their own data beyond 12 months to provide a more accurate representation of the enterprise's financial health. The requirement for this is detailed in 6.2.3.

6.2.3 Digital Ledger for Enterprises

To make informed decisions, data plays a crucial role. The government is taking steps to support micro and small businesses to grow, but the limited financial data of these enterprises makes it difficult for the decision-makers to plan further interventions. To address this issue, it is suggested that a platform with the capability to track sales, expenses, inventory, customer payments, and other financial aspects be established. This will enable NRO/entrepreneurs to monitor their cash flow and have a real-time understanding of their business's financial health. (For reference, Khatabook is one such platform that can be referred.)

The system should allow for the collection and recording of enterprise performance data through two methods:

1. Collection by the CRP-EP from the field and entering it into the system (6.2.2)
2. Self-maintenance by entrepreneurs with a login ID for their business, updating their data in the digital ledger (6.2.3).

7 CBO Registration

The Kudumbashree-NRO and NRLM work with Community Based Organizations (SHG) and therefore, the system must be able to capture their details. While NRLM has a central database with comprehensive information about the SHG, the data is often not updated due to changes in SHG formation. Thus, the system should not solely rely on the NRLM database. There should be an option to upload the SHG data collected from BMMU, including the SHG Code, Name of SHG, Name of VO, Name of CLF, GP, Date of Formation, Number of Members, etc. Additionally, the system should allow the creation of SHG with automatically generated SHG codes.

8 Loan Management

Entrepreneurs require funds to establish an enterprise and can obtain loans from either the NRLM ecosystem or a bank. To ensure timely repayment and efficient tracking, the project team must implement a loan management system. The current method of using spreadsheets for loan tracking is time-consuming and not efficient. The system should include a module to manage the loan process, from loan applications to approvals, disbursements, and repayments.

The loan management system should include the following steps:

- **Define Loan:** Allow the user to create a loan type and set the interest rate along with what percentage of interest earned should be distributed among CBO (SHG, VO, CLF).
- **Create Loan Portfolio:** The first step in the loan origination process, where the borrower applies for a loan and is vetted by community-based organizations (CBOs) and approved by the Project Approval Committee (PAC). The loan portfolio should include details such as the borrower's information, business name, entrepreneur, loan amount, and account details.
- **Underwriting or Approval:** After reviewing the business plan, loan application, and creditworthiness, the project approval committee approves the loan. The system should

have the option to approve or reject a loan, and if rejected, an option to list the reason for rejection can be updated. Once the loan is approved, the system should have the option to generate a loan repayment schedule that can be printed.

- **Loan Disbursement:** Since the system only tracks the loan approval and is not linked to any banking system, the accountant physically visits the bank and submits the disbursement requirements. The system should have the option to generate a list of approved loans. (Note: the loan approval and disbursement date can be different)
- **Repayment:** The borrower pays a monthly installment by visiting the BRC, giving it to a community resource person who then deposits the money into the bank or submits it to the BRC, or by directly depositing the money into the bank. In all three cases, a money received, or deposit slip is required. Based on this slip, the BRC accountant updates the loan repayment. The system should ask for the details of the bank deposit slip when updating the installment details. The repayment module should support block wise / panchayath wise or CLF wise repayment data entry where the repaid amount can be entered against the selected period's demand. The EMI entered should be divided into principle and interest based on the loan period, approved interest as well as loan balance as per the loan portfolio.
- **Reporting:** The system should allow the user to generate reports such as:
    - List of loan approvals and rejections
    - Loan disbursements
    - Delays in loan disbursement (approval and disbursement)
    - List of defaulters
    - Details of non-performing assets
    - Total outstanding loans
    - Collection status
    - Report by CRP-EP, CLF, VO, SHG, Date

9 Accounting

The projects are managed by block-level staff and a dedicated office, either the Block Resource Center for Enterprise Promotion (BRC-EP) or the One Stop Facility Center (OSF), is established for smooth implementation. These offices receive funds to implement the projects, and proper handling of these funds requires a software. Currently, accounting is done using spreadsheets, which can lead to inaccuracies. The system should have a ledger and balance sheet to record all funds received and expenditures. Additionally, the accounting system should be aligned with the PFMS budget booking heads.

Report: The system should record adequate information to generate the following reports:

- Head-wise receipts and expenditures
- Bank balance matching the system's record
- Interest earned from the bank
- Interest earned from CEF (Loan) lending
- Interest earned from CEF lending and distribution to CBOs

10 Formalization and Handholding Support

The system should also have a module for handholding support provided to enterprises, which may include the following:

- **Formalization Support:** Keeping track of licenses obtained (e.g., PAN, GST, FSSAI) by each enterprise. The system should update these licenses against the enterprise/entrepreneur depending on the nature of formalization obtained.
- **Bank Linkages:** Recording the number of enterprises that have applied for and obtained loans from formal banking systems.
- **Backward/Forward Market Linkages:** Keeping records of the support provided for connecting enterprises to backward and forward markets.
- **Weekly/Monthly Market Support:** Tracking information about market events (e.g., name of market, location, date, number of entrepreneurs and SHGs, revenue, etc.) to provide a platform for entrepreneurs to sell their products. Participation in National / State level Melas
- **Other areas to be added**:

11 Training and Capacity Building Management

The Training and Capacity Building Management module aims to assist the Kudumbashree-NRO in tracking and managing training activities, including schedules, completion, and evaluations. With a large number of programs being run simultaneously, it can be challenging to allocate resources and manage multiple batches. This platform will help the organization to efficiently track all batches and ensure a smooth implementation of the program.

- **Module:** This section will function as a CMS and Project Management tool for the capacity building team. Modules for various trainings need to be uploaded here so that they can later be assigned to batches and completion can be marked accordingly.
- **Project:** Under the Training and Capacity Building module, users should be able to create a project with basic details such as Project Name, State, District, Block, Start Date, End Date, MoU, Tentative date of the first batch start, Budget, and Source of Budget.
- **Batch:** Once a project is created, the user can create a batch with certain information, including a unique batch ID, batch start and end date, district, block, state, and module. The user can also add a trainer for each module. When a batch is created and a module is assigned to a trainer, the trainer should receive an email notification allowing him/her to either accept or reject the request. **Plan your journey**; If accepted, the trainer must be able to update the journey start and end date, travel mode, and logistical requirements. If rejected, an option to update the reason must be provided.
- **Reassign a batch:** System should notify the user responsible for assigning the batch about rejection so that he/she can assign the batch to next available trainer.
- **User ID:** To access personalized or restricted information, a user must log in to the system, which will determine their access level. Trainers can log in and view or edit assigned module details. On the first day of training, the trainer must register all participants in the system.
- **Register Participants:** The block/district team shall provide participant details, including Full Name, Aadhar Number, DOB, Caste, Religion, Highest Qualification, Existing Cadre, and Block/District. System should allow trainer to upload/update the participants details.
- **Module Coverage:** As the complete module will be uploaded into the system, the trainer needs to update the coverage details.
- **Attendance:** The system should have an option for updating the attendance of trainees by trainers. To mark attendance, the trainer must select the batch and module, which will list out the participants' details.
- **Assessment:** Similarly marks of each assessment/exam need to be updated in the system against each participant. In case a participant is absent the system should not be asking to enter the marks of that particular participant.
- **Assignment:** Marks of the assignment need to be updated by the trainer.

- **Work Report:** Trainer should be able to generate his/her work report, for example day wise what all topics covered.
- **Batch Report:** The system must include the provision to generate a batch report, including an overview of the batch (number of participants, modules covered, number of trainers involved, attendance percentage, score percentage, etc.) and a detailed report of the performance of each participant (attendance and score).
- **Participant profiles:** The participant profiles should be maintained and should be uniquely identifiable with an official ID (Aadhaar). The profile should list the different trainings received by the participant, existing skills as well as any formalizations received.

12 Dashboard and Report

This section of the application should enable users to generate reports and export data for further analysis. Users should have the option to select the type of report they want to generate and specify the criteria for filtering the data. An interactive dashboard, customized for each user level, should also be available to display various reports, including:

Coverage

- State
- District
- Block
- GP
- Village
- CLF
- VO
- SHG

Financial Progress

- Funds Received in each head
- Expenditure in each head

BRC Grading

- Performance of BRC in each KPIs

Top Ten to be displayed in the dashboard

- Enterprise Type Promoted

- Enterprise Type-Wise CEF Loan Allocation
- Enterprise Type with Regular Payment
- Enterprise Type-Wise Default
- Enterprise Type-wise Source of Finance
- Enterprise Type-wise Revenue
- Enterprise Type-wise Profitability
- Enterprise Type-wise Aspiration Income V/s Net Profit
- Enterprise Type-wise Break Even
- Enterprise Type-wise Capital Requirement for Establishment
- Enterprise Type-wise Revenue (Reverse Order)
- Enterprise Type wise Profit (Reverse Order)

Social Indicator

- Gender Wise
- SECC Deprivation Category-Wise
- Women-Social Indicator Details
- Persons with disability
- Entrepreneur Social Indicator wise count

Operations

- CRP-EP Gender-wise
- Business Plan Status
- Reasons for Rejection of CEF Loans
- Earnings of CRP-EP per Month
- Education Level of CRP-EP

Financial Linkages – Applied, Availed, Amount

- CEF Loan
- CBO Loan
- Bank Loan

Project-Wise Enterprises

- Enterprise Target v/s Achievement

- Revenue v/s Aspiration Income
- Enterprise Capital
- Enterprise Profitability (Monthly)
- Enterprise Type- (Single/Group)
- Government Spending
- Source of Finance
- CEF Loan Availed
- New Enterprise v/s Existing Enterprise
- Enterprise Ageing
- Break-Even Reached
- Growth of Existing v/s new
- Aspiration Income v/s Net Profit

CEF Circulation

- CEF Loan Size
- Repayment Period
- Default/Delinquency
- Amount Recovered/Repaid
- CEF Loan Applied, Approved, Disbursed, Repayment Started
- CEF Loan Defaults

Training and Capacity Building

- Number of trainers (Active/Non-Active)
- Trainer Profile (Name, DOB, Age, Highest Qualification, Certification, Experience, Domicile, Gender, module that he/she qualifies to teach)
- Calendar view of the trainers (showing their engagement, availability)
- Number of Batches (To be started/Ongoing/Completed)
- Number of Trainees (training completed / dropouts)
- Evaluation/ Grading Sheet

Please note that this is a preliminary requirement document. Further information for each section will be provided separately.