MANAGEMENT INFORMATION SYSTEMS STUDY USING PARTICIPATORY PROCESSES FOR AAJEEVIKA-UPASaC

by

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GLOSSARY

AWPB	: Annual Work Plan & Budget
BDS	: Business Development Services
BLCMC	: Block Level Coordination and Monitoring Committee
BO	: Block Office
BP	: Business Promoter
CAAA	: Comptroller of Aid, Accounts and Audit
CAP	: Centre for Aromatic Plants
CBED	: Community based Economic Development Project
CBOs	: Community Based Organizations
CBRE	: Community Based Retail Enterprises
CCL	: Cash Credit Limit
CDB	: Centralized Data Base
CEO	: Chief Executive Officer
CHEA	: Central Himalayan Environment Association
CPMAS	: Computerized Project Management and Accounting System
CRP	: Community Resource Person
CSC	: Common Service Centre
DDB	: Decentralized Data Base
DLCMC	: District Level Coordination and Monitoring Committee
DMU	: District Management Unit
DOC	: Day Old Chick
DRDA	: District Rural Development Agency
FAO	: Food and Agriculture Organization
FDD	: Functional Detailed Design
FNGO	: Facilitating Non-Governmental Organization
FPU	: Field Presence Unit
FRDC	: Forest and Rural Development Commissioner
GoI	: Government of India
GoUK	: Government of Uttarakhand
GP	: Group Promoter
HARC	: Himalayan Action Research Centre
HH	: Household
HLD	: High Level Design
HO	: Head Office
HR	: Human Resource
HRDI	: Herbal Research Development Institute
ICIMOD	: International Centre for Integrated Mountain Development
ICS	: Internal Control System
ICT	: Information and Communication Technology
IFAD	: International Fund for Agricultural Development
ILDC	: Integrated Livestock Development Project

INHERE	: Institute of Himalayan Environmental Research and Education
INR	: Indian Rupees
ISLP	: Indian School of Livelihood Promotion (now known as The Livelihood School)
IT	: Information Technology
KVIB	: Khadi & Village Industries Board
KVK	: Krishi Vikas Kendra
LDPE	: Low density polyethylene
M&E	: Monitoring & Evaluation
MAP	: Medicinal & Aromatic Plants
MART	: Marketing and Research Team
MIS	: Management Information Systems
NeGP	: National e-Governance Plan
NGOs	: Non-Government Organizations
PACS	: Primary Agricultural Cooperative Society
PD	: Project Director
PoP	: Package of Practices
PRIs	: Panchayat Raj Institutions
RIMS	: Results and Impact Management System
RL	: Requirement List
SHG	: Self Help Group
SIMS	: SHG Information Management System
SME	: Small & Medium Enterprises
SOP	: Standard Operating Procedure
SRI	: System of Rice Intensification
SWAN	: State Wide Area Network
TDC	: Tarai Development Corporation
UGVS	: Uttarakhand Gramya Vikas Samiti
ULDB	: Uttaranchal Livestock Development Board
UOCB	: Uttaranchal Organic Commodity Board
UPASaC	: Uttarakhand Paravatiya Ajeevika Samvardhan Company
UREDA	: Uttarakhand Renewable Development Agency
VLCC	: Village Level Coordination Committee

CONTENTS

ACKNOWLEDGEMENTS

We are deeply indebted to Ms Jyotsna Sitling, Project Director of Aajeevika and Sri P. S. Hooda, CEO of UPASaC for giving us this valuable opportunity to take up this study. They not only shared with us their insights but also made time to participate in the design workshop for software development.

We also thank the Aajeevika and UPASaC teams in Tehri, Bageshwar and Chamoli as well as all the staff of Head-Office for their cooperation without which this study would not have been possible.

We thank all the participants at the Participatory Design Workshop held in Dehradun on 21st and 22nd August, 2008. The interactions helped build and validate a lot of the understanding presented here.

Lastly, our thanks to Sri Pawan Kumar, Manager, Communication, Monitoring & Evaluation and other senior staff for their support in helping us in completing this assignment.

EXECUTIVE SUMMARY

In the last four years, UPASaC and Aajeevika have expanded their activities in 959 villages, 17 Blocks, 5 Districts spread over Garhwal and Kumaun and formed over 3,000 SHGs and initiated demonstrations in seven sub sectors. There are over twenty nine facilitating non-government organizations engaged in SHG formation.

A project of such scale and diversity can grow only if its various operations, processes and practices are integrated through a suitable system of Information management which keeps it connected to its goals. In this context the project had already put in place a framework for monitoring and evaluation to ensure that its goals are always in sight. The present study was commissioned as part of the efforts to introduce enabling information technologies that would help in managing diversities and also bring in efficiency and increasing the reach.

The team had discussions with the management and key staff; the relevant documents were reviewed; team visited field locations; its findings were validated in a workshop which was attended by not only the staff but representatives from FNGOs and SHG groups also. During the workshop the participants understood the importance of point of data generation, collection, transfer to a centralized storage system and verification of data.

A participatory process was used to create the high level design of the management information systems (MIS) for the project. The design process resulted in the participants articulating a list of features for the MIS. These features were further clubbed into three broad modules, the SHG/Federation module, the Livelihood Value-chain module and the Project Management and Communication module. For each of these, detailed features were discussed and documented.

Later, based on the concern for managing over 500 staff, located in about 60 locations and managing their aspirations and attrition, the need for automating the HR processes was also voiced. HR is also seen as the key driver for project's success. Accordingly, fourth module was visualized for HR with features such as recruitment, deployment, transfer, promotion, training, skill set of staff, appraisal and feedback system for self correction and system of rewards and incentives.

The detailed features of the modules would be implemented through a centralized database. Though connectivity is an issue in some areas, staff approved the concept of a centralized database due to its higher reliability as compared to a decentralized database. For the purpose of obtaining the reports, mirror databases will be made available in all the five Districts.

The objective of the introducing of such a management information system is to bring in discipline in the project, transparency in processes, improve communication and increase efficiency of operations

KEY RECOMMENDATIONS

- Project needs to adopt IT strategy as an important tool for project integration and to achieve higher efficiency and there is need to allocate substantial budget for software development and software deployment.

- Investment of INR 4.3 million for software development for four modules: a) Federation and SHG, b) Livelihood and value chain, c) Project Management and Communication and d) Human Resource Management.

- Investment of INR 3.3 million on software deployment for all the four software modules in 52 clusters, 5 Districts and HO.

- Project should take up three innovative pilot projects to enhance the understanding of the project in IT adoption as well as reduce cost and for empowering federations in adopting business in information economy.

- Investment in innovative ICT projects of INR 1.0 million for application of mobile in one block to ensure that data captured at the level of GP and BP in village is transmitted directly. Such an innovation will remove the operating cost in data entry and data transportation to District from the system and also ensure high accuracy in data.

- Investment in innovative project of INR of 1.1 million for demonstrating ICT enabled business on information services by four federations in a block.

- Investment in another innovative project for INR 1.1 million for designing participatory design for the service providers of complete value chain for a sub sector and setting up business model for providing information services to all in the value chain at District level.

- The project MIS must be integrated with the project M&E system which is working well. Appropriate capacity building to be carried out of senior staff to handle IT deployment with recommended size of investment

- IT strategy should be implemented on an immediate basis – as there is diversity in field operation area, sub sector, staff and monitoring parameters and these are expanding with time.

- Project should have an IT partner with experience and expertise in participatory software design and rural livelihood promotion.

- Software development must be carried out with participatory design and agile principles of software development as the users of the project have multiple differentiations – location, education, culture and occupations etc.

- SIMS software for monitoring SHG program has inherent limitations. Its database structure is not SHG member based and hence it cannot provide member level reports. It only serves a limited purpose and hence should be dropped.

- SIMS software is in-house developed but there is limited technical documentation. It cannot be reengineered for correction in the absence of documentation. In-house software development for such a complex program of evolving nature is not a fruitful exercise and is best avoided.

INTRODUCTION

For quite some time it has been recognized that the traditional subsistence economies in the Himalayan region have broken down due to increased pressures on the available resources and increased aspirations caused by greater contact with rapidly developing regions of the country. This breakdown has accentuated poverty and led to the loss of livelihood opportunities in these areas. Out migration has exacerbated the disruptions. The need was felt for an intervention to help rebuild local economies and enhance sustainable livelihood opportunities in these regions.

In Uttarakhand, this intervention is sought to be made with the most deprived sections of the populace in 17 blocks of 5 districts through Project Ajeevika.

Aajeevika, also known as the Uttarakhand Livelihoods Improvement Project (ULIP) for the Himalayas, is being implemented by the Uttarakhand Gramya Vikas Samiti (UGVS), a Society registered by the Government of Uttarakhand under the Societies Registration Act, 1860 with support from the International Fund for Agricultural Development (IFAD). The project aims to enhance livelihood opportunities for poor households by utilizing the self-help principle and by promoting self help groups (SHG) that would build savings, reduce drudgery and create a context from which livelihood projects can be launched.

As part of the Aajeevika project initiative a Social Venture Capital Company has been formed as a special purpose vehicle to promote livelihood activities through escort services. Uttraranchal Parvatiya Aajeevika Samvardhan Company (UPASaC) was registered under section 25 of the Companies' Act 1956 on 29th March 2006.

MIS in the context of Aajeevika and UPASaC

Wikipedia defines 'MIS' as "*a planned system of collecting, processing, storing and disseminating data in the form of information needed to carry out the functions of management*".

Data are "*discrete, objective facts about events, including numbers, letters and images without context*". Information is data with some level of meaning. Knowledge is built on data and information and is the basis of decision making. MIS uses knowledge to arrive at reasoned decision making at all levels.

In the context of the project, although billions of bytes of data are being generated every moment, very small part is being recorded manually and a miniscule part of that is being collected and stored in electronic form in different databases located in 60 locations. Most of the data are in Excel and Word files. Only SHG data, using SIMS software, is in Access and Accounts data, using CPMAS software, is on MS SQL database.

In this way, MIS forms the base on which rests the framework for monitoring and evaluation and in turn leads to IFAD framed Results and Impact Management System and to the final impact measurement. This has been presented pictorially in Figure 1 where automated MIS is shown by the thick broken line which covers aspects of all four.

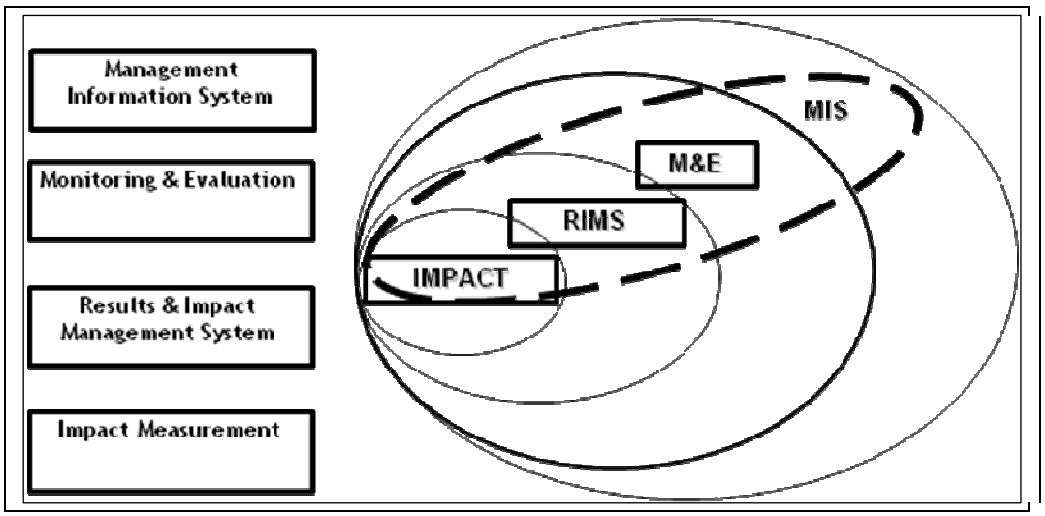

Figure 1 Automated MIS in Context (Source: IFAD M&E Framework)

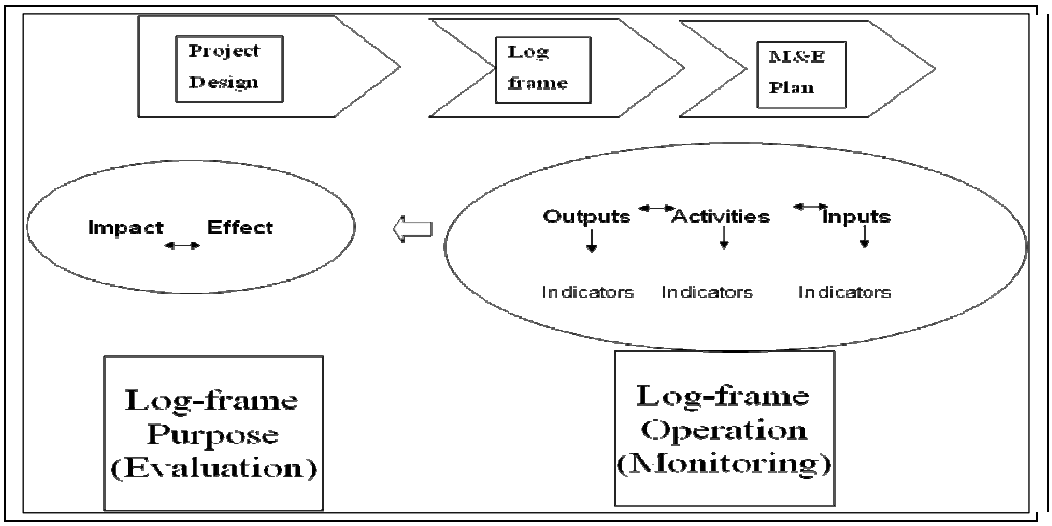

Figure 2 M&E integrated with Log Frame

Monitoring is the continuous collection and analysis of data and communication of information about inputs, activities and outputs of a project during its execution. Progress monitoring shows physical and financial progress of project

implementation where as impact evaluation shows whether and to what extent the project contributed to the change it was designed to bring about.

Evaluation is the periodic assessment (e.g. mid-term, completion, ex-post) of the relevance (is the project dealing with the priorities of the target population?) efficiency (are resources used in the best possible way to achieve the outputs?), effectiveness (have outputs contributed to the achievement of the project purpose/objective?), impact (to what extend has the project contributed to its goal?) and sustainability (will there be continued positive impacts as a result of the project after external funding has ended?) of the project. By integrating the monitoring and evaluation framework with the log frame approach we can clearly see that monitoring refers to inputs, activities and outputs while evaluation refers to impact *(see Figure 2)*

In the Project Loan agreement document of ULIPH in Article IV it is stated that each PMU will establish "an appropriate information management system" to enable it to continuously monitor the program.

Schedule 3 of this document contains guidelines for Project Implementation and under Monitoring and Evaluation under 12.3 it is stated:

The M&E Agency/Consultants will develop a web based Management Information System (MIS) to enable all the stakeholders to track and monitor the performance of Project implementation.

In consonance with the IFAD agreement, Aajeevika and UPASaC have a management information system in place but which is largely manual. However, as the project is in its fourth year it seeks to move to an automated web based information system, thereby honoring the above stated clause.

Steps towards MIS

A workshop was held on 6th June 2008 on Management Information System: Aajeevika's perspective and requirements. In this workshop, MIS was viewed against the M&E framework and linked to the information needs of the project.

Information needs of various stakeholders were looked at and these were:

- CBOs & Community, VLCC - progress of work, external inputs (fund availability, capacity inputs), accountability and transparency.
- FNGO - progress of work and capacity enhancement at community level
- DLCMC/BLCMC, DMUs/UPASaC BOs - physical and financial progress, institutional capacity and process followed in programme implementation, line department collaboration, accountability and transparency

- PMU/UPASaC CO - physical and financial progress, institutional capacity and performance, input utilization, output, process, impact and outcomes (qualitative and quantitative)

- UGVS/UPASaC/RDD/GoI - physical and financial progress, outcomes and impact

- IFAD - logframe based result and impact of programme

The workshop brought to the fore doubts such as “Are our information needs clear?”, “Will computerization make a big impact?” and “What will be the role of website?”

Questions emerged such as, “Why is data not sent timely from BO?” and “Why are formats not fully designed?”

It showed concerns regarding conflicting information sent in different reports and analysis and utility of information at the district level.

Participants wanted MIS to provide feedback to stakeholders and facilitate decision making at all levels, matching aspirations of stakeholders’ information needs.

Sharing experiences and looking ahead, they sought to identify opportunities and design appropriate systems that can be effectively used and handed over to SHG federations, producer companies and CBOs in the next three years.

Participants also shared the view that complexity of data is growing with diverse livelihoods being promoted and managing will become difficult without proper MIS.

Need for a study for MIS

Project had already taken up short study for MIS requirements. Outcome of the study was not satisfactory as it did not reflect a holistic understanding of the system.

It was felt that a study involving stakeholders and users should precede the design of the MIS so that shared issues and concerns get aired and future users are involved in the design process. Thus, a participatory process of system study to generate the final list of requirements in the order of priority for automation was initiated. Saral Services, Hyderabad was entrusted with the assignment of Participatory System Study to understand system requirements and priority of automation for developing the software. This study was carried out with the objective of enabling all stakeholders to understand their MIS requirements so that decision making is informed and reasoned.

Proposed study was conducted with the senior management at the HO and District level participation in the high level design of the information technology (IT). Output of the study will also feed into the mid term review (MTR) to enable project get a clearer picture of the importance of IT deployment in the project.

AAJEEVIKA

The context: Uttarakhand

Uttarakhand has a geographic area of 51,125 sq km, of which 93% is mountainous and 64% classified as forest. Most of the northern parts of the state are part of the Greater Himalayan ranges, covered by high peaks and glaciers, while the lower foothills are forested. The climate and vegetation vary greatly with elevation, from glaciers at the highest elevations to tropical forests at the lower elevation. Mr Deep Joshi, Consultant to the Saral Team and native to Uttarakhand while speaking about the extreme variation of climate and vegetation very evocatively put it: “The village I grew up in had mango and guava trees and the village to which I walked everyday to attend school had apple trees. You cannot think of any other place that has such variety in such short distances.” The ruggedness of terrain is reflected in mobile connectivity with coverage available in one part of the village and not in other part of the village.

The density of population in Uttarakhand is 159 persons per sq Km (All India 324) but the spread of population is fairly uneven. For instance, the districts of Haridwar and Dehradun together account for roughly 32% of the State's population whereas district Champawat accounts for only 2.65%. As per 2001 Census, the ratio of rural to urban population is 74:26. Uttarakhand’s terrain makes it a difficult geographic location to work in as villages are remotely located and often inaccessible.

Infrastructure in Uttarakhand

Terrain and Physical Connectivity

A predominantly hilly State, Uttarakhand is minimally connected through rail and air links. Therefore, it would not be an exaggeration to say that roads are the lifelines of the State. As on March 2005, the State had 24,208 Km of road length maintained by the PWD, 3,335 Km of bridle roads and 546 Km of border tracks. This is much less than the neighboring Himachal Pradesh which has 27,000 km of roads despite having a comparable geographic area and a smaller population.

In terms of village connectivity, 9,419 villages out of 15,656 were connected by road as on March 2005. Landslides during the rainy season routinely reduce connectivity, cutting off entire regions for weeks and months on end. IT maintenance services cannot be done from a distance and one would have to

place IT technicians at sub-district level for any project using IT; one IT technician will have to be placed for 2-3 blocks.

Energy

Uttarakhand has an estimated hydro-power potential of approximately 20,000 MW but so far only about 10% has been tapped. The state is now electricity surplus but not all the villages are electrified. Rural electrification data for the state is presented below.

Total inhabited revenue villages	15,652
Villages electrified up to 31.03.2007	14,905
Villages to be electrified	747

The government plans to provide all the households access to electricity by 2009.

At 95%, rural electrification in the state is higher than the national average. However, due to the scattered nature of habitations/hamlets in Uttarakhand extension of lines presents a major problem. In addition, the quality of supply and voltage is an issue that is yet to be attended to. Although per capita energy consumption in the State at 396 units is significantly higher than the all India average of 314 units (2000-01), about 35 % families have no access to electricity in spite of 95% of the villages being electrified.

Information Communication Technology (ICT) in Uttarakhand

Uttarakhand Government is keen to leverage benefits of ICT for the growth of the state. The Plan document for 2007-2008 lists biotechnology and IT and IT enabled services as the two new fields where the government feels it can make a jumpstart and become a leader.

In respect of information technology the vision is to deploy IT as an effective tool for catalyzing economic growth and efficient governance resulting in the creation of a knowledge-rich society with a high quality of life and to develop the State as an attractive destination for IT industry. The key focus areas are:

a) Development of IT infrastructure (connectivity backbone)

b) Investing in HRD (Human Resource Development) in terms of IT skills.

c) Deploying E-governance applications which are citizen focused and which aim at delivering government services to every citizen at a place and time of his/her choice rather than the other way round.

d) Promoting IT industry, particularly the IT enabled services industry in the State.

The state released an ICT policy document in 2006 that clearly lays down its vision with respect to promotion of ICT. Some of the initiatives are:

- A state wide Area Network (SWAN) is proposed to be established for connectivity across the state. Given the difficult terrain WAN is planned as based on hybrid technologies, primarily wireless.

- The State is coming up with a dedicated IT Park in Dehradun, for which 40 acre land has already been acquired. The park is expected to host large number of ITES and software companies that will further give a boost to the demand drivers of the state's economy. Also, presence of IT sector in the state is expected to be a major source of demand for commercial real estate.

- Under the National e-Governance Plan (NeGP) Uttarakhand government signed an agreement in April 2008 with Reliance Communications Ltd., Comat Technologies Pvt. Ltd. and Hughes Communication for establishing Common Service Centres (CSCs) across the state under Public Private Partnership. These CSCs are envisioned as the front-end delivery points for government, private and social sector services to rural citizens of India in the remotest corners of the country through a combination of IT as well as non-IT services.

Aajeevika is fully aware of the forthcoming IT infrastructure in the state and plans to leverage the power of CSC for the project. CSC means setting of computer at the level of a panchayat. Therefore, they can be leveraged for automation of SHG accounts. Though this service will be in place only after two years, one can plan the link as the number of SHG grows in the cluster. The links can also be used by the dispersed producers and producer groups being promoted by the project.

Thus, although issues of electricity availability connectivity remain, the scenario is changing fast and the future holds much promise for Uttarakhand with all these IT initiatives on the anvil.

SARAL SERVICES: A PROFILE

Saral Services is a non-government organization focused on capacity building and action research in the context of leveraging the power of information and communication technology (ICT). Saral Services specializes in conducting MIS diagnostic study, MIS requirement study and participatory design workshops. *(For details please see annexure – 3 and web site URL – www.saralservices.org)*

TERMS OF REFERENCE OF THE STUDY

This study is titled as "System Study and Participatory Process of Understanding the System Requirement and Priority Setting for Automated MIS for UPASaC*."*

However, during the course of the study it was realized that neither the study nor the proposed MIS could be restricted to UPASaC. The nature and structure of the two organizations, Aajeevika and UPASaC is so closely intertwined that the study necessarily becomes a study of for both the organizations.

Objectives

The Study would have following objectives:

1. Review the documents prepared on project design and MIS framework developed so far.

2. System study for four project components: B. empowerment and capacity building of community organization and support organizations; C. Livelihood enhancement and development; D. Livelihood support system; E. Project Management. Linkage of MIS with information needs of the project and project logframe.

3. Analysis of the reporting formats developed by project for social and business related information needs.

4. Analysis of the reporting formats developed in the context of decision making by project staff and other stakeholders including SHGs and federations.

5. Review of progress made by the project through AWPB, RIMS, field reviews and integration of the findings in the project MIS.

6. Review the options for internet based reporting including integration with project website.

7. Identify options for use of simple, cost effective and participatory GIS in data integration from village.

8. Design appropriate systems that can be effectively used and handed over to SHG federations, producer companies and CBOs in next 3 years (2011).

9. Study the system of project interface with stakeholders such as facilitating non-government organizations (NGO), community based organizations (CBOs), technical collaboration partners for livelihood enhancement component in various sub sectors and value chains identified by project.

10. Review the two applications already developed – SIMS and CPMAS.

11. Interview the key-informants from among producers, SHG members, facilitating NGOs, District staff, State level managers and other stakeholders such as Banks, Department of Rural Development of Uttarakhand and IFAD staff.

12. Interview will cover two blocks, two districts and state level staff.

13. Prepare information flow charts using users' stories.

14. Prepare requirement list.

15. Workshop of all the stakeholders for finalizing the requirement list with priority of automation.

The study would be undertaken covering the State level office as well as cover the districts of Chamoli and Bageshwar.

Although the TOR mentioned Chamoli and Bageshwar as field locations, the Saral team included Tehri also to increase their understanding of the project.

Output of the assignment

1. List of system requirement for software development.

2. Software features, covering these system requirements with priority of development.

3. Approximate cost of development.

4. Process of software development.

5. Educating stakeholders about the need of data collection and using the analyzed data for operations.

6. Short system stories describing stakeholders involved, templates used for information collection or reporting and navigation.

7. Educating staff of project partners about the importance of collecting less but correct data and on realistic expectations regarding the reports it will generate.

8. Shared thinking about the approach of developing software for the project.

9. Analytical report on the two existing software – SIMS and CPMAS.

10. Clear road-map for software development and deployment.

PARTICIPATORY MIS DESIGN PROCESS

To understand the operations of the project the study team planned emersion through visits to the HO in Dehradun and remote field locations. For this purpose, four members of the team visited Dehradun and interacted with the senior staff of the project, including Project Director, Aajeevika and MD, UPASaC. In this visit the complete TOR was reviewed and deliverables were discussed.

The team tried to understand the project objectives, the four project components:

- **Component B:**
  Capacity building, institution development, convergence of government programs and drudgery reduction intervention,

- **Component C:**
  Training and initiation of income generating activities and setting up backward and forward linkages,

- **Component D:**
  Enterprise development and mainstreaming the micro-enterprises taken up

- **Component E:**
  Project management to ensure smooth functioning of the project and achieving the stated objectives and development indicators set by project partners, namely GOUK, Department of Rural Development and IFAD.

While there are these four project components, there are two operating institutions, UGVS and UPASaC with separate staff in the Districts.

The project is presently conducting value chain studies for various activities. Indicators that arise during the value chain study are also used for monitoring. The mid-term review of the project, due shortly, is likely to introduce significant changes in the design of the project and the proposed MIS should take this into account.

The project staff shared various useful documents such as Annual Report 2007-08 that provided detailed data on achievements and activities of the project. The team also looked at various studies on the project (review in annexure 4).

The team studied the final list of indicators suggested by IFAD and the RIMS exercise. The M&E framework prepared by IFAD is very exhaustive and clear. It explains monitoring and evaluation in the context of logframe, RIMS and MIS. Team studied the final list of indicators prepared by IFAD and also a document

"Information Requirement Assessment Study for UPASaC" prepared by a firm GNA.

PD wanted the MIS to be such that it can be used by the community and community based institutions such as SHGs and their federations. This point was not there in the TOR but was added in the report only after the discussion.

The tension between mobilization and capacity building of the poorest of the poor and grounding commercial activities to be adopted by them also surfaced during the discussion.

The Steering committee for the project is chaired by the Chief Secretary. It is convened in the Chief Secretary's meeting hall, twice a year, with heads of other line departments such as Uttarakhand Bamboo & Fiber Board, Uttarakhand State Seed & Organic Production Certification Agency, Institute of Medicinal Plant Research & Development and Uttarakhand Sheep and Wool Development Board. They are invited to coordinate with the project for convergence of program as well as to provide the linkages for income generating activities. The Steering committee expects reports depicting families, district-wise, requiring support from line departments. The team looked at the minutes of the Steering committee to understand its role in the project.

Management committee of the project is chaired by Forest and Rural Development Commissioner (FRDC) for coordinating with banks and FNGOs that meets once a quarter. PD is required to report the outreach of the program and the impact as it is through this committee that accountability of the project towards the government is monitored. The team looked at the minutes of this committee.

Subsequently, the team did field work in three Districts, Tehri, Chamoli and Bageshwar and looked at dairy, kroiler rearing, agriculture and horticulture, candle making, SHGs and branch offices. Team interacted with two FNGOs, a banker, the livestock department and staff from both Aajeevika and UPASaC. The data and insights gained from field work were reported during the workshop for validation by participants. Field work was helpful in understanding the operational details and points of data generation in various activities. It also revealed the users of the data and data flow for different activities.

Once the team had an understanding of the project, people, place of work and project goal, a two day participatory design workshop with staff of UGVS, UPASaC, FNGO and members of SHGs was held to interact and develop the High level design for the MIS. Participants were facilitated to participate in high level design for IT solutions. It defined the contours of automated management information systems. At the end of the workshop broad requirements were articulated. They also set priorities with respect to automation, using software, mobile telephony and centralized database.

A presentation was made and a draft report on the participatory design was shared with the project staff on 9th September 2008 in Dehradun. The report was also shared with some of the earlier project consultants and IFAD. Senior Staff discussed the report and gave feedback on the draft report. Based on the various feedbacks received, the report has been further refined.

PROJECT DOCUMENT REVIEW

A number of documents provided by the project were reviewed. The same is given as annexure – 4.

UPASaC MIS FORMATS

Some 30 MIS Forms have been prepared (a few indicative of one time information requests that are made from the team by various stakeholders, especially state government offices). The forms cover livelihood activity mapping to regions and profiles of input sources, service providers and resource NGOs. Forms track field visit findings of staff. There are a number of forms for tracking training of enterprise beneficiaries and UPASaC staff. Data of SHGs and community organizations is also tracked. Financial assistance to enterprises is also tracked through these forms. Staff reimbursement of claims (as per IFAD requirements) is also covered as is assets and other basic accounting requirements.

There are some basic problems with these forms. These are of two kinds –

1) Multiple subjects: data from different sources is collected in one form and this has problems in collection,

2) Repetition of data: same data is collected in more than one form.

These forms need to be refined and the best way to refine these forms will be by collecting the data using these forms so that one can experience and reflect on the difficulties encountered while filling these.

These refined forms will be required when the automated MIS goes into the functional detailed design stage. The relationships of each form to data capture format will have to be worked out.

FRAMEWORK OF MANAGEMENT INFORMATION SYSTEMS (MIS)

MIS in the context of project design, operation, impact assessment, resources and stakeholders

Information is the common element in Project design, operation, impact assessment, resources and stakeholders. Hence managing information adds value in building the organization. Reliable information plays a vital role in preparing a framework for project design, especially projects for the development of the poorest. Logframe exercise builds vital indicators, covering input, activity, output, outcome and impact. Combining project designing and logframe exercise construct the platform for monitoring systems.

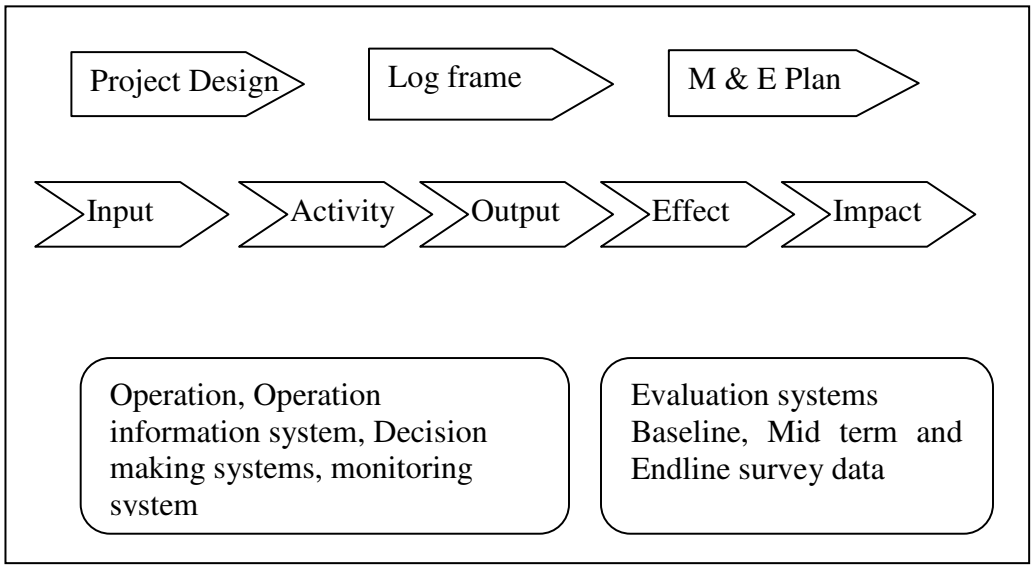

Figure – 3 (Operation information system and Decision System)

The Figure 3 shows the position of M&E in planning. Planning has to be based on project design and logframe exercise. Logframe provides input, activity and output indicators as well as outcome (effect) and impact indicators. Project evaluation would deal with impact indicators, primarily.

Monitoring system essentially covers input, activity and output successfully while evaluation system covers effect and impact indicators. Base line, mid term and end line data are collected and analyzed to evaluate the project.

Regular automated management information system would cover the monitoring system primarily in the first phase of automation.

Automated MIS

Automated MIS deals with a very small part of the entire project data. Data is getting created every moment, some useful and some not so useful and some useless. Based on the logframe and project design, data is created that is useful from the point of view of the indicators developed. Data in a way is like a newborn child; it is born and if not taken care of, there is chance of data mortality. Therefore, it is advisable to collect data when and where it is born so that the possibility of its getting lost or corrupted is minimized.

Data can be collected along seven vectors – time, target (families we work for), territory (hamlet, village, panchayat, block and district) and task (activity and sub-activity, input), staff, collaborators (SHG, thematic group and federation) and indicators (such as RIMS). Data can be analyzed along these seven vectors.

Time and space are vital in data collection. Delayed information is prone to error and misreporting. Distance plays a role in collection and transportation. Thus, appropriate data collection, data transmission and data storage determine the quality of MIS.

SHORT SYSTEMS STORIES/ USER'S CASES

SHG – Bank linkage or the CCL

Self Help Groups after conducting their affairs properly for a period and building their savings to a prescribed amount can approach banks for availing loans. The Group Promoter (GP) or Block Coordinator does the initial liaisoning with bank officials. The application furnishing details of a particular SHG is submitted to the bank by the GP and includes the members' photographs and signatures. The bank does the formal verification and processes the application. Once the bank process is completed, the SHG can take loans from the bank. Members generate demands for loans in SHG meeting and the required amount is withdrawn from the Cash Credit (CC) account. The amount withdrawn from the bank is also entered in different books of accounts in the SHG. SHGs also charge a different rate of interest for loans from the CC amount compared to loans from their own saved funds. The loans distributed among the SHG member out of the CC borrowings are not accounted in the SHG Information Management System (SIMS). Recently, the project assessment of the SHG has been done by external consultants Agriculture Finance Corporation (AFC), Delhi.

Kroiler – Chamoli

Poultry farming is one of the livelihood ventures being promoted by UPASaC. In this district there are 6 mother units with 500 chicks per unit.. An agreement is signed between the farmer and UPASaC and Assistant Manager (AM) with the Business Promoter (BP) as the witness. Birds were bought from Uttaranchal

Poultry Products Ltd, a body that has a monopoly in this supply. For capacity building a 10 day programme was organized at Pantnagar. In Chamoli, the birds can be bought only between February and August as it becomes very cold for the birds in the other months. The plan is to go for 2,000 chick units provided with drinker and feeder.

In the first round, the BP goes along with the beneficiaries to pick up the chicks for them. Each beneficiary contributed Rs 1,000 and provided the infrastructure. Day Old Chicks (DOC) come with feed and vaccine. Mother unit looks after DOCs for 21 days. A DOCs cost Rs 10, cost of feed is Rs 7 for 21 days, transport cost is Rs 1, vaccine costs Rs 1 and the rent could be Rs 1,000 at the most. Each chick is sold for Rs 35 after 21 days. Mortality of kroiler is affected by their piling on each other and killing themselves and lapses in providing vaccine and proper feeding. BP's duty is to monitor these aspects closely and guide the farmer.

Once chicks are 21 day old and their sale begins. Farmer is free to sell the chick whenever he likes but must make the sale to his SHG members and only when they do not have a requirement then it is sold to others. The experience has been that some farmers are selling chicks early i.e. a few days old while others are keeping them for 3 to 4 months also. BP keeps data of all sales

Cultivation of Medicinal Plants

Farmers of these clusters have been cultivating certain plants well known for their medicinal value that also grow in the wild. Since the plants have a long growth cycle of three years, farmers who grow three crops in one year are not interested in these and prefer collecting the same from the wild and selling. Since there is a great deal of migration in these areas, land of migrants is used for cultivation. The plants as such do not require much care.

A baseline survey is done by BP to find out how many farmers are already cultivating such plants, including non-SHG farmers. Simultaneously, UPASaC team works on establishing linkages for marketing the produce.

BP talks to the farmers about this in SHG meetings. Beneficiary selection is done and demonstration is done, followed by replication. Monitoring of demonstration is done by the BP and Assistant Manager (Enterprise). The BP collects data for the crop regularly.

When the crop is ready the farmer is introduced to the buyer and the two parties mutually decide the sale. For connecting the buyer and the seller UPASaC takes 8% of the profit as Business Development Service (BDS) charges . This eliminates middlemen who are exploiting farmers by conducting unfair barter with them.

Candle making – Chamoli

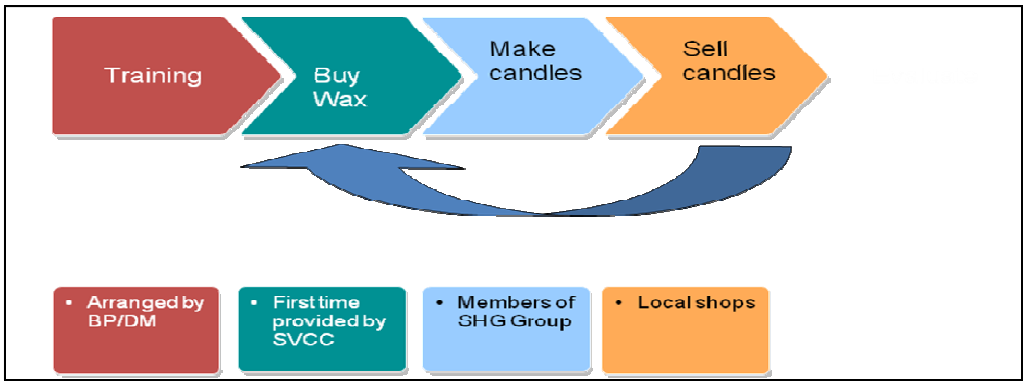

Figure 4: Enterprise Promotion and Operation Loop of Candlemaking

Wax Production Unit was started with initial investment of UPASaC. There are only two units but the activity is not regular. Hence the production is also not regular. The SHG members take it as tertiary activity. The initial investment done by the UPASaC has been returned. There is little data generated.

Dairy – Chamoli

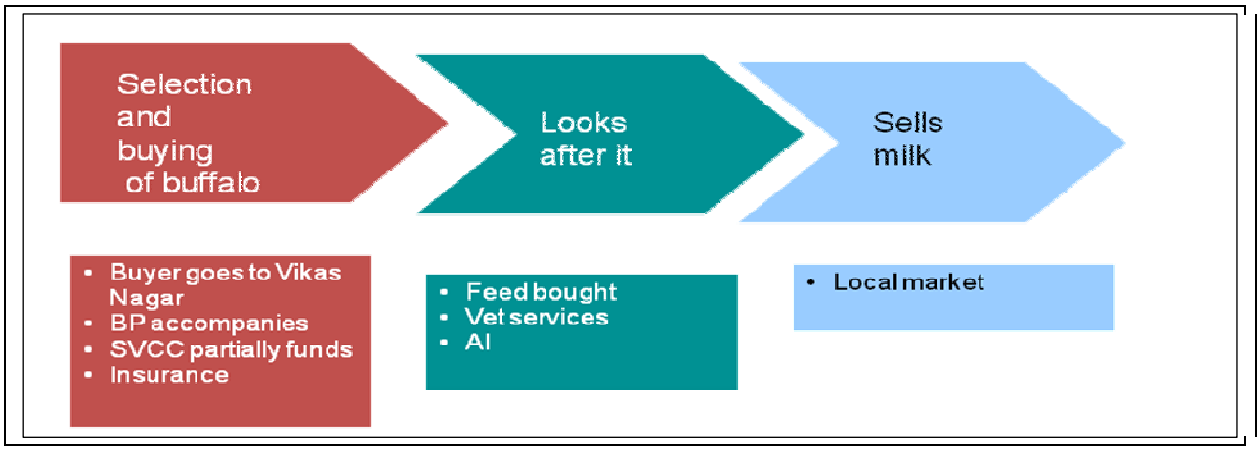

Figure 5: Enterprise Promotion in Dairy

Cultivation and Sale of Gladioli as an Enterprise in Bageshwar

Enterprise promotion in Bageshwar has been done keeping in mind a sub sector analysis that has been done for the region. The sub-sectors identified as relevant for Bageshwar district are as follows:

1. Rural Tourism
2. Poultry

3. Dairy
4. Medicinal and Aromatic Plants (MAP)
5. Non Timber Forest Produce (NTFP)
6. Horticulture
7. Organic Farming

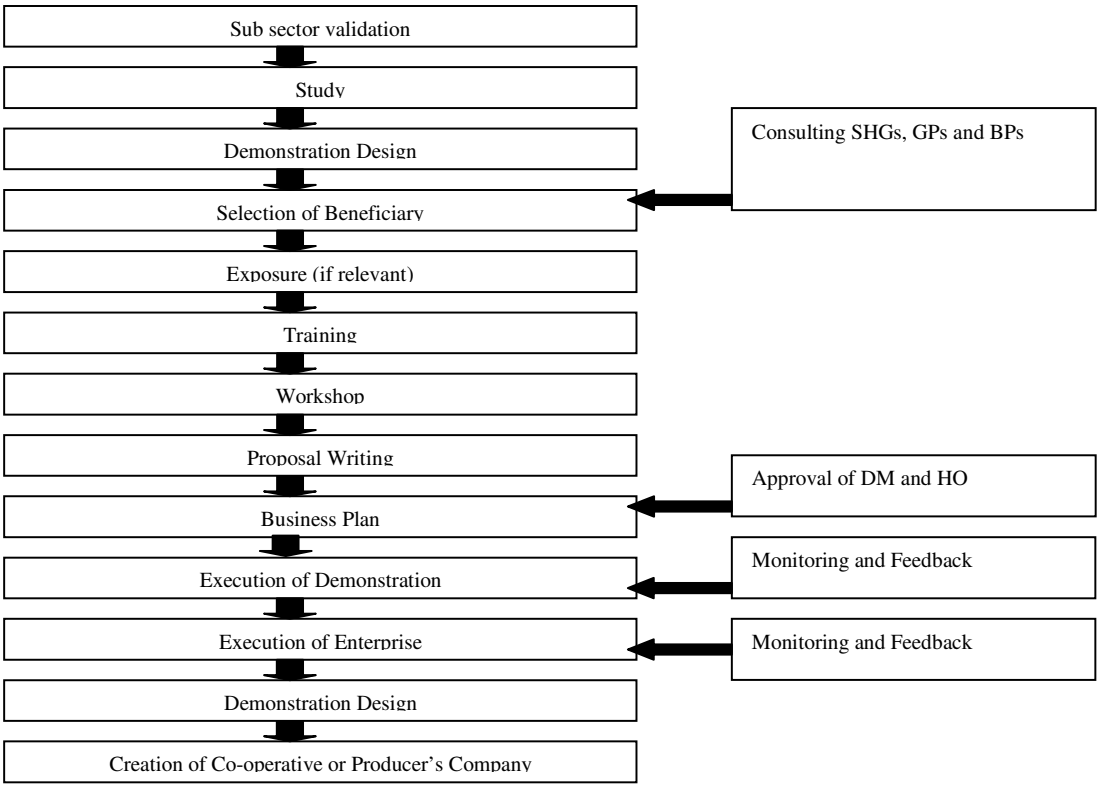

Figure 6 Process of Enterprise Promotion

The sub sector has been defined as the sequence of activities required to make a product or provide a service. This analysis enables one to understand the value chain, and the characteristics of each node in the value chain. The value chain can be understood as seeing how each activity in the series of activities adds value to the product and service. In this connection the demonstration in the horticulture sub-sector is a valuable experience to study. The horticulture sub sector includes off season fruit and vegetables and floriculture. This is the story of the cultivation, marketing and sale of gladioli.

An enterprise is selected for promotion through well laid out process as shown in Figure 6. As mentioned above the sub sectors suitable for a particular place have already been identified after proper study. The first step was to ensure that the

enterprise fitted the sub sectors suitable for the region. Then the gladioli cultivation process was studied and for this a consultant was taken on from Green Foundation. In consultation with the consultant a design for the demonstration was made. Through consultations with GPs, BPs and SHGs 22 beneficiary farmers were selected and 1.5 ha land was identified for the demonstration. Bulbs were acquired from the consultant and distributed to the farmers at a cost. The farmers were assured a return primarily on the basis of a guaranteed buyback of the bulbs that would be available after the season. Each bulb planted would multiply to 4, thus assuring a return of 4 times of initial bulb cost.

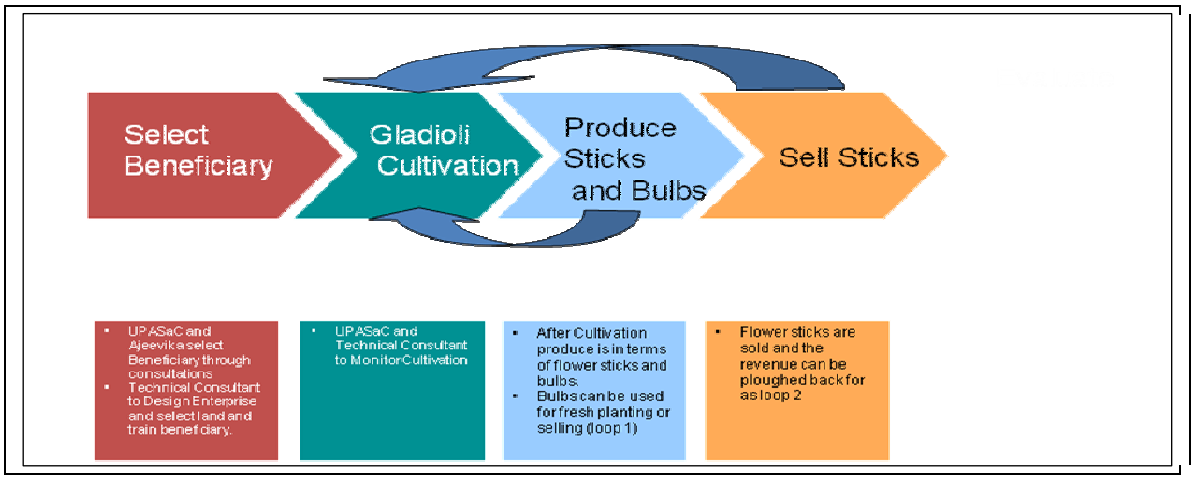

Figure 7: Gladioli Process flow.

Training was given on gladioli cultivation to the farmers. Cultivation started in May 2008 and the BPs and Assistant Manager (Technical) monitored the cultivation process.

Simultaneously, marketing networks were sought in Bageshwar, Haldwani, Dehradun and Delhi. The marketing networks were accessed on pure commercial terms. The first sticks were sent to the market in July 2008 and the data has been recorded (*see Table 1).*

Table 1: Marketing Details of Floriculture (Gladioli)

S. No.	Date	Unit	Damage	Sale	Per stick rate	Amount	Transport (Bageshwar to Market)	Mediator commision	Market place
1	7/11/2008	32	0	32	2.5	80	0	0	Bageshwar
2	7/16/2008	384	84	300	2.66	798	450	0	Dehradun

3	7/18/2008	774	138	636	2.66	1691.76	600	0	Dehradun
4	7/22/2008	228	96	132	1.21	159.72	320	0	Haldwani
5	7/23/2008	1200	360	840	0.84	705.6	1100	141	Delhi
6	7/25/2008	672	0	672	1.7	1142.4	315	228	Delhi
7	7/25/2008	216	0	216	2.08	449.28	0	0	Bageshwar
8	7/28/2008	840	0	840	1.04	873.6	315	175	Delhi
		4346	678	3668		5900.36	3100	544	

A study of the data revealed that Dehradun appeared to be the best market keeping in mind the demand, in transit damage, transport costs and commission. This demonstration has proved a mixed success showing the pitfalls to avoid while scaling up the business. This data has been collected by BP from the entrepreneur. Data provides several in-sites such as margin is 2,256 in a period of one month when they start selling the flower. Though small amount it significant for a poor family. Delhi does not give better price. Local market provides better price and cost transportation is also less. However, local market cannot pick up large quantity.

Need Based Rural Non-Farm Enterprise Promotion

There are two types of Rural Non-farm Enterprises that are promoted in Bageshwar: those that are linked to a value chain in an identified sub-sector, and those that are need based i.e. emerging from a felt need of the community and the convenience of the people of the area that the enterprise will serve. These enterprises would be individual and with little chance of scaling up, precisely because they are not part of a value chain which feeds a large market. In Bageshwar the enterprises promoted include flour and spice mills (chakki), village shops, tailoring, carpenter establishments and restaurants not linked to tourist or pilgrimage routes. These enterprises serve dual purposes, as a means of livelihood and as providing a service to the community, the absence of which is causing loss of time and increased expense.

The need for such enterprises is gauged by the BP in his or her interaction with the GP and the community, and the enterprise promotion activity is taken up with beneficiaries that are identified through consultation with the GPs, the SHGs and the community.

Rural Tourism: The Story of Tourist Lodges in Supi and Jhuni

Pindari Glacier is a very popular trekking site in Bageshwar district. In Bageshwar UPASaC is promoting the construction of tourist lodges in villages Supi and Jhuni, in Loharkhet block of Bageshwar. While this is a convenient location for a base camp for trekkers going to the Pindari Glacier, it is out of the normal route.

In this enterprise promotion effort the value chain has been considered. The community level organization is in the form of an Activity Group of village people involved in tourism. The groups consist of 30 to 35 members. Their contribution is in terms of labour and supply of locally available raw material. The technical and marketing collaborator is VillageWays, a tourist holiday company with good international links. VillageWays is providing the technical knowledge and design for managing the establishment which will be owned by a village level organization. VillageWays has an existing location in neighbouring Almora district which will create synergies with the upcoming locations.VillageWays will also provide the marketing linkages.

UPASaC is supervising the construction work started in June in Supi, due to be completed by September 2008. Construction at Jhuni is due to start in December 2008 and be ready by February 2009. Meanwhile, UPASaC is organizing the training of the village community aspects of the hospitality industry – housekeeping, food and beverages. Training is being organized for guides and porters. Later plans include encouraging handicrafts enterprises also.

BP-GP reporting structure

Group Promoters are in the lowest echelon of the project implementation structure of Aajeevika. Group promoters are staff of the FNGO. They are directly in touch with the community and are responsible for community mobilization and SHG formation. Once the SHGs have been formed, they start doing transactional work with the community. They prepare detailed monthly and daily plan, which is submitted to the Block Coordinator who is also the employee of the same FNGO. The Block Coordinator compiles plans of all the Group Promoters into a monthly plan and presents them to the Aajeevika District Monitoring Unit.

Business Promoters are the staff of UPASaC. The Assistant Managers are in charge of a block and look after the general management of cluster offices. The Business Promoters stay and work in their respective clusters. The monthly target is assigned by the Assistant Manager and in accordance with that the Business Promoters make their monthly plan. The monthly plan is presented in the first Business Promoters' meeting with assistant managers and the business promoters meeting of UPASaC held in the first week of every month. Their plan is reviewed and feedback incorporated, if necessary. The Business Promoters work in synergy with the Group Promoters.

REVIEW REPORT ON SIMS

SIMS – SHG Information and Management System – is software to manage information pertaining to SHGs. It gives monthly consolidated data of SHGs' financial transaction. The transactions done in each SHG is fed into the system located in cluster office/block office. In some districts the software is located centrally in the district which acts as the data entry point. SIMS helps in capturing the monthly progress data that has to be reported to HO. Data profiling the SHG members is stored in the database and is kept as repository only. Individual membership details are used to consolidate the baseline data of the SHG. The good points of SIMS include the fact that the group has a unique code so that integration is easy and accurate. The software can be used at Block level and it can also be aggregated at HO level. In sum, SIMS is meant to provide data for HO and that it does. That the profiles of all groups and members have been entered is a good point.

The issues with SIMS are:

1. The code is not auto generated; mistakes by data entry operator can pollute the database.

2. Since the transactions are not at the level of members, no report is possible for members.

3. Data entry is cumulative, so it is hard to correct the data if the opening balance does not match. Such problems are there in Tehri.

4. The software does not follow the rules of micro-finance i.e. deduct the interest first from the repayment amount.

5. It cannot provide overdue or interest accrued and not paid.

6. There is no schedule and hence there is no calculation of overdue.

7. Bank code is not unique and hence, we cannot consolidate Bank wise.

8. It does not keep the member level transactions and hence is not useful for SHG and its federation.

9. SIMS does not give any information related to the financial health of the SHGs.

10. The software dose not capture vital information like NPA status, ageing of loans, source of funds for internal lending, the average duration of loans for which the members takes loans, the purpose for which the members takes loans.

11. The repayment ratio, credit to saving ratio, credit circulation, etc. are some of the parameters which help to know the health of SHGs but are not incorporated in the SIMS.

The SHG should always be the primary point of all data generation at village level. Work progress in the village should be captured with reference to individual member's data entered in the SHG to get a better picture of ground realities. The primary focus of making the SHGs as a community based financial institution has not been envisioned through this package.

The software has been developed in-house and therefore the documentation of the functional technical design documents is not available. It is a major bottleneck for any reengineering. Since the database design has not taken member level transactions, the present software design has a major limitation if it were to be changed for applications requiring member level transactions.

REPORT ON CPMAS

CPMAS is software that captures the accounts of the project. It allows General Ledger creation at the HO. The same General Ledgers are sent to all the branches. The branch office can open sub ledgers and that provides flexibility. There is a system of authentication of transactions so that vouchers can be modified if not authenticated and after authentication, only rectification is possible.

There is logic for code generation as shown in Figure 7.

Cost	Infrastructure/ Recurring	PMU/DMU	Activity	FNGO

Figure 8: Code Generation logic in CPMAS

Since the code generation is technical the operator needs to get training to get it correctly. CPMAS provides a cost center approach.

It is not web based therefore, smooth integration with branch has limitation. It transfers accounts data at branch level into external storage device then physically the device is sent to HO for uploading. If the software were web-based, with centralized database then integration is a non-issue.

Centralized database in the present context is very relevant to Aajeevika. and requires that all the offices of Aajeevika have good connectivity to access the database. Present infrastructure is not ready for this. However, Aajeevika needs to position itself for providing reliable connectivity at the district level where CPMAS is used for accounting. Perhaps in a year, down the line it will be a

reality and by then if CPMAS is based on centralized database it can help the project even more.

Presently, it is not integrated sufficiently with physical progress data, though apparently the module is there but is not utilized. Automatic linking of physical progress against output indicators and budget lines (known as cost table) is not being done now although there has been some thinking on linking them.

The method of code preparation for voucher entry needs trained staff to handle. There is also scope of further simplifying the user-interface (UI). With improved UI and web based technology enabled integration between head-office and branch would give more confidence to the staff. There is a need to integrate with physical progress captured from other MIS.

Since CPMAS was outsourced and professionally done, the modularity and scalability is possible. Staff also has confidence in the application and the project has taken the benefit of using the application. Reporting to IFAD on utilization and budgeting has been consistent. It has generated positive energy in favour of automation.

ORGANIZATIONAL STRUCTURE

The organization structure of Project Ajeevika can be seen in the chart shown in Figure 9.

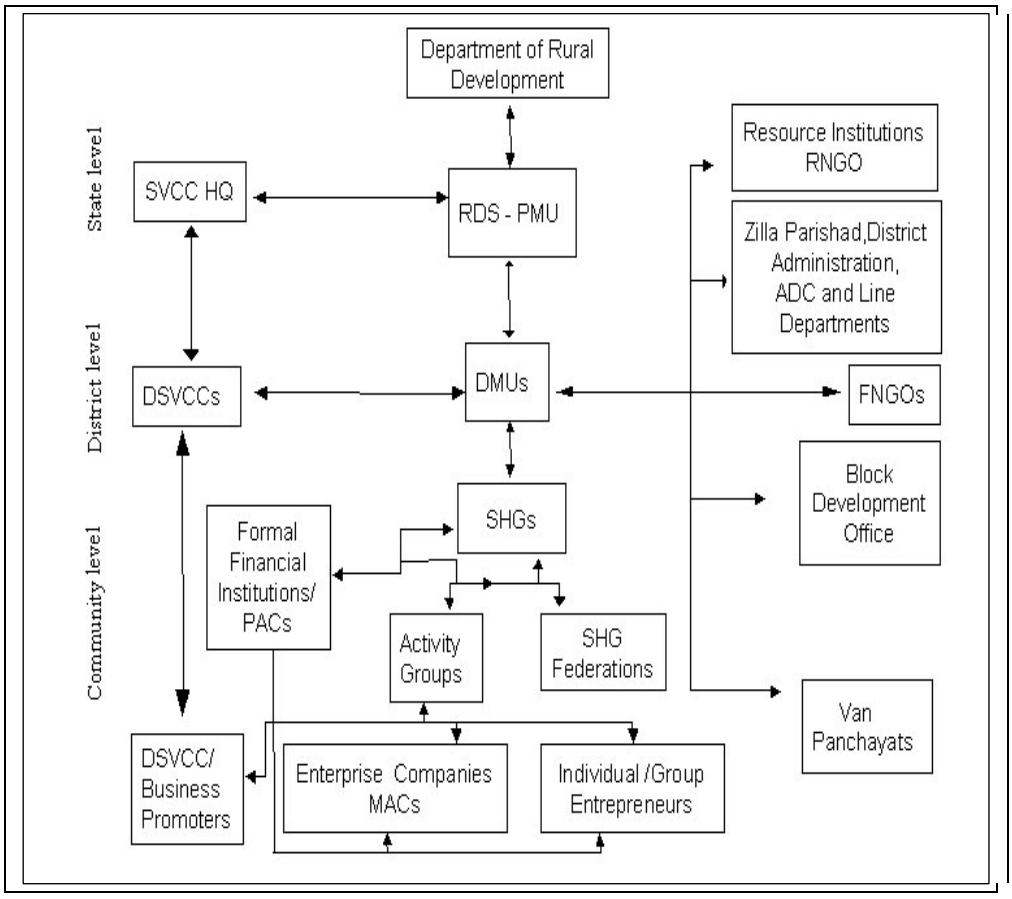

Figure 9: Organizational Structure of Project Ajeevika

A careful look at the entire organization chart reveals the basic two pronged approach of the project, namely the social approach of empowerment, drudgery reduction, building savings, natural resource management, and the business approach of enterprise promotion. The two approaches are coordinated at every level and in fact at the ground level, they almost completely merge with each other. The two approaches are pursued by two different organizations, which (it bears repeating) work in a coordinated manner, albeit with differing emphasis.

The social approach is taken up by the Project Team referred to in the organization chart as Project Management Unit (PMU) at the state level and District Management Unit (DMU) at the district level. At the community leve, the social approach is taken up by Facilitating Non-Governmental Organizations (FNGOs) who have block coordinators and group promoters who work with the community.

The Social Venture Capital Company (SVCC) takes the business approach, which as mentioned before is UPASaC. The state office of UPASaC is headed by a CEO, and the district office is headed by a District Manager. In the community

the Business Promoters work along with the Group Promoters. Although there are two parallel structures representing two organizations, they need to work together, especially at the level of the community. However, there are areas of confusion due to different lines of control at the level of district (visible in Tehri).

Our understanding is that if at the district level there is one person in command for both staff for Aajeevika and UPASaC there would be better coordination and smooth running of operations. Since there is not much difference in the GP and BP profiles in terms of qualification and skill, they need to be at one level. Both of them will need capacity building for using the automated application.

As shown in Figure 9, the dotted circle depicts the two key parts of the structures - SHG and producers groups where most of the operational data is generated. They are very important from the point of data for the MIS. Their locations and their connectivity in terms of road link and data link are to be considered. The project is connected with this structure through BP and GP. These staff will be the backbone for data collection, data correction and data uploading into the automated MIS. Since MIS quality is essentially dependent on the quality of primary data that have been entered, BP and GP need to be given training and also helped to understand the data better.

Present Organizational Structure and Proposed MIS Architecture

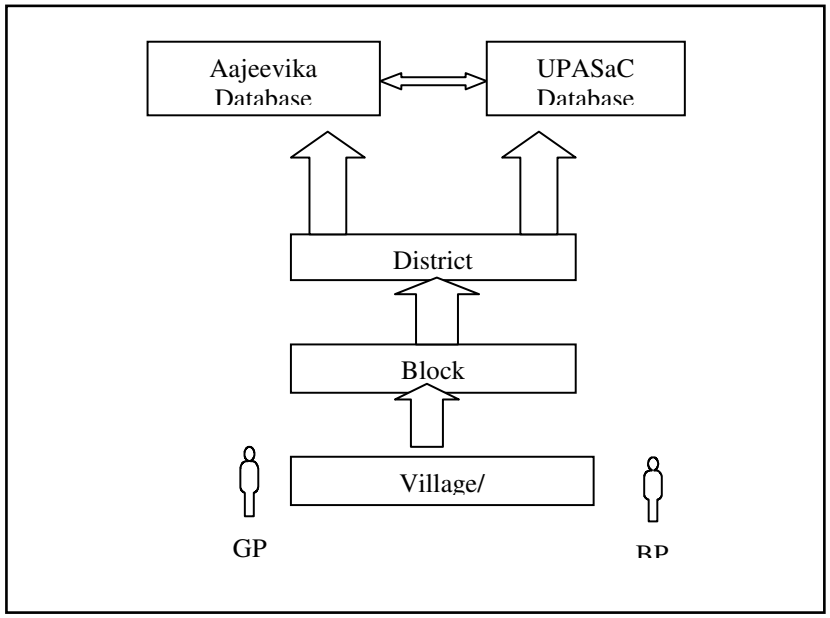

Figure 10: Project Ajeevika Organizational and Current Information Flow

MIS high-level architecture has to be synchronized with the structure of the organization and its information flow. Figure 10 represents the broad organization

structure of Project Aajeevika and the current flow of information. Primary operational data are generated at SHG and GP level and are captured through GP and BP. Figure 11 represents the proposed information flow with automated MIS. The major difference between the two is that Figure 11 shows data flowing in a loop so the MIS is serving every one and not merely the management, and in particular the Head Office. This helps the MIS drive the operations and also helps validate the data as the creators of the data regularly review the data and can thus flag wrong data.

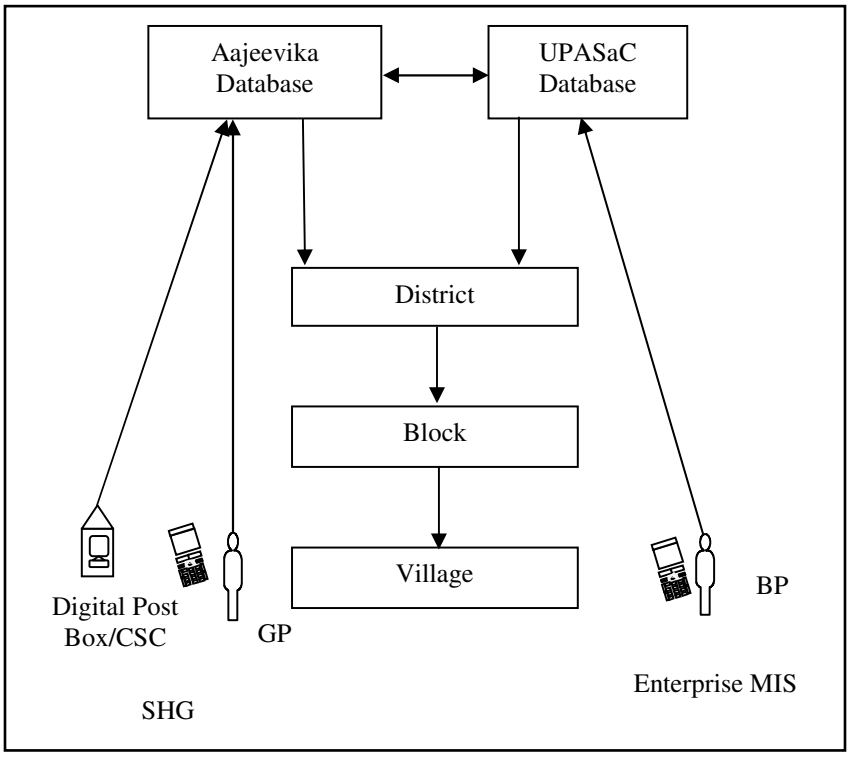

Figure 11 Proposed Information Flow with Automated MIS

Data Storage: Centralized database

Currently, the database is decentralized. For example, every district has its own database for SHG and CPMAS. Data from these district offices are transferred to Aajeevika and UPASaC database at Dehradun. There are two options for designing the data base.

- Centralized database (CDB): In the CDB data is directly stored from the point of data generation to the centralized database for report generation by all the users. Centralized database is safe and maintained at one

place. Cost of maintenance is low and reliability is highest. For accessing the database, one has to only connect from field offices. Connectivity has to be there whenever one wants to enter data or view reports. For viewing purposes, data from CDB District office can be downloaded at any office and viewed offline (without connecting to CDB).

- Decentralized database (DDB): In case of DDB district level database is used for all the data entry. All the data is stored in local database. Once a month, data from the district database is transferred to HO database. Often we opt for DDB because connectivity is a problem. But DDB is costly and also not reliable. It is also difficult to maintain so many DDBs in remote districts and blocks.

Pros and cons of both the systems were discussed in the design workshop. There was agreement on CDB. Therefore, the proposed MIS architecture is one that envisages all data being entered into one central database, accessed by all through the web.

There are two ways a CDB can be maintained:

a) Hire a dedicated web server at Aplus or some other reputed web space. It is like outsourcing the web server space.

b) Buy a Server and keep it in the office of Aajeevika. This is like maintaining own database. It needs to have public Internet Protocol (IP), very good firewall, anti spam and anti virus tools and trained staff to do regular maintenance.

We propose a CDB and web space outsourced through a reputed company. After two years, we could plan for project's own Server. GPs would enter transaction data of SHG and social interventions and BPs would enter enterprise data into this server.

Methods of data capturing

Data capturing is one of the most important components of MIS architecture. Data is being generated every moment by the project at all locations, by all staff and in all activities. However, all the data is not captured. Only data relevant to MIS framework is captured. GPs and BPs were visualized as having more than one option to capture data. It was discussed that since it is difficult to travel in Uttarakhand multiple options are required for data capture, including, if all else fails, the manual processes.

The principle driving this architecture is that data integrity has to be maintained at all cost.

At the village level data will continue to be captured through manual process.

This data is entered by the GP/BP using:

- Mobile, limited quantities of data in case of lower end handset, using Short Message Service (SMS) technology.

- Larger quantities of data in case of higher end GPRS supported handsets, depending on the availability of GPRS, we can send more data, pictures and voice.

- The data can also be entered through Digital Post Boxes/Common Service Centres/Internet Kiosks which are being set by a Public-Private project in the state in the next two years. GP and BP can enter data at CSCs that are located nearby.

- Data entry can be done through the block offices. These data are to be sent to State through email, CD and pen-drive. At the District level data will be uploaded to HO.

While there were concerns about the applicability of mobile phones in the MIS architecture, the participants of MIS design workshop at Dehradun agreed on the need for a centralized database and data flows serving all stakeholders/users. It was decided that mobile should be introduced in one district on pilot basis before adoption in the entire project.

EVENTS WITH INFORMATION NEEDS

Users of the MIS:

We need to understand the class of users, their attributes in terms of ability to understand information, location, ability to access information and level of participation in the project. There are broadly 15 users' classes. They are also the stakeholders of the project. The users' classes we have created are taken from their information needs. The MIS will have to be seen from the angle of these users. The following table presents the analysis of the users that define the scope for the MIS.

Table – 2: User class and their objectives for in using systems

Sn	Users class	Attributes of the users	Purpose
1	Citizens of Uttarakhand	Adult citizens, rural, especially women, mostly speak local language but majority can read Hindi	To know Aajeevika program and how they can benefit Participate in program Join as worker Support the work Provide suggestions
2	SHG members/ Producers	Rural, mainly women, poor, illiterate, speaks local language	Know individual transactions (saving, loan, outstanding, input for the livelihood, output sold, income), To know the precise source of technical support Training they can attend What is the next step?
3	Staff of SHG federation, Producers company)	Mainly non-graduate Experience Leadership	How to link with line departments, bank, insurance companies, market Value-chain of an enterprise Training opportunity SHG operational data Enterprise operational data Accounts of federation/producer company
4	GP and Cluster Coordinator of FNGO	Graduate/ Master, having mobile, can speak in Hindi, read English, Block level	SHG individual member operational data Village identification Well being ranking Convergence activities and departments Training for SHG members Training for themselves
5	BP	"	IGA/ Enterprise operational data Sub-Sector and Enterprise/ Activity Enterprise value chain Training for SHG members Training for themselves
6	DM	Master/ Professional degree/ technical person, District level	Sub-Sector and Enterprise Value-Chain players and margins Enterprise linked input, output and outcome indicators Training for BP and Producers Staff performance Coordination with line departments and FFI
7	District level PM	"	Input, output and outcome indicators associated with community empowerment and institution building Training of GP and Cluster coordinator Staff performance Coordination with FNGO, RNGO and FFI
8	State level Management staff of Aajeevika and UPASaC	Experienced Based in Dehradun Professionals State level	Input, output and outcome indicators Training of all staff Staff performance Coordination with FNGO, RNGO and FFI and line departments, GOUK

Sn	Users class	Attributes of the users	Purpose
9	State level Manager (Finance)	Professionally qualified based in State capital	Budget and budget line Utilization of fund Cost center wise analysis for the project
10	RNGO (Training organization) / Resource organizations / Consultants	Independent technical/ Training/ Marketing/ Consultancy ind / institutions	Project design Operating processes Explicit expectations Assignments for outsourcing and TOR Events for collaborations and sharing
11	Bankers (Formal Financial Institutions)	Banker Insurance company	SHG/ PG/ Fed/ Producer company grading appraisal SHG and PG outreach Value chain report
13	Line departments	Technical departments of GOUK	Project design Operating processes Explicit expectations Outreach of enterprise
14	IFAD	UN funding agency	IFAD format for indicators
15	GOUK	Government	Report on outreach and benefits coverage

Key Events information matrix:

Having understood the users, there is a need to understand the key events that either generate or use information from the MIS. These events are analyzed from the point of view of users who participate and how it is triggered and the point of event (POE) and information required to make the event successful and information that gets generated. The information has to be captured as it is generated:

Table – 3: List of key events of the project and its requirement in terms of information

Events (Participants)	Trigger	POE	Information requirement	Information generated
Steering committee (15, 13, 8)[a]	Once in four months, PD Aajeevika	State	Target families, outreach, output indicators Physical and Financial	Input indicators, Linkages, support from line department,
Management committee (11, 8, 4, 9)	PD, Aajeevika	State	Target for the quarter, Staff placement, staff leave and attrition, training, SHG grading,	New FNGO, New criteria Approval of project
Reporting to IFAD (14, 8, 9)	IFAD, quaterly	State	IFAD format of indicators from logframe, AWPB	

[a] These numbers refer to table – 2 row numbers. They are the participants in the event.

Events (Participants)	Trigger	POE	Information requirement	Information generated
Project team meeting (8)	PD	State	Output and input indicators	Follow up plan for the month New assignments New training for the staff
Aajeevika Project meeting (7, 8, 4)	PM	Dist	SHG Summery, Bank linkage, Achievement of monthly target for input and output indicators	Follow up plan for training, linkages with Bank, Convergence, HR data
UPASaC project meeting (8, 6, 5)	DM	Dist	Output and input relevant to IGA and ME and SM data,	HR data, Follow up for performance, new plan, training schedule
SHG meeting (2,4)	SHG meeting date and time	Village	Member wise saving, loan repayment, disbursement, purpose, group expenses and income,	Training, demonstration, IGA, attendance, transactions of the month
PG / producer meeting (2, 5)	Producer or BP	Village	Activity wise – skill set requirement, marketable surplus, technical support providers,	Production, input used, mortality, support required

HIGH LEVEL DESIGN

High level design (HLD) is the broad sketch of the MIS design. It broadly defines the users, events when either information is used or generated, mechanism of data capturing, data storage, the list of complete requirement and the road map of software development and deployment. The proposal information flow in figure 11 will be the Architecture for the IT adoption.

REQUIREMENT LIST (RL)

It is the complete list of requirement that Aajeevika and UPASaC would like to have in the MIS. For generating the RL participatory design approach was adopted.

Broadly there will be four modules.

1. **Federation and SHG:**
   Component B of the project essentially focusing on capacity building of the community and Institution building. Federation and SHG has two parts - it will maintain the accounts of the federation and help the federation maintain its SHGs and their accounts and business transactions. It will have two stages – firstly to system to monitor the promotion of SHGs and capacity building and the in the second stage, automate the operation of SHG regular transactions

and accounts. At this stage as the federation to manage the SHGs, it should take the ownership of the application. Table 4 describes the list of requirements for the module and their objectives. It also describes the priority of automation.

2. **Livelihood and Value Chain:**
   This module would aim to automate the Livelihood promotion such as training, exposure visits and demonstration. Enterprise has to be mapped to Sub sector and associated tasks and indicators. It will also map the value chain and the associated service providers. In the second stage, automation of the livelihood wise operational information and decision making reports. Project has started the value chain workshop. Table – 5 describes the details of the requirement for the module with priority set by the project.

3. **Project Management and Communication:**
   It will address the component E of the project. There are two parts – a) the management of the project at District and State capital. RIMS and Log-frame indicators will be tracked. These reports will used monitoring the program. There is a system of collecting monthly project data from every team. Such a system will be automated to aggregate the progress at all levels. B) The second part of the module is the communication with all the stakeholders on the project, people and its programs. Tables 6 and 7 describe the list of requirements for the module. In the beginning they were seen as two different module they can be merged in to one module.

4. **Human Resource Management:**
   Human resource is the key driver for running the organization and taking it forward. Automation of human resource development in the project will strength the system to ensure achievement. It will also take care of the staff grievances. Main grievance is not getting the work as per the interest and skill. Such a system will help keep the staff happy. Subsequently HRM will be used for building reward and incentive for the best performance. An objective system of appreciation and reward will inject energy for better performance. Table – 8 describes the list of requirement for the module.

Table 4: Prioritized Requirement List for Federation and SHG Module

S No	Description	Priority	Functionality
1	SHG profile	1	Add a new SHG, Modify, Dissolved,
2	Federation profile	1	DO at cluster level
3	Grading	2	Grading process leading to calculation of credit limit, Once in six month
4	Member profile	1	Add new member of SHG, withdraw,
5	Village Profile	1	Add village profile with code from census (standard code)

S No	Description	Priority	Functionality
6	Bank profile	1	Add / Remove
7	CRP Profile	1	Add/ Remove
8	Facilitating NGO profile as implementing agency	1	Add/ Remove, Attach staff of FNGO as GP and Cluster coordinator
9	Basic account 1	1	Provide all accounting functionality for SHG accounting
10	Loan activity profile 1 Multiple loan Multiple loan disbursement Variable loan period Change in interest rate	1	Define add new loan interest rate
11	Saving and Internal loan regular transactions 1	1	Handle all financial transactions for individual savings (compulsory and voluntary) and provide interest option
12	Bank linkage	1	Bank loan, repayment to Bank, close of loan, linking of Bank loan to loan to members
13	SHG accounts with all accounting reports	1	Account voucher entry BS, R&P, P&L, Cash book, Bank book
14	End of the year profit appropriation/ dividend transfer	2	Dividend calculation on saving and time, distribution of dividend to members
15	Financial year closure	1	Accounts closer, creating opening balance for all member and their accounts
16	Cut off date transaction upload	1	Opening balance uploading for a given date
17	Change in compulsory saving	2	Automatic calculation of saving due
18	Monthly data transfer to Aajeevika database	1	Export option to transfer the data from SHG wise and month wise
19	Data transfer to Aajeevika database directly from SHG using SMS.	3b	At the Server side is application is required for capturing the SMS and putting them in database
20	Data transfer to Aajeevika database using mobile application	3c	In case of more data transfer application is also required at mobile end.
21	Aajeevika web module for reporting	3	10 reports on web side to see analysis of the data on SHG
22	Aajeevika web interface with Bank and Technical Institution, Federation, FNGO.	3	Provide access to Bank and technical institutions to access SHG where they are lending

Table 5: Prioritized Requirements for Livelihood Promotion Module

S No	Description	Priority	Functionality
1	Livelihood profile, Sub-sector and Value chain profile	1	Livelihood Sub-sector profile and mapping with value chain and value chain partners

b May need to demonstrated as pilot in one district
c May need to demonstrated as pilot in one district

S No	Description	Priority	Functionality
2	Bank/ PACS/Financial Institutions linkage	2	Loan borrowing from Bank and repayment and closing of loan
3	Enterprise Profile	1	Enterprise and value-chain mapping
4	Service provider profile	1	Add/Remove/Graduate
5	Technical support institution profile + Panel of Suppliers and Marketers	1	Add technical institutions/ Mapped with add/remove from panel of suppliers and market provider
6	Demonstration Transactions	1	Transaction of demonstration with a family on an activity
7	Capacity Building	1	Training place, module, training institute, duration of training, mapped with individual
8	Enterprise accounts with all accounting reports	2	Enterprise accounts for producer group and individuals
9	Area based aggregation of Enterprise MIS	2	Reports on area wise village, panchayat, Block and District; Should have the option of selecting a few villages and a few blocks
10	End of the year profit appropriation/ dividend transfer	2	End of year profit appropriation for producer group
11	Financial year closure	3	
12	Cut off date transaction upload	1	Member wise opening balance to be entered for upload.
13	Accounting service on SMS for enterprise	3	Accounting services to producer group and individual should be available on mobile
14	Data transfer to UPASaC database using mobile application / using digital post box (CSC of Uttarakhand)	4d	Module to configure Web based data transfer module
15	UPASaC web module for reporting on enterprises	4	Reports on enterprise
16	UPASaC web interface with Bank and Technical Institutions, Producers' Company/ Cooperative.	5	Interface user interface with access rights

Table 6: Proritized Requirements for Project Management Module

S No	Description	Priority	Functionality
1	Implementing agency – UGVS / UPASaC	1	Add/ Remove
2	Service Provider, FNGOs etc.	1	Add/Remove
3	Staff profile	1	Add/Transfer/Retirement/Exit
4	Activity – Tasks – logframe indicators	1	Add/Remove

d May need to demonstrated as pilot in one district

S No	Description	Priority	Functionality
	profile		
5	Sub-sector and Value chain profile	1	Add/Remove/map to value chain
6	AWPB interface	1	Planning and Budgeting sheet Mid term correction Opening balance entry
7	Tasks wise planning and tracking at District level	1	Planning and tracking
8	Staff change and transfer	1	Transfer/retire/Exit/promotion
9	Interface with SHG-Aajeevika data	1	Interface for Import of SHG data and livelihood data
10	Interface with UPASaC Enterprise data	1	Do
11	Cut off date transaction upload	5	Import of Opening balance at any given date
12	Data transfer to UPASaC database using mobile application / using digital post box (CSC of Uttarakhand)	2e	
13	IFAD/ GOUK/ RDD reporting interface	1	
14	Social Intervention	3	
15	Empowerment	3	
16	Convergence	2	Add/ Remove
17	Innovations	4	Add/ remove
18	Investments	1	Add/ Remove
19	Community Contribution and Usage	5	Transaction for given IGA /ME

Table 7: Prioritized Requirements for Communication Module

S No	Description	Priority	Functionality
1	Re-engineering 1. RTI 2. Advertisements 3. Guidelines	1	Re-engineering of present web-site
2	Dashboard	2	Dashboard for Manager (F), Manager (HR), Manager (BD), Manager (CD and ID)
3	Guidelines	2	Text content
4	Learning to share – monographs	2	Do
5	Field Notes	3	Do
6	Publications	3	Do

e May need to demonstrated as pilot in one district

Table – 8: RL for HRM

S. No	Description	Priority	Functionality
1	Bio-data/ CV of interested people	1	On-line submission, correction and storage in database List them as per skill, post applied, location preferred
2	Screening and selection for suitable post in the project	1	Screening data input Recording of selected person Wait-list preparation
3	Mapping of training input	1	For mapping various training one has attended with duration
4	Placement	1	- Once a person is selected, he is posted in a location with a given role – system must capture them
5	Induction	1	Staff who went on induction and completion of the induction To ensure staff has received induction input
6	Promotion	1	- change of designation, effective from, change in grade
7	Transfer or change of post	1	- change in location and role, effective from date
8	Job description	1	Job description of various post Available whenever one wants Print
9	Exit or person left	1	Exit w. e. f. Reason of exit (optional) Handing over
10	Work Experience	1	- Recording of work experience with role
11	Feedback forms	2	- Design feedback forms
12	Compilation of feedback	2	Entry of feedback Compilation of feedback
13	Planning feedback process	2	Planning of feedback process in terms of time Start and close of the feedback process
14	Monitoring feedback process	2	Track who gave feedback and who did not
15	Hr rating for a job calculation	2	- Compilation of education, training and experience and feedback score as Hr rating based on job profile
16	Reward and incentive structure	2	- Entry of norms for reward and incentives
17	Reward or incentive point calculation	2	- Calculation of reward and incentive points periodic basis.

RECOMMENDATIONS FOR ROAD MAP TO AUTOMATION OF AAJEEVIKA AND UPASAC:

Participatory software development: Given the nature of the organizations, UGVA and UPASaC, and their synergy, it is important plan a unified software for both the organizations. As an example one can compare with BASIX that has five

organizations operating independently but all of them have one common web site and common software. Basix has also integrated staff and management. Similarly, Aajeevika and UPASaC can have common applications software. Since there are multiple implementing organizations, facilitating NGO partners, support organizations, line departments and resource organizations, the complexity is higher and therefore, broad strategy of developing the systems has to be drawn first. Present study is addressing the issue of laying out the broad strategy of organization-wide MIS development as high level design (HLD).

Theme linked application development: Broadly, there are three themes:

a) Capacity building and community based institution building: This is being addressed through project component B and part of C. HLD for SHG module will essentially deal with institution building and management. There are distinctly two stages here. The first stage includes promotion and capacity building exercises to help create a community and help its members experience the power of collective action to liberate themselves from poverty and sufferings. In the second stage they themselves manage the structures, such as SHG and Federation. Community also needs IT power to manage operations and to take the advantage of the information economy. In the rural context of Uttarakhand where population is sparsely located the power of IT can bring them virtually together to achieve commercial viability. Once they gain the experience of running a Federation and Producers Company, these IT solutions can be transferred to them. As the SHGs and Federations graduate, they can manage group transactions using the software and the project can be taken to new villages.

   Long term vision for IT strategy of the project should be to provide transaction and accounting services to large number of SHGs, Federations, Producers Group/ Company while at the same time also provide platform for knowledge management in community organization and capacity building.

b) Enterprise development for targeted families: Project components C and D are addressing these. Livelihood module of HLD will address enterprise development.

   There are two stages of enterprise development. In the first stage, training and demonstrations are taken up. Once a substantial size is achieved after the demonstration, the enterprise is taken to the next level of expansion through integrated growth of value chain. Subsequently, in the second stage, value chain analysis is done and collaboration is reached between all the value chain providers for developing the enterprise. As the nature of various enterprises is quite different from each other, the task of software development is rather challenging. Sub sector-wise enterprise

templates are developed for applications development. At the level of an enterprise, transaction management linked with accounts is required. Although such an application will be required in the second stage of the enterprise development, the software will have to be in place from the beginning. Once the Producers Company/ Group are mature, they will require such an application for tracking the input and production parameters. Long term vision for IT strategy of the project should be to provide enterprise transaction and accounting services to large number of Producers Group/ Company while at the same time provide platform for knowledge management in sub-sector based enterprise management.

c) Program Strategic Management and Communication: As the size of operations is large and multiple stakeholders are involved in funding and design, strategic management is the key driver for innovation in pushing the program activities and raising resources (funds and staff) for the project. HLD has two modules to address Program Strategic Management – project management and project web site. The project has to keep various donors and government departments supportive and therefore, it has to address their needs. Equally important is the role of communication to all the stakeholders. Powerful tools of web site, flash display of work and job description as well as progress in the project will be communicated through web site.

The project with its given size needs to adopt IT at the early stage. Results of early adoption in accounts are already visible. CPMAS software has made a positive contribution in providing common understanding of cost table and fund utilization. Reporting to IFAD and RD using output from CPMAS has been smooth and effective. The case of SIMS, the other application for SHG and livelihood data generation and compilation is the opposite as the understanding of the data and information by District Manager and by State level staff are different. Such differences are likely to grow and have an adverse impact on the project performance. IT will play an integrating as well as disciplining role in the project. Both the roles are crucial in implementing large programmes like Aajeevika. There has already been a delay in introducing IT in an effective way. After the midterm review IT introduction must be taken up in earnest.

Process of adopting IT has to be on the basis of taking IT Solutions Provider as a long term partner because IT solutions are initially costly and IT staff attrition rate is very high. Therefore, outsourcing of the IT solution is the best option for the project and taking up an IT partner as program strategy will be a good option for Aajeevika.

Deployment strategy: Deployment process is as crucial to any project as software development work. Even the best software will not reach fruition without proper deployment strategy. Deployment strategy needs meticulous planning of deciding a clear cut-off date and calculating opening balance one day after that

cut-off date. This has to be followed scrupulously for all accounts and indicators. The operating team must verify this and be prepared to take ownership of any mistakes in this. The community should confirm opening balance before it is entered. Management has to be alert and prepared to provide any policy support in case any unforeseen situation arises. Data entry should be done as early as possible so that the operation is current. Proper training has to be given to staff for data entry and for checking the reports generated by the system. Investment is required in putting IT infrastructure in place and for all the trainings events that are organized. In addition, management must issue clear directives that manual system will not be accepted after the cut-off date.

Steps required:

1. Create budget for IT investment.

2. Quick adoption of IT strategy for the project and training of staff in IT application.

3. The project MIS must be integrated with the project M&E system which is working well. Appropriate capacity building to be carried out of senior staff to handle IT deployment with recommended size of investment.

4. Engage a suitable IT partner who has experience and expertise in IT participatory design and software development in the rural development sector on long term basis. If this is not possible then hire software vendor for implementing MIS without further delay in certain time period.

5. Based on the priority, software should be developed using participatory method. Participation is a must for the successful implementation of this software as there are a large number of stakeholders who must understand and accept the software.

6. Start three pilot projects, one for using mobile for transaction capturing in the field and the other for setting up internet multipurpose service center kiosks at village level. These kiosks could also be used for transferring data from Federation and Producers Company to centralized server.

7. In the value chain analysis, invite IT vendor and build an enterprise with IT strategy from the beginning.

8. Adopt resolution in Management Committee and Steering Committee for adopting IT strategy as component F.

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ANNEXURE – 1: SARAL STUDY TEAM

1. Deep Joshi, Consultant, Saral Services
2. Subodh Gupta, Executive Director, Saral Services
3. Smita Rawat, Director, Saral Services
4. Joseph Mathai, Senior Manager, Saral Services
5. Khanindra Kalita, Project Lead, Saral Services

ANNEXURE – 2: LIST OF PARTICIPANTS IN THE PARTICIPATORY DESIGN WORKSHOP, DEHRADUN, 21ST AUG 2008

Aajeevika

1. Jyotsana Sitling, PD
2. Pawan Kumar, PMU
3. Rajesh Sen, M GNC
4. Dr GD Pant, PM, Chamoli
5. Dr HB Pant, PM Tehri
6. Kamlesh Joshi, CO GNC Almora
7. Ritesh Dwivedi, CO GNC Uttarkashi
8. Manish Kukreti, Project Assistant PMU
9. Pankaj Bhatt, Project Assistant PMU
10. MS Yadav, TO
11. Sushma Gaur, Swati Aajeevika Samuh
12. Rajbar Singh, DEO Himad Samiti, Chamoli

UPASaC

1. P S Hooda, CEO
2. Mahesh Rawat, BC (GVK)
3. Narendra Sajwan, CO (GVK)
4. Surender Singh, AM (TSG) Almora
5. Tarun Agarwal, CFO
6. Ajay Sharma, MRF
7. Shantanu Garg, Manager (BSG)
8. BK Bhatt, AM(DEP) & DMI/C Purola
9. Vinita Negi, DM Chamoli
10. Meena Bhandari, GVK Jaunpur

11. Lalit Kumar, FM, Tehri
12. Arif M. Akhtar, PM, Tehri
13. B M Madhwal, Manager (TSG) Dehradun
14. Pawan Kumar, MCME
15. Rajesh Sen, M GNC
16. Harish Bhatt, Relationship assistant
17. Tanmay Saikia, DM, Bageshwar

Saral Services

1. Deep Joshi, Consultant
2. Subodh Gupta, ED Saral Services
3. Smita Rawat, Director, Saral Services
4. Joseph Mathai, Sr Manager Saral Services

ANNEXURE – 3: SARAL SERVICES - PROFILE

The Context

We live in a divided society, and in the midst of all the divides arguably the most prevalent and insidious is that between the haves and the have-nots. This basic divide tends to affect all other divides. The digital divide too is affected by this economic divide. People who have exposure and access to the digital world and who are digitally rich, can leverage the power of information and communication technology (ICT) while others cannot. Digital divide widens the economic divide. Public and private efforts to put information technology infrastructure in digitally poor areas are being made. Government has launched broadband and is setting up large network of kiosks in rural areas. However, the gap cannot be reduced by simply putting the infrastructure in place. Efforts are required to enhance the capacity of the people to utilize this IT infrastructure effectively.

Saral (an acronym for *Society for Action Research in Accelerated Livelihood*) Services seeks to not only encourage society to invest in IT infrastructure in digitally poor areas but to also enhance the utilization of IT infrastructure in these areas. Saral Services plans to enable IT infrastructure to accelerate multiple services such as micro-finance, livelihood, health, education and training in rural areas. Saral Services has worked with several NGOs, MFIs and LPOs and helped them to develop MIS. Saral Services engages itself in requirement study, software design and anchoring participatory design and implementation.

Saral Experience in Participatory System Design

Participative Design processes entail drawing in the end users so that they are actively involved in the design process, thus ensuring that the application is designed to meet their needs and that the users have ownership of the application. The emphasis here is more on the process of design and ensuring that it is democratic and empowering. The essential basis of democracy being equality, the participative process underlines the essential equality between the designer/developer community and the users' community, with the former having knowledge of ICT potential and the latter having the knowledge of the actual human processes.

Thus the participative design process drops the system study component in the traditional Software Development Life Cycle, where the user community is at times reduced to passive subjects of a 'study' and in its place has design workshops where there is knowledge sharing between designers/developers and the users.

Saral has participated in a joint project entitled the Rural E-Services Project with a group of institutions from the UK, namely the Sheffield Hallum University, Oxford University, Engineering and Physical Sciences Research Centre

(EPSRC), Overseas Development Institute, and Safal Solutions, Hyderabad. The project has designed, developed and rolled out an Agricultural Information Flow System titled KHETI for the Sironj Crop Producers Company Limited (SCPCL), Sironj, M. P., a crop producers' company set up under the District Poverty Initiatives Project (DPIP) of the state and promoted and supported by Pradan, one of India's leading development organizations. KHETI is used by service providers who are farmers belonging to the SCPCL. Using mobile phones and a mobile python application in the GPRS compatible phone, it allows capturing images, recording voice and loading those on to a web server and/or calling-in through an IVRS system. The service provider can thus raise any crop and farming related issue with an agricultural scientist on behalf of farmers and receive a solution and convey it back to the farmers.

This application was completely designed and developed through participative design and agile programming method. Each feature was designed through a participative design workshop where 15 to 20 members of the users' community actively engaged on design issues with developers of different features and also tested the applications as they were developed, feature-wise. Saral Services contributed to the processes and it gained valuable insights.

ANNEXURE – 4: REVIEW OF DOCUMENTS

Project Appraisal document

The Project Appraisal Report has been prepared by the Asia and the Pacific Division of Programme Management Department of IFAD in 2004 on the basis of field visits to Meghalaya and Uttarakhand in 2003. The appraisal report was prepared consequent to the Project Formulation Report for the projects presently running in Meghalaya and Uttarakhand.

The Project Appraisal Report is the basic document which lays down the complete plan of the project, covering its Rationale, Objective, the Project Area and the Target Groups, the Strategy and Approach, along with the Project Components (i.e. Component B: Empowerment and Capacity Building, Component C: Livelihood Enhancement and Development, Component D: Livelihood Support Systems Development through Social Venture Capital Company and Component E: the Project Management). The Appraisal Report lays down the Project Cost and Financing and details of Organization and Management. Finally, it spells out the benefits and impact of the project and the possible risks.

This document has proved invaluable in providing an overall understanding of the project. It is also interesting to see how planning has been amended to suit ground requirements in the course of implementation. For instance, it was planned that the Bageshwar District be managed by the Almora District Team, but when this was found not feasible the Bageshwar District office was set up.

Aajeevika Revised Project Logframe, 23rd November 2007

This document structures the project in an analytical framework that clearly indicates the Inputs, Activities, Outputs and Impact required. The document has been used as the chief basis of developing the requirements of the automated MIS and has been validated through discussions at the Participatory Design Workshop held in Dehradun on 21st and 22nd August 2008. These indicators would be the initial items that are to be automated as part of Project Management module as IFAD uses these for seeking information on the progress of the project.

Result and Impact Management Systems (RIMS)

In February 2003, IFAD's Governing Council called upon the Fund to establish a comprehensive system for measuring and reporting on the results and impact of IFAD-supported country programmes. The Results and Impact Management System (RIMS) provides information on three levels of results:

- First-level results refer to project activities and outputs.
- Second-level results relate to project outcomes and reflect changes in beneficiaries' behaviour, improved performance and sustainability of groups, institutions and infrastructure.
- Third-level results are associated with project impact on child malnutrition and household living standards.

The Aajeevika Revised Project Logframe clearly indicates which of the indicators in the logframe corresponds with a specific RIMS indicator.

Uttarakhand Livelihoods Improvement Project for the Himalayas (ULIPH) - Annual Report Year 2007-08

The latest annual report helped us get an idea of the achievements of the project as of 31st March 2008. The summary details for the status for each component are listed below:

Component B: Empowerment and Capacity Building

The project started working in all identified 959 villages in 17 blocks and 5 project districts.

Well-being ranking exercise of all households of the project villages was completed. Out of 63,161 households in the project villages, the category wise distribution is as follows: category I (vulnerable) 7%, category II (ultra poor) 29.7%, category III (hard-core poor) 27.5%, category IV (moderate poor) 17.9% and category V (well-off) 17.75%. Project interventions are being organized around these categories and focus is on category I to III households.

A total of 2,959 SHGs (project target 2,846 SHGs) have been formed by the project till date against revised target of 4,000 SHGs. 29,331 HHs out of target of 42,690 HHs have been organised into SHGs. Around 96% of the SHGs are exclusive women SHGs.

During 2007-08 the SHG saving was Rs 8.97 million, 652 SHGs had been credit-linked for an amount of Rs 17.23 million and 1,220 SHGs received seed capital.

Twenty nine NGO partners provided social mobilization inputs in 52 clusters. One PACS was chosen on trial basis, covering 13 villages for SHG formation and credit linkages. There are 309 NGO staff providing field inputs in community mobilization to project communities.

SHG audit was carried out by a chartered accountant firm for 365 SHGs with combined resources worth Rs 0.1 million. The audited SHGs also benefited from cross-learning experiences which were shared during the audit exercise.

Forty six SHG based federations have been established in project clusters.

The project has identified 2,401 persons belonging to vulnerable category in the project districts and 1,391 persons have actually started receiving pension from the government. In Tehri district 100% coverage of identified vulnerable families has been achieved.

Drudgery reduction interventions and innovations were one of the key focus areas of the DMUs and NGO partners. Replication of vermi-pits (48%), grasses (332%) and improved tools (54%) was carried out. An innovation of project has been training 221 bullocks for carting fodder, fuelwood, compost, etc. In one district, 10 trained bullocks were bought by wandering Gujjars at twice the market price to be used for carting their supplies. Average time saving of 2-3 hours per household has been reported due to drudgery reduction interventions of projects on the basis of sample survey.

The financial achievement in this component was Rs 44.12 million against target of Rs 44.52 million, which was 99% of annual target.

Component C: Livelihood Enhancement and Development

A total of 3,160 demonstrations were organised under this component, covering diverse activities related to agriculture, horticulture, livestock, forestry, soil and water conservation and ecotourism. Twenty three partners were identified through whom technical inputs were provided.

Demonstrations tried out in various sub-sectors were as follows:

1. Agriculture, comprising of demonstrations of rajma, maize, soybean, wheat, lentil madua, bio-fertilisers and bee-keeping.

2. Horticulture, comprising of demonstrations of off-season vegetables, spices, poly-tunnels, orchard management, seed production and floriculture.

3. Livestock, comprising of demonstrations of poultry, fisheries, fodder banks and Integrated Livestock development centres.

4. Forestry, comprising of demonstrations of fodder grasses and medicinal plants.

5. Soil and water conservation, comprising of demos of water harvesting structures and micro-irrigation techniques.

6. Ecotourism, comprising of demonstrations of rural tourism and numerous off-farm activities.

The project organised 134 training programs and 53 exposure visits and workshops for farm and off-farm activities in the identified sub-sectors.

Business Development Services were provided by UPASaC for marketing of soybean through M/s S P Solvent Pvt. Ltd due to which 424 farmers earned a premium of 30% over the market price.

Intervention in poultry led to taking up this activity in a micro-economic activity mode by 7,979 project households.

Crop consolidation was carried out in 83.3 ha for 9 crops involving 1,097 farmers.

Sunday market experimentation was initiated in 5 locations of Bageshwar district in which 110 events were organised. Total business volume generated was Rs 0.9 million.

The financial achievement in this component was Rs 17.1 million against target of Rs 18.89 million which was 90% of annual target.

Component D: Livelihood Support Systems Development

The project has recruited 130 Business Promoters to provide business facilitation to project communities.

UPASaC promoted 780 Household enterprises and 179 small and medium enterprises with investment of Rs 77.81 lakh. Out of this Rs 9.74 lakh was taken as as term loan, Rs 21.98 lakh as beneficiary contribution and remaining as contribution by UPASaC, to be returned.

The project identified and started working on issues related to governance of Van-Panchayats, enhancement of rice production systems for mainstreaming and mainstreaming of project villages falling within Sanctuary Area with respect to state government policies.

The financial achievement in this component was Rs 27.19 million against the target of Rs 34.67 million which was 78% of annual target.

Component E: the Project Management

Project Monitoring systems were thoroughly worked upon and the Project logframe was revised in close consultation with inputs from IFAD. Identified project staff was made responsible for specific indicators of the project logframe. Aajeevika was the first IFAD project in India to develop Result Oriented AWPB (RO-AWPB) as per IFAD guidelines. The project also provided support to another upcoming IFAD project in Rajasthan (MPOWER) in finalizing its logframe and formulation of RO-AWPB. All key project staff was provided hands-on training in RO-AWPB formulation.

The Baseline survey of the project was completed during the period. The findings of the baseline survey have been circulated to all stakeholders.

Participatory Monitoring framework with SHGs was tested. Field review of NGO performance was organized half-yearly in which 252 PRI and 44 government officials participated.

The project has established a system of review and sharing at state, district, block and village level. Meetings at the state level were held timely; 78% district level and 75% block level meetings were organized as per plan; and 58% of village meetings were held as per plan and efforts are being made to increase their frequency from next year.

The project has successfully implemented financial management systems. In order to further streamline financial management, the project facilitated fund release from the parent department i.e. Rural Development Department, Government of Uttarakhand to half yearly instead of quarterly basis.

The Human Resource Policy of project was refined. Continuity of staff has improved significantly.

The project tried to place greater emphasis on Knowledge Management for development action. Subsequently, the project website www.ajeevika.org.in was launched. One article was published in Asia Pacific IFAD newsletter. Bi-monthly Hindi newsletters in all districts continued to be brought out by project and distributed to key stakeholders, including community members.

The project has initiated pro-active steps in preparing for Mid-Term review planned during September 2008 by initiating *reflective studies* on poverty, gender, drudgery reduction, capacity building, rural finance services, etc.

The project has initiated sharing of information among head-office and district staff on a fortnightly basis through teleconferencing.

The project made concerted efforts for convergence, focusing on program convergence with a strong focus on social and BDS issues. These efforts paid off with inputs from line departments and NGOs for technical and social

interventions worth Rs 16 million while the community contribution was Rs 1.8 million.

Benefit realization from government pension schemes to the vulnerable was Rs 7.25 million yearly.

Achievements of the project led to project level convergence with more international projects. One such landmark is signing of agreement and operationalisation of the Regional Economic Development (RED) project from GTZ, focusing on strengthening and integrating regional marketing framework with Aajeevika initiative.

Another convergence initiative is the agreement was signed between the GoUK and IFAD for the LEADER Project for drudgery reduction under Aajeevika with an outlay of Rs 4 million.

The project worked closely with ICIMOD and received technical assistance in four areas mainly, Vision Building, Gender, Queen Bee rearing and Value chain analysis.

The overall expenditure of the project during the year was Rs 109.13 million out of which the expenditure made by PMU was 59% (Rs 64.83mn.) and by UPASaC 41% (Rs 44.29 mn.).