

TOWARDS A JUST AND LASTING CHANGE

**STORIES OF PEOPLE MAKING A
DIFFERENCE IN RURAL NORTHEAST INDIA**

Edited by

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**North Eastern Region Community Resource
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Preface

North Eastern Regional Community Resource Management Project for Upland Areas (NERCORMP¹) is one of the two pioneering development projects working with communities in the North East. Thus, many of its experiences in dealing with issues of poverty reduction and community resource management are a rich learning resource. To improve project delivery and impact, NERCORMP has also been keen to document its experiences on a continual basis. And to do so notably through its own operational teams without total dependence on documentation experts outside the project.

It is in this context that ENRAP and NERCORMP collaborated on customizing and applying an evaluative and participatory technique of documentation promoted as Systematization² by FIDAMERICA, IFAD's network in Latin America. Apart from documenting project lessons, the methodology also helped build project and partner capacity for regular and systematic documentation.

Starting in October 2005 three such exercises were conducted in the widely spread out project area of Meghalaya, Manipur and Assam with participation of project team; government and NGO partners; and community members. Participants evaluated the process of change engineered through project interventions and documented this thematically, choosing about four to five areas of interventions in each of the three exercises, ranging from issues of natural resource management to an assessment of women's empowerment through income generation activities. The effort was led by the vision of project leaders and operationalised by the senior project staff.

The intensive seven day exercise comprising of preparatory desk research, participatory research in the field and subsequent analysis and writing allowed teams to work together and learn from each other. They were able to tell the untold stories, come to realize the unexpected results of their project interventions through this systematization technique. Subsequent electronic discussions on this process also offered a platform for continued learning.

The result is the set of comprehensive reports put together in this collection, which have been used to disseminate findings to both grass-roots organizations and to policy makers while providing the necessary evidence-based feedback to the project management.

These exercises also demonstrated how project staff and stakeholders could document their experiences in a systematic and participatory manner. It gave them an opportunity to focus on evaluating their own work and reflecting on the project successes and challenges, which they often did not get a chance to do. In the process, they also

¹ NERCORMP is a joint initiative of the International Fund for Agricultural Development and Government of India.

² For more on Systematization visit www.enrap.org. ENRAP is a joint collaboration between IFAD and International Development Research Centre of Canada. It is a platform for knowledge sharing and networking between IFAD projects and their stakeholders.

benefited from improving their own documentation skills and recognized what needs to be done to comprehensively document their learning experiences.

Through this publication and other such efforts I hope that NERCORMP's rich experience can benefit similar future endeavours and enable a more fruitful policy dialogue on issues affecting communities of the North-East of India.

Shalini Kala,

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New Delhi

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We would like to thank the ENRAP-IDRC, New Delhi for supporting the 'systematization of documentation' processes in three project districts of NERCORMP-IFAD, viz. West Garo Hills in Meghalaya, Ukhrul in Manipur and Karbi Anglong in Assam between 2005 to 2007. In particular we would like to express our profound gratitude to Ms Shalini Kala (former Programme Coordinator) and Ms Apoorva Mishra of ENRAP, without whose keen interest, active participation and professional guidance the processes of 'systmatization of documentation' at NERCORMP could not have been completed. Both of them have been part of the processes of documentation by visiting difficult project villages, enduring challenges of unfamiliar terrains and physical discomforts.

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Acronyms Used

ASEB	Assam State Electricity Board
BRO	Bosco Reach Out
CBOs	Community Based Organizations
CC	Community Coordinator
CEM	Chief Executive Member
CKKA	Chinthong
CO	Community Organiser
DoNER	Ministry of Development of North Eastern Region
DRDA	District Rural Development Agency
DST	Development Support Team
ENRAP	Knowledge Networking for Rural Development in Asia Pacific Region
FCC	First Contact Carer
FD	Forest Department
FGD	Focus Group Discussion
FPO	Food Product Order
GB	<i>Gaon Bura</i>
GD	Group Discussion
GoI	Government of India
GRAS	Grassroot Agricultural Specialists / Grassroots Agri-Horti Specialists
Ha	Hectar
HQ	Headquarters
IDRC	International Development Research Centre
IFAD	International Fund for Agricultural Development
IG	Income Generation
IGA	Income Generation Activities
INR	Indian Rupee
JFM	Jhum and Fallow Management / Joint Forest Management
KACRMS	Karbi Anglong Community Resource Management Society
KANIM	Karbi Anglong NERCORMP Institute of Micro Finance
KCC	Kisan Credit Card
Kg	Kilogram
KII	Key Informant Interview
KINGFISHER	Fishery Experts
LCL	Low cost latrine
LIVE	Livestock & Veterinary Experts
MFI	Micro Finance Institute
MoU	Memorandum of Understanding
MP	Member of Parliament
MYRADA	Mysor Resettlement Development Agency
NABARD	National Bank of Agriculture and Rural Development

NaRM-G	Natural Resource Management Group
NBFI	Non Banking Financial Institute
NEC	North Eastern Council
NEDFi	North Eastern Development Financial Institution
NERCORMP	North Eastern Region Community Resource Management Project for Upland Areas
NGO	Non Governmental Organisation
NMCIREMP	Northern Mindanao Community Initiatives and Resource Management Project
NRM	Natural Resource Management
NTFP	Non Timber Forest Produce
P3DM	Participatory 3 Dimensional Model
PCDS	Programme Coordinator and Development Strategist
PDS	Public Distribution System
PHE	Public Health Engineering
PHED	Public Health Engineering Department
P-NaRM-G	Primary Natural Resource Management Group
PRA	Participatory Rural Appraisal
PSU	Project Support Unit
PWD	Public Works Department
RBI	Reserve Bank of India
RS	Regional Society
SBI	State Bank of India
SC	Shifting Cultivation
SDATA	Society for Development Alternative in Tribal Area
SDT	Systematization Documentation Team
SHG	Self Help Group
SIDBI	Small Industries Development Bank of India
SLA	Sustainable Livelihood Analysis
SSI	Semi Structured Interview
SWOT	Strength, Weakness, Opportunity, Threat
TBBL	Tripura Bamboo Board Limited
TSL	Tangkhul Shanao Long
UBI	United Bank of India
UDCRMS	Ukhrul District Community Resource Management Society
UN	United Nations
UNOPS	The United Nations Office for Project Services
USD	US Dollar
VA	Village Authority
VDC	Village Development Council
V-NaRM-G	Village Natural Resource Management Group
WGHCRMS	West Garo Hills Community Resource Management Society
WRC	Wet Rice Cultivation
Yr	Year

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LIVELIHOODS BASED BIODIVERSITY CONSERVATION: LESSONS FROM WEST GARO HILLS DISTRICT OF MEGHALAYA

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I. INTRODUCTION

“We had plenty of forests earlier, but we saw these forests only for jhum; by conservation we now have so many different kinds of forests from where we can get almost everything we need”, remarked an elderly man from Daribokgre, a small hamlet at the foothills of the famous Nokrek Biosphere Reserve in West Garo Hills District of Meghalaya. Meghalaya and the rest of the states in Northeast India together form a mega-center of biological diversity. Yet, large sections of the people in the region living in rural areas continue to be marginalized with the challenges of both environmental security and food security. One of the contributing reasons for this twin insecurity is the compelling need of continuing unproductive shifting cultivation, the practice of which is severely constrained with shortening cycle and land degradation.

Coupled with this condition of challenges was the general absence of developmental role models for upland areas, poor delivery system of the existing government and other service agencies in the region, and challenges of social unrest in the forms of insurgency and ethnic aspirations. With this background, the NERCORMP was initiated at the critical juncture of the end of the 20th century and the dawn of new

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millennium, perhaps symbolically but aptly to usher in new hope and innovative development role model for the people and the region.

The North Eastern Region Community Resource Management Project for Upland Areas (NERCRMP) is a joint initiative of the Government of India (GoI) and the International Fund for Agricultural Development (IFAD). The North Eastern Council (NEC) and the Ministry of Development of North Eastern Region (DoNER) represent the Government of India in the Project set-up. The United Nations Office for Project Services (UNOPS), Bangkok is the Cooperating Institution for project supervision in implementation.

The Project is operational in the states of Assam, Manipur and Meghalaya in two district each, viz., Karbi Anglong and North Cachar Hills in Assam, Senapati and Ukhrul in Manipur, and West Garo Hills and West Khasi Hills in Meghalaya. The Project was declared effective from February 1999, Mid-Term Review in May 2002, Interim Evaluation in May-June 2005. The Project ends by September 2006, but extension up to 2 more years is under consideration based on the recommendation of the Interim Evaluation.

The overall objective of the Project is *to improve the livelihood of vulnerable groups in a sustainable manner through improved management of their resource base in a way that contributes to protecting and restoring the environment*. The Project attempts to achieve this overall objective through a set of eight specific objectives, one of which is **“to make people more aware of the need to preserve and regenerate natural resources, particularly forests and biodiversity”**. However, the Project programme has been to consistently link the biodiversity conservation with the livelihood activities and opportunities of the communities. To date, the Project has been able to reach out 862 villages with 39,203 households.

The implementation mechanism of the Project is through its Project Support Unit (PSU) at Regional Society in Shillong and District Support Team (DST) at the District Society at the District HQ of respective district. The Project has the participation of 50 NGOs as partner organisations. At the community level, the project activities are implemented and delivered through the Project-initiated community based institutions, viz. the Natural Resource Management Groups (NaRMG) with equal representation of men and women drawn from each household and the Self Help Groups (SHG), predominantly of women.

The present study was conducted in West Garo Hills District of Meghalaya, where the Project has been implemented through the West Garo Hills Community Resource Society (WGHCRMS) since 1999, covering 192 villages with 7070 households forming 252 NaRMGs and 520 SHGs. The WGHCRMS is assisted by 7 partner NGOs in the implementation and delivery of the Project. The tribes living in Garo Hills are known popularly as Garos, but they prefer to call themselves as ‘Achik’. The land tenure system in Garo Hills is that of the community under the custodianship

of the *Nokma*. Shifting cultivation or jhum continues to be the predominant land use patterns in the district.

II. OBJECTIVES OF THE STUDY

The key topic of present documentation is to explore the livelihoods based biodiversity conservation. More specifically, it is to understand the process of “mobilizing and building community capacity to care for their environment & ecology with particular reference to their local biodiversity”.

The West Garo Hills Community Resource Management Society (WGHCRRMS) under the aegis of NERCRMP-IFAD has been working in the district for the past six years. One of the key components of the project interventions has been in the areas of promoting community biodiversity conservation. The strategy adopted to achieve this objective has been multi-dimensional that includes promotion and/or revival of:

- Village reserved forests;
- Community forests;
- Catchment reserves;
- Cane & timber reserves;
- Bamboo reserves;
- Broom & Thatch reserves;
- Wildlife sanctuaries / corridors;
- Elephant corridor reserves;
- Riverine fish sanctuaries;
- Jhumland reserves;
- Promotion of traditional jhum agro-biodiversity;
- Jhum optimization and rationalization.

While the project interventions have led to effective promotion and revival of the above biodiversity conservation activities among the various project villages in West Garo Hills District, one of the most notable achievements have been in the optimization (linking jhum clearings with labour availability in the household for subsequent weeding) and rationalization (selection of jhum sites by avoiding critical water sources, stream banks, sites of dense and large trees, canes, etc.) of areas under shifting cultivation leading to improved biodiversity conservation and livelihoods of the communities.

With this background, we wanted to explore to what extent the ideas of community biodiversity conservation has been accepted and adopted by the communities and to understand the degree of success or failure of the project interventions. We also wanted to extensively interact with the different stakeholders within the village communities (members of NaRMGs and SHGs, Village Development Councils, Village Traditional Institutions or the Nokmas, the women group and the youth) to understand the extent of benefit-percolations between themselves and what

further linkages may be required. And finally, we wanted to draw a set of experience or lessons that could be a model strategy for other districts within the State and even for other states within N.E. India.

We wanted to explore the following more specific issues and questions in order to draw the lesson or experiences:

- Did the optimization and rationalization of shifting cultivation really decreased the areas under jhum and increased areas under forest cover?
- What is the trend in agro-biodiversity?
- What is the status of food security of the communities after optimizing and rationalizing area under shifting cultivation?
- Did the optimization and rationalization of shifting cultivation really improve the promotion of community forestry / biodiversity conservation and livelihoods?

III. METHODOLOGY, AREA COVERED & TOOLS AND STRATEGY

The study team

The study team was composed of Charseng, Daniel, Gringnang, Jenibirth, Pardi, Demchi, Nanda, Pushkin and Vincent. The team was facilitated by Dr. Pushkin Phartiyal, Executive Director, Central Himalaya Environment Association, Nainital, Uttarakhand, while all the other team members were from the project drawn from the Regional Society in Shillong, District Society in Tura and partner NGOs working in West Garo Hills District. The overall study was jointly coordinated by ENRAP, New Delhi and NERCRMP, Shillong and WGHCRMS, Tura.

Study tools and strategy

The study team assembled at Tura on 22nd October 2005. The team had a detailed discussion on the 23rd October 2005 on the methodology, tools and strategy to be adopted for the documentation and collection of information. It was considered appropriate that due to the language limitations, the methodology and tools adopted would be a mix of PRA, appreciative enquiry, panel discussion in group, specialized group discussion and key informer / individual interactions. In all cases, both men and women were to be equally addressed. Questionnaires were designed and formats were prepared for data collection.

It was decided that the team would spend 4 days and 3 nights in the villages for extensive and intensive opportunity of interactions with the communities in selected villages. This will also give an opportunity to the team for visits of some of the key activities at sites for direct interactions with the beneficiaries for information gathering and advise as and where appropriate.

Area covered

The study team covered the following villages in West Garo Hills District of Meghalaya for the present documentation:

Date of visit	Name of village	Year of Project initiation
24.10.05	Daribokgre	2001
25.10.05	Sasatgre	2001
26.10.05	Chandigre	1999
26.10.05 *	Chokagre	2003
27.10.05	Rombagre	2003

(* interviewed at Rombagre)

The villages were selected to represent the project interventions on a time scale of 7 years (Chandigre, 1999), 5 years (Sasatgre & Daribokgre, 2001) and 3 years (Rombagre & Chokagre, 2003), respectively.

IV. THE PROCESS

Project Perspective.

Community based Bio-diversity conservation concept by itself does not offer a very attractive prospect to the villagers below poverty level unless it is significantly linked with livelihood activities. With this background the project strategy offered farmers livelihood improvement activities as an efficient incentive to mobilize the community to adapt bio-diversity conservation programmes in the villages. This process started with an awareness campaign on the project concept and philosophy for the farmers along with the formation of the NaRMGs and SHGs. The prospective farmers were then offered the opportunity to enter into partnership with the project by signing a social agreement with the District Society, where in the terms and conditions included natural resource and bio-diversity conservation and management. In the terms of reference the *Nokma* (Village chief and custodian of the land) signs a written proviso declaring no objection to the programmes of the project, and only after this the project implementation process continues further. In effect the traditional and conventional rules and regulations (formulated and scheduled) are revisited, revived and strengthened in close consultation with the community with the aim of educating them on these formal and informal existing rules and regulations. Very often, the concerned line department, particularly the Forest Department, and times the District Council is involved in the process.

Community Perspective.

The Project communicated efficiently and through participatory mode, offered the community an appropriate opportunity to improve and strengthen their sources of

livelihood and attempted to retain the natural environment as well. The demand driven opportunities of availing loans and grants and at the same time improved skills was almost a dream scheme for them. Initially the community found it difficult to believe the provisions, as the participatory approach adopted by the project was a new introduction. The project also revived the community based conservation and management practices, which were already part of the District Council regulation acts but were defunct. The involvement of line departments like Forest, Soil and Agriculture departments further strengthened the technical and legal aspects of professional services, creating a sustainable bridge of access and understanding among the stakeholders.

It was observed that at the initial stages of the project, the communities with certain apprehensions participated partially. During the course of time, slowly and gradually the benefits of participatory working showed results on the ground that led for wider participations from the respective villages. *“Our women, who were not able to read and write earlier to the project are now the most active players in the project ...and they can also write their name as well.”* says Nokma of Daribokgre.

The field interaction revealed that the interventions by the project facilitated the village communities for working in a participatory manner. When it was asked that why it was not possible to do the same without project presence, one of the NaRMG group members at Sasatgre responded, *“We tried earlier also but as there was lack of harmonious participation with a commitment, we failed to achieve what we intended to. The NaRMG has brought us closer to develop a clear understanding about our perspective planning and road map for sustainable development.”*

The communities who were visited during this study documentation were observed having pride to share the books and records of SHGs and NaRMG of their respective villages, which indicates their sense of ownership over the project and the village level institutions facilitated by it.

The Project Teams perspective.

The District Team coordinating the project had the unique opportunity to focus on mobilizing and building the capacity and skill of the community to plan and implement their own livelihood development programmes. The methods of participatory appraisal, decision and transparent implementation and planning lead to high accountability on the part of the community. This also resulted in a substantial contribution from the community as their share (both in labour and material) in every activity producing a much more efficient work and lower scales of costing. For the first time there was a positive convergence of the efforts of the NGO (acting as catalyst), Community and Development departments including the financial institutions like the banks. There was no competition or compartmental divergence as normally experienced in rural development efforts. Particularly the constant NGO presence in each village day in and day out provided the driving force and guidance in the right direction. The presence of Community Organiser in each village also filled the much needed gap for constant linkages between the local communities and the partner NGO / DST.

V. THE FINDINGS

Jhum optimization and rationalization has positive impacts resulting reduction in jhum areas in all the villages under present documentation. This has been achieved with the active participation of the NaRMGs in these villages who had taken the initiative of discussing over the issues prior to the allotment and selection of jhum sites. On the other hand this has resulted in the improved forest cover of the area together with greater environmental awareness of the communities. The average reduction in the jhum areas were found to be as much as 50% in Daribokgre, Sasatgre and Chokagre, while very sharp decline in jhum areas were observed in Chandigre and Rombagre due to the project interventions. The average jhum area per household also proportionately declined, though the number of households practicing jhum reduced only marginally. It is also worth mentioning that the jhum is now practiced with a compact area approach instead of scattered jhum plots practiced prevailing earlier to Project interventions.

The reduction in overall jhum area has also been achieved due to the concurrent programme of the Project under its “jhum modification activities”. Besides optimization and rationalization, these programmes include:

- Conversion of jhum land into terraces;
- Promotion of cash crops, perennial horticultural crops, ‘high value low volume’ crops (medicinal & aromatic plants) in the jhum fields;
- Conversion of jhum fields into community forests / community reserves, particularly those with very good tree covers and other valuable NTFPs;
- Promotion of crop intensification (by increasing the cropping phase from generally one year of crop cultivation to two years or more by crop modifications / cover crop introduction).
- Promotion of traditional jhum crops /niche crops/ vegetables (other than paddy) in jhum for higher cash income.
- Promotion / introduction of economic trees in the jhum / tree farming;
- Promotion of agro-forestry, such as large cardamom with existing trees in the fallow areas.

An important support that the villagers received from the project was the development of terrace cultivation as part of jhum modification activities and also promotion of forest conservation through increased production of food crops in terraces. Taking example from the Sasatgre village, prior to the Project entry in the village, the villagers had neither technical guidance nor the financial supports to create the terraces. But after the project intervention, the villagers were able to create terraces through the revolving fund / income generating grant and social works provided by the project and the group. The general view of the villagers practicing this cultivation feels that the crop productivity improved manifold. The women folks feel that this type of cultivation is less laborious thus providing ample time to engage themselves in other activities. It is a generally accepted concept that expansion of terrace cultivation will ultimately leads to reduction in Jhum practices and finally replace the practice itself. In the present context the jhum area in Sasatgre has reduced to 1/3 of its size as compared to 10 years

earlier. Project has also encouraged the communities to take up other income generation activities like orange plantation, bee keeping, squash cultivation and wild citrus cultivation. Women were also facilitated to form the SHG thus empowering them to participate in decision-making, instill the habit of saving and enable them to have access to small and emergent loans.

The overall findings in Sasatgre and other villages have been that the development of terraces will ultimately leads to reduction in human pressure on the existing forest resources, thus resulting in preserving the vast diversity of flora and fauna in the region. The Sasatgre village, and also Chandigre and Rombagre has great potential for expansion of terrace cultivation provided proper irrigation system is met which can eventually subside the jhum cultivation which at present is the prominent cultivation system in these villages. The villagers also realized that this cultivation involves less labour and time. This has enabled some of the villagers to take up other activities like orange orchards, arecanut plantation, squash garden, tea plantation, etc. over the existing jhum land, thereby, directly contributing to the preservation of remaining forests. It is indeed heartening to observe that Sasatgre village and others are moving forwards towards exhibiting themselves as model villages to the surrounding as well as non-project village in biodiversity management and livelihood upliftment.

Promotion of revolving funds for NaRMGs and SHGs for micro-credit that facilitated in development of farm-base (particularly orchards) and non-farm based income generating activities together with market development have also contributed to the reduction of jhum in these villages, which will also be true in many other villages that could not be visited during the present study. Increased terraces for paddy cultivation have also contributed to the reduction in jhum areas.

The increased forest cover as a result of optimization of jhum has further facilitated in the promotion of various kinds of biodiversity conservation practices, variously termed as village reserve forest, community forest, catchment reserve, bamboo reserve, cane & timber reserve, thatch reserve, wildlife sanctuaries, riverine fish sanctuaries, etc. Significance of these conservation practices are improved income of the communities and individuals in different villages together with improved availability of biodiversity services, local climatic regulations, nutritional improvement and so on. An encouraging example is that of two farmers in Daribokgre who have developed cane enterprises from the cane reserves within the multipurpose catchment reserves of the village (Case study 1 & 2: Daribokgre).

Case Study 1: Daribokgre Village

The Cane Enterprise

The village Daribokgre is situated at an altitude of 1400 mts above sea level adjacent to the Nokrek National Park. Located at a distance of 40 km from the District Head quarter of Tura town, the villagers have to trek a distance of 11 km along a kutchra (dirt) road from the main highway. Business opportunities and connectivity are marginal in the village but Mr Sengchang Marak and Mr Gobin Marak were able to excel in their skills of cane handicraft only after the SHG formed under the project extended them a loan. With this fund the enterprise of cultivating cane and bamboo for handicraft flourished. Annually they earn over Rs 30,000/- from the sale of cane furniture and handicraft.

With this successful example in their vicinity, today all the houses have started cane cultivation and handicraft as a major livelihood. Incidentally cane cultivation requires a stand of trees for successful growth, which offers the opportunity for both flora and fauna to thrive along side, resulting in a cohesive livelihoods linked bio-diversity management. The habitation thus developed into rich bio-diversity zone. The women are happy to see their children attending schools due to the improved economic conditions.

Case Study 2: Daribokgre Village

Multipurpose Catchment Reserve Makes Villagers Happy

Before the project intervention the villagers while appreciating the importance of biodiversity conservation were finding themselves unable to manage the catchments due to absence of community participation. The villagers use to practice jhum cultivation extensively for their livelihood. The forest resources, which were in constant pressure due to Shifting Cultivation (SC), also faced major threats because of over exploiting NTFPs.

With the project intervention, the villagers formed the Natural Resource Management Group, which catered to the needs of overall development within the village as well as conserved the depleting biodiversity through judicious management practices. By 2001 the project with active participation of the community conducted PRA exercise to identify the Social and Natural resources of the village. Following which a practical vision for the village was framed. Through constant facilitation by the Project, the community of the Daribokgre identified the area to be kept as a multipurpose forest catchment reserved. This reserved was kept with the aim of providing multipurpose benefits to the community. A part of the site selected with local wisdom for the reserve has now become a breeding habitat for local wild life. The reserve also caters the NTFPs needs of the villagers. The terrace farming, initiated under the project, gets supported in the form of constant flow of perennial streams originating from this reserve.

The level of awareness and action by the communities on their local biodiversity has also significantly improved since the project interventions. Issues such as biodiversity, village reserve forests, wildlife, water conservation, etc. are now discussed in the Village Development Council (VDC) meetings or NaRMG meetings more frequently than ever. The communities in these villages have also initiated some elements of keeping records of their local biodiversity in their local registers including in their VDC records. They have also started framing rules and regulations in the forms of “do’s and don’ts”. Most rules and regulations are preventive and punitive with a fine of Rs. 500-1000 for penalty and Rs. 100 for the informer as incentives. However, violations within the villages appear to be absent so far.

Jhum agro-biodiversity continues to be an emerging issue of concern among the communities as well as for the Project. The communities have recorded as many as 77 crop varieties of jhum crops in Daribokgre and Sasatgre, although a jhum field may harbour about 51 crop varieties during a cropping season at any given time. The communities are increasingly realising the fact that although paddy may not grow well, many other crops continue to grow very well in the jhum fields and hence could be a

good source of income for the households if organized appropriately. In most villages of the present study, the annual average household income from the sale of traditional jhum crops is calculated to be more than Rs. 10,000. This pace of income may be possible to keep up and even improved further by promoting the traditional seed preservation techniques and exchange of seeds (jhum crop) among the farmers, as is prominently seen among the women farmers of Chokagre (Case Study 3)

Case Study 3: Chokagre Village

The seed preservation and exchange

The Garo tribe follows a vital tradition for division of labor among the family members. However the women actively participate in household as well as on farm activities. Agriculture whether on jhum or terrace is the main source of livelihood. Thus, seeds naturally become an integral part of this society nurtured by a unique seed preservation and exchange practices among themselves.

During the field visits, women farmers from Chokagre village shared the seed preservation methods practice by Garo women. According to them there are four types of seed preservation methods, which they practice. Some ripened vegetables like brinjals, chillies, cowpea, flat beans, lady's finger, maize, seral seeds are kept above the fireplace to dry whereas seeds of pumpkin, cucumber and other gourd family seeds are removed from the ripened fruit and poured into the bamboo. The bamboo is cut at one end and in the other end a small hole is made for the seeping of water from the seeds. This bamboo is hung in one corner of the house. To preserve seed for paddy, millets and sesame are sun dried and kept for next cultivation. Yam, ginger, sweet potato tubers are kept in the shady ground and preserved.

There are more than 60 varieties of crops cultivated in the Jhum fields in a season. The time of seed preservation is as per the maturation of the crops eg. Rice in the month of August to September, millet in the month of August, chilli in the month of October to November, Yam family in the month of December to January, Gourd family in the month of October, Cucumber in the month of June/July etc.

The seeds are exchanged among the womenfolk through barter system. Women having extra seeds of one vegetable exchange it for another type of seed with another woman of their or neighbouring village. Some seeds like pumpkin, cucumber and Gourd family stored together by a group of women and distributed among them during the time of sowing. This self-reliant practice in the era of hybrid seeds is not only a sustainable practice but also contributes in the biodiversity conservation of the traditional crops.

NRM, particularly land use planning and biodiversity conservation have also been enhanced through the promotion of P3DM. Sasatgre is an example where the P3DM has benefited the communities in biodiversity conservation and land use planning, though there are also prominent individuals who missed the opportunities (Case study 4 & 5).

Case Study 4: Sasatgre Village ***The P3DM for Biodiversity Conservation***

Prior to the project intervention, the informal Village Development Council (VDC), had a limited responsibility in resolving conflicts and allotment of jhum plots to the individuals. There were hardly any developmental activities carried out by the VDC. However, with the intervention of Forest Department and local NGOs, they selected the area of about 83 ha of jhum fallow as village reserve forest, which they also called as catchment reserve before the project intervention. The catchment reserve has its own drawbacks as no proper rules and regulation or records were maintained. Thus the illegal extraction of timber from the reserve forest continued even after declaring the area as catchment reserve area. The threat to vast biodiversity in the village was more prominent with extensive jhum practices with no alternative to replace or at least slow down the pace of shifting cultivation.

Afterwards things changed when the villagers formed the NaRMG under the project intervention with the aim to actively participate as well as carry out the developmental processes in the village. Effective interactions during interface at the NaRMG forum gave them an opportunity to initiate conservation and regenerating efforts for the depleting natural resources. By 2001, the project with active participation of the community conducted PRA exercise to identify the Social and Natural resources of the village and frame a practical vision for the village. Thus the NaRMG took the full responsibility in managing the existing catchment reserve with proper regulations. The individual bamboo reserves were also expanded from 5 ha to 6 ha. However, the project functionaries observed the problem of NaRMG in management of jhum fields and natural resources due to their large geographical area of 35,000 ha.

To facilitate villagers for planning and managing their resources project came up with a participatory tool namely Participatory 3 Dimensional model (P3DM) at Sasatgre village. The community participated enthusiastically for structuring a 3-D model of their village and adjoining areas by using rubber sheets and paint. By the help of this model, the villagers are now able to systematically allocate and demarcate land that should be conserved, and land where jhum can be cultivated or orchard can be located. Disputes regarding allocated jhum land after structuring of the model have been reported as nil and optimizing the land use has become efficient.

The general view of the villagers practicing terrace cultivation the crop productivity can be increased manifold. For instance, one of the NaRMG members in the course of interaction reveals that he harvested about 1000 kgs of paddy from 3 bighas (0.4 ha) of terrace as compared to about 300-400 kgs from jhum of the same size. The P3DM structure placed at community hall in the village allows them to identify further suitable lands for expending their terraces.

The P3DM has made the villagers quite optimistic that they could abandon jhum cultivation completely if proper irrigation system could be provided. In the present context the jhum area has been reduce to 1/3 of its size as was practiced 10 years before, thus increasing its cycle from 5-6 years to 7-8 years. With present trend of decrease in jhum cultivation, the villagers feel that the jhum cycle can be increased up to 12 years. The P3DM is a must for NaRMG of Sasatgre and also for the visitors to village who are able to visualize the impact of project activities on the wider horizon extended by the model.

Case Study 5: Sasatgre Village

The Lost opportunity

The village of Sasatgre entered into partnership with the Project in 2001 to over come their subsistence living. With the credit facility extended through the SHGs entrepreneurship blossomed and now all the households have managed to develop more terraces and orchards for their micro enterprises. Today electricity has been introduced into the village due to the combined efforts and deposits. Many are sending their children to the Don Bosco School in the near by village of Chandigre.

However, the Chief of the village Mr Genot M. Sangma has progressed scarcely. He invested his share of the opportunities, earnings and even the loan from SHG in pursuing a court case of dispute for the Nokmaship. According to him, the expenses during 2004-05 were over Rs. 80,000.00 in the process continuing for several years. With such an unproductive investment he could not afford to continue his children in the Don Bosco School and was forced to withdraw them who now goes to the local lower primary school. The economic status of the Nokma is deteriorating along with his physical health. He has brought prosperity to the village by introducing the project but he himself is trailing behind.

One of the significant findings of the present study is that the livestock populations in all these villages have remarkably reduced over the years, particularly since the Project interventions. The villagers attribute multiple reasons for this: (a) reduction in area of jhum i.e. reduction in grazing land (jhum fallows are used for

grazing); (b) epidemic (non-availability of treatment facilities for the livestock); (c) increased orchards (reducing grazing area, demanding labour for maintenance/weeding and so non-availability of household man-power for animal grazing); (d) increased wildlife, particularly predators (causing reduction in goat and poultry population).

Added to all these development it is observed that improved networking with other line departments such as forest, agriculture, horticulture, soil conservation and also various trainings provided by these departments, as well as by the Project have direct impact on the communities in terms of addressing their local biodiversity for livelihoods. The community based organisations such as NaRMGs and SHGs as promoted by the Project are now better organized to address and discuss on these issues and also improve their bargaining power with the existing line departments in the district. Above all, the present elders or senior community members are also seriously taking steps in disseminating their learning to their children or junior members of their communities.

Another remarkable aspect of the present finding is that in spite of the reduction in jhum areas, the food security of the communities have significantly improved or has been totally addressed. Increasing areas under terraces has increased areas for food crop production. Furthermore, even for those who did not have terraces, their accesses to food have been improved by enhancing their cash income through sale of various farm-based products. Improved cash income has directly benefited them in improving their purchasing power of food. Through the availability of potable water and improved health and hygiene, the communities have also remarkably improved their food utilisation capacities across the age groups. Promotion of home garden, promotion of fish sanctuaries, promotion of community forest reserves for wild vegetables, etc. are contributing to the availability of balanced and nutritious diets for the communities as in the case of Rombagre (Case Study 6). The communities have reported remarkable drop in infant death rate since the Project interventions. It was heartening to note that some of the SHGs have started taking up not only issues of economic or income generating activities, but also women and child health particularly health of expecting mothers and nursing mothers.

The comparative profiles of pre-and post-project interventions in each of the villages visited during the present study were undertaken to develop an understanding about the impact of project interventions. The exercise was carried out with the villagers in each of these villages representing the traditional village institutions, Natural Resource Management Groups, Self Help Groups, ordinary farmers --- men and women. The exercise was carried out through a mix of PRA, panel discussion, appreciative enquiry, specialized small group discussion and key informer / individual interactions. Often the discussion in each village extended over 5-6 hours on an average, though at times extended beyond the stipulated schedules. The approach of the discussion were made as much participatory so that the communities received back as much information as they shared their knowledge about their environment and biodiversity. It was observed that in general though the women were not well versed in measurements and volume related information and local geography as compared to

men, they were better informed and knowledgeable on crops, seeds and cultural practices than the men. The village profiles of changes were collected and enumerated using the format as given at **Annexure 1**

Case study 6: Rombagre Village

The Poor too can fish

The 18 villages of Chinabat cluster of the project have joined hands in a harmonious effort to boost the fish population in the river Simsang that flows through their lands. Each of these villages have revived the traditional practice of identifying and declaring fish sanctuaries which are protected by the cluster of villages through the Nokma (traditional chief institutions) with the support of their respective NaRMGs.

The NaRMGs have institutionalized rules and regulations for preventing any damages to these fish sanctuaries. Among these Rs. 1,000/ fine for illegal fishing out of which Rs.100/ is awarded to the informer; no poisoning or using of fine nets etc have been registered with the District Council. Since 50 mt area on the both sides of the riverbank is also protected under the sanctuary no trees or bamboo is allowed to be cut within the area. Fishing, outside the sanctuary is permitted only with medium sized nets and angling hooks is allowed. The sanctuary can be harvested after 3 years for the first time after declaration of provision and thereafter every 2 years. Discussion on the management practices and enforcement of rules is undertaken once in a month both at NaRMG & Cluster level

Since the population of fish has increased and it is now possible to catch them with out wasting much time, the poor labour class has also started fishing as earlier to this due to time constraints, caused by less population of fishes, they used to prefer working on field to earn their livelihood. The project was instrumental to extend a forum of NaRGM to the local communities to make the dream of fish sanctuaries a reality. Now they are selling more fish; fingerlings to the village situated at upland areas and of course eat more fish, especially the women that is contributing in the nutrient in their food. Junior NaRMGs & SHGs are given awareness training and talk by their elders in the respective communities to ensure a brighter future and conservation of biodiversity.

Interestingly out of 18 villages, those came together for effective enforcement, only 8 villages are NERCRMP villages while remaining 10 non-project villages enthusiastically joined the initiative made by the former, which indicates the winding horizon of the participatory philosophy of the project.

VI. THE LESSONS LEARNED

During the 4-days documentation of project villages, various issues relating to community mobilization, institution building, conservation practices and livelihood supporting system have surfaced. The learning is heavily drawn from the analysis of data generated through questionnaires used for study. The questionnaire is annexed at **Annexure 2**. It may be stated that the overall scenario of the documented villages are very optimistic and had already shown a sign of moving forward to achieve a holistic development process, particularly livelihoods improvement through biodiversity conservation. Some of the important lessons learn from the present study may be summarized as below.

Community mobilization and Institution building

Though the concept of building community institution was not alien to these villages, hardly any effective institution existed in these villages before the project intervention. While at Chandigre, VDC existed even before the Project intervention, it was but almost

non-functional and could never effectively mobilize the communities for any community based activities. During the last 4-5 years, these villages have experienced the emergence of various community based institutions like the Natural Resource Management Group (NaRMG), which is also acting as a VDC in close consultation with the Self help Groups formed in the village. Some of the visible changes that have taken place are as follows:

- Unity among the fellow villagers has become stronger.
- Decision-making is no longer confine to the village headman but the whole village participates in the process.
- These institutions are bestowed with the responsibility of planning and implementation of various developmental activities as well as judicious management of available resources.
- Operating with Bank Account and handling of cash/finance has given them a new experience, particularly with the values of thrift and savings for their own prosperity.
- Accountability and transparency have been strengthened through proper management of records and regular meetings.
- The participation of women in decision-making has increased but remained minimally visible and still needs to be encouraged.

Conservation education and practices

The villagers are now more aware of the importance and values of conserving natural resources in the village. Though they were unable to state the actual area of the forests around them, they knew that more forests mean more opportunities for their livelihoods. Earlier their valuing of forests was seen only from the angle of the prospect of the forests being suitable for jhum. Prior to the Project intervention, the villagers never heard the words like biodiversity conservation. Now they are thrilled to hear the word “biodiversity” for the first time, which conveys to them everything (plants and animals in the forests, fish in the river, crops in the jhum fields, terraces and home gardens) that they needed for their sustenance, including for the future of their children and grand children. Materials needed for the construction of their houses and shelter for their domestic animals also come from conservation of biodiversity. However, the practice of jhum cultivation still remains as the main source of livelihood with few options for soil and water conservation. Some of the main changes in conservation practices are summarized below:

- These villages are maintaining community conserved areas in the form of catchment forest reserves, village reserved forests, etc. with the aim to conserve the flora and fauna biodiversity. These forests reserves have been either registered (eg. Chandigre) or in the process of registering under ADC (eg. Sasatgre and Daribokgre) as per the Garo Hills Forest Act.
- The new concept of maintaining about 50-100 meters of forest reserve along the perennial streams was introduced after the project intervention. No jhumming is allowed in such stretches.

- The villagers have started maintaining natural cane and bamboo reserves as well as bringing more area under cane and bamboo reserve through artificial regeneration.
- They have started recording various flora and fauna available in the village as part of Community Biodiversity Register, though still at rudimentary stage and requires improvement.
- There are no permanent grazing areas and collection of firewood is done from the present jhum area. This has resulted in the reduction of livestock, though there is opportunity for development of fodder species, but the villagers are yet to learn the art of stall-feeding.
- Soil conservation practices are rudimentary; can be improved through further interventions and exposure trainings.

Collective Livelihood Concerns

Livelihood activities are now collectively addressed by the NaRMGs and SHGs, as well as by individual households much more sustainable manner. Revolving funds and grants for various income generating activities, and also benefits drawn from the social sector investment in the forms of drinking water supply and low cost latrines, inter-village road improvement and culvert/causeways constructions, orchard development, etc. have given them wider menu of choices and scope for improved livelihood activities. Some lessons learned include:

- Jhum cultivation remains the main source of livelihood. However, the jhum area has greatly reduced to about one-third of the area of what it was 10-20 years before. As a result, the jhum cycle has increased from 4-5 years to 7-8 years. The cultivation system still remains unchanged with few options for technical intervention and other soil and water conservation measures. This cultivation involves minimum tillage with no irrigation facilities. However, more rational analysis of input – output ratio between the crops grown at jhum and terrace needs to be undertaken to convince villagers about the benefits of optimizing jhum practices.
- However, there is great opportunity for interventions in jhum practices. Agronomic practices can be modified and cropping phase can be intensified from traditional one year to two years or more by introduction of nitrogen fixing crops as cover crops either in the second year or third year. Agronomic practices can be reduction or total exclusion of paddy (as paddy is not doing well in short-cycled jhum) but promotion of traditional agro-crops, mainly vegetables, (which does well as per the experience of the villagers) that can improve their cash income by sales of such crops from jhum fields with appropriate interventions for marketing and transport.
- There is a continuous expansion of terraces in the villages. Mono cropping is practiced. Paddy is cultivated only once in a year with the land remaining barren for the rest of the year. The farmers have experienced better paddy yield in terrace as compared to jhum.

- Terrace production can also be further enhanced by linking with irrigation development, introduction of short-gestation high yield varieties to enable two-season cultivation, cultivation of off-season vegetables in terraces, etc.
- Introduction of orchards and cash crop plantation has greatly enhanced the annual income.
- Opportunities also exist by promoting fishery, apiculture, sericulture for widening menu of livelihoods improvement opportunity. Promotion of home gardens (squash cultivation in the present documented villages) has also yielded very positive and significant higher cash income for many households in most of the project villages.

Women Empowerment

After the onset of this project there has been better gender empowerment and development of women status in the society. Some of the lessons learned are stated below:

- The women have become more aware of the health and sanitation and importance of education and preserving natural resources. Biodiversity conservation for the women means easy access to fire wood, wild edible plants, plants needed for their domestic animals and of course, more fish to eat (besides to sell) as in the case of the women of Rombagre in the present case study.
- They have become more responsible towards the society, more confident in public speaking, informative and have developed better communication skills. Earlier their life revolved round the kitchen, family and jhum fields, but now they have become more open to changes in the society.
- Many of them have received training in various fields like kitchen garden, processing of foods, Accounts training, etc and are able to utilize their knowledge in their day-to-day activities.
- The mobilization and organisation of the women as SHGs have particularly given them a new vistas of experience in the society. Their ability to discuss freely among themselves about the women issues and their development has been altogether a new experience and lessons for them. They are also transferring their knowledge and experience to their daughters and daughter-in-laws as junior or second generation SHGs. They feel that each household is now a new transformed unit with better cleanliness, hygiene, childcare, etc.
- Availability of revolving fund and credit opportunity have given them new lessons and responsibility in life, besides improving their livelihoods, income, savings, and above all the total family resource capital. Domestic violence is practically absent. Disparity between the women in terms of their income is also reducing as they are able to help each other through the SHGs.

Improved Networking

Since the coming of the Project in these villages, the community mobilization and capacity building has been directed not only towards addressing their own issues, but

also the various opportunities that exist for greater linkages with various line departments and development agencies for their own benefits. On the other hand, since the initiation of the Project, there has been increasing inflow of line department's involvement in various development programmes of the communities, not only due to the tireless and constant efforts of the DST and partner NGOs, but also because of emerging 'mobilized and motivated communities' who are able to access on their own. In all the villages documented during the present study there is increased observable linkages with key line departments particularly forest, agriculture, horticulture, PWD, PHE, soil and DRDA.

Livelihoods linked to Biodiversity

The concept of conservation and management can only be practical and acceptable if it also results in improved income and livelihoods. The first priority of all habitations is water and catchments reserves, which results in secured water supply for drinking as well as improved irrigation. This also results in increased crop productions and subsequently food security. Besides these, community forests or village reserved forests linked with bamboo reserves, cane and timber reserves are also becoming increasing popular among the communities because of the direct benefits they derive out of such reserves for livelihoods and improved income as evident also from the case studies.

Eco-tourism and Biodiversity

A remarkable change is the positive impacts and keen interest created by the rich biodiversity of the fish sanctuaries on the tourists. Today many of the fish sanctuaries have become tourist destinations who come to enjoyed feeding the fish and also to sample the local fish preparations with the food. Today, the Riverine Fish Sanctuaries of Rombagre in Simsang river promoted and developed by the local NaRMGs is a popular destination with its pool of fish population. The Rongbangdare water fall just beyond Rombagre village is another destination where local restaurants have developed providing local cuisines and good employment. The place is also linked up with popular road-side open vegetable stalls produced and sold by the members of local NaRMG and SHGs. The travelers between Tura and Williamnagar invariably stop at this place to help themselves with fresh supply of local ethnic vegetables, most of which are the produce of jhum and wild vegetables from local forests, which only gives the clear signal of the importance of conserving the local agro-biodiversity and community forests.

Participatory Management and Biodiversity

A very clear message learned from the project is that the conservation efforts can materialize only if the whole village participates. This is because the rules and regulations are chiefly a voluntary agreement. Further the same commitment and social agreement is required from the neighboring villages and visiting outsiders to sustain the practice. The process of declaring forests reserves and river sanctuaries can only happen by ensuring hundred percent voluntary participation, from all partners

concerned. This has been shown by the members of the Chinabat Cluster formed by 18 surrounding villages, which preserve 4 Riverine Fish Sanctuaries on mutual agreement and trust, but everyone benefits out of this conservation initiative.

VII. EMERGING ISSUES IN BIODIVERSITY CONSERVATION BY THE COMMUNITY

Sustaining Conservation Efforts

The requirement of the biodiversity conservation movement is replication and extension to the adjacent and continues areas of habitation and the river stretches along the human habitations and forest areas. As the population is increasing, there is the need for increasing the forest reserves and riverine sanctuaries. However, the sustainability of such efforts can only be ensured if the neighboring villages also adopt and adapt similar regulation to capitalize on the opportunities, which can be also harvested in their lands and streams. Although the Project has its own limitations in terms of its operational life and area, but the practices and lessons learned can easily continue in non project villages even after the expiry of the present Project. There is a need for introducing more scopes for livelihoods linked conservation efforts such as introducing the scope of marketing of edible wild plants.

Gender and Biodiversity

The direct relation of improved fuel wood supply and closer sources of water and food from the reserves tells immediately on the status of women. The increased availability of fish improves the nourishment of the mother and child. Such lessons learned need further detailed documentation and sharing of information of benefits, which can easily be replicated by other communities.

Institutionalizing Biodiversity Conservation

The important follow up actions of registering the reserves and adapting joint forest management exercises along with the Forest department and District Council leads to a legal recognition and professional input to all this efforts of creating and declaring reserves. Further comprehensive forest management plans and approval can lead to sequential harvesting and legal trade of timber and NTFPs. With the establishment of the State Biodiversity Board in Meghalaya and building linkages with it, such efforts of the communities in biodiversity conservation can perhaps give further impetus and missed opportunities for sustainable livelihoods.

VIII. CONCLUDING REMARKS

In a natural resource rich area, a project aiming to combat rural hunger and poverty requires to adopt a strategy that caters the development needs of the communities, as well as ensures conservation of local biodiversity. The NERCRMP

while addressing the poorest and the vulnerable communities has successfully attempted project activities in a sustainable manner through improved management of their resource base **in a way that contributes preserving and restoring the environment**. During the course of present interactions with the communities and also as observed by the team, a symbiotic relationship between livelihoods and community based biodiversity conservations has been the key to success for attaining project objectives, which is elaborated at Fig. 1.

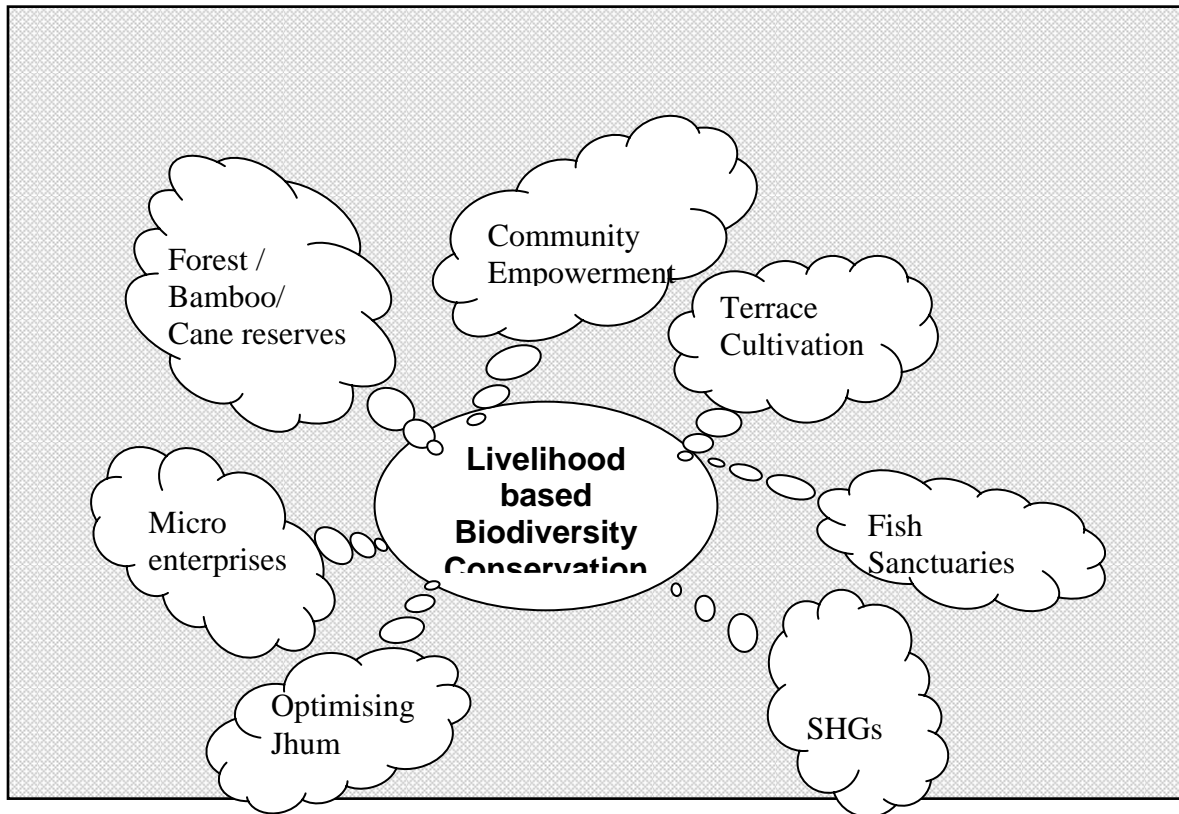


Fig. 1. A pictogram of linkages between community biodiversity conservation and livelihoods in the case study villages in West Garo Hills District of Meghalaya.

IX. VOICES FROM THE GRASSROOT COMMUNITIES

Individuals were asked what they benefited most out of the Project. These are samples of voices from the grassroots communities, which overwhelmingly reflect their feelings about the Project.

“We were able to provide a secure habitation for the wild animals and we are experiencing a harmonious co-existence.” – Breningsten Sangma, President, NaRMG, Chokagre.

“I got training and advice on how to increase the production of my orchards and vegetable gardens that has shown results on fields.” – Noben Marak, NaRMG member, Daribokgre.

“We can now eat fish at least twice a week and feed our children with better food. We now have better opportunity for employment and livelihoods for our future.” Krenila Marak, Secretary, SHG Simsang Federation, Silchotchigre (interviewed at Rombagre).

“The idea of community forest reserves and community fish sanctuary through the project brought new life and opportunities for us; we also managed to bring electricity through the Project which changed our life together with development of orchard.” Itarson A. Sangma, President of Silchotchigre NaRMG (interviewed at Rombagre).

X. ACKNOWLEDGEMENTS

The Team is extremely grateful to ENRAP through Ms Shalini Kala for agreeing to conduct this type of participatory documentation, which is a new experience and learning for the members of the Project at DST, Tura and RS, Shillong. The team, particularly, members of NERCRMP are also grateful to Mr. K. Moses Chalai, PCDS for his constant encouragement and support. Our sincere gratitude and appreciation is also extended to the people, Nokmas, NaRMGs & SHGs of Daribokgre, Sasatgre, Chandigre, Rombagre, Chokagre and Silchotchigre, as a part of this team, who had painfully but cordially participated in the documentation process and unusually lengthy interviews stretching at times much beyond their normal night waking hours; their simplicity, warmth and hospitality is unforgettable.

ANNEXURE I

Questionnaires for Village Profile Documentation Before & After the Project Interventions

Sl no	Particulars	Before Project Interventions	Now	Remarks/ Specific Interventions by project / process
1	Year of establishment			
2	No of households			
3	No of household practicing jhum			
4	Average jhum cultivation area per household			
5	Total land area under village (ha)			
6	Human settlement area (with homestead garden)			
7	Village Reserve Forest			
7a	Catchment reserve area			
7b	Bamboo reserve			
7c	Thatch reserve			
7d	Cane & Timber reserve			
7e	Fodder/Grazing reserve			
8	Terrace area			
9	Total Jhum cultivation area			
10	Orchard area / Cash crop plantation			
10a	Orange			
10b	Tea			
10c	Large Cardamom			
10d	Pears			
10e	Arecanut			
10f	Coffee			
10g	Squash			
10h	Pineapple			
11	Wildlife sanctuaries			
12	Fish sanctuaries			
13	Wildlife habitations			
14	Village records			
15	Crop varieties grown in jhum (Total)			
16	Total Crop varieties grown in jhum at any given time			
17	Crop / paddy yield / household (Jhum)			

18	Paddy from Terrace/ household			
19	Income from jhum / per household			
19a	Ginger (cash crop) / household			
19b	Traditional vegetables			
19c	Homestead garden & squash			
20	Food & commodity inflow			
21	Food & commodity outflow			
22	Conservation practices			
23	Major building materials			
24	Livestock / average Per family			
25	Milk production / household			
26	Registration status of community forests with ADC			
27	Major edible plants collected from wild for consumption (nos)			
28	Major edible plants collected from wild for sale			
29	Training organized for villagers			
30	Water availability			
31	Water management			
32	Fire wood source / distance			
33	Fodder source / distance			
34	Collection/ availability of medicinal plants			
35	Issues discussed in VDC			
36	Networking for conservation			
37	Conservation plan & programmes			
38	Climatic changes			
39	Timber trade (Supreme Court Ruling)			

IMPROVING ACCESS TO CREDIT FOR THE RURAL COMMUNITIES THROUGH INSTITUTIONAL FINANCIAL LINKAGES IN WEST GARO HILLS DISTRICT OF MEGHALAYA

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1.0 The Study

1.1 Background

The International Fund for Agricultural Development (IFAD), a specialized UN agency established in 1977 to combat hunger and poverty in developing countries, supports a number of poverty alleviation initiatives in the Asian Region. The North East Region Community Resources Management Project (NERCRMP) is one such initiative that is being carried out in the country. This report is an outcome of a documentation exercise carried out in West Garo Hills, one of the Project districts, between October 23 and October 29, 2005 – with support from Knowledge Networking for Rural Development in Asia and Pacific (ENRAP), which operates from its South Asian Regional Office in New Delhi, India.

1.2 Rationale

There are a number of similar initiatives being conducted in other parts of the world, chiefly in the South Asian and Pacific regions, to create a 'World without Hunger'. Many such initiatives are generating the expected results and have been able to reduce the poverty level of these countries, especially in the rural areas. Most of these initiatives are following a more or less similar course of action and pattern of functioning, encountering on the way a comparable set of problems and constraints.

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These initiatives are constantly engaged in a struggle to sustain and improve the livelihoods of the people of these regions, with an aim to raise them above the poverty line. However, the processes of change through these initiatives, which have proven useful to the people in general, have not been properly documented and disseminated to the extent desired. Due to this, the experiences generated by these initiatives are lost. Therefore, there has risen a need to document the processes of change so as to learn from them and also to be able to share the accumulated knowledge with those interested.

1.3 Objectives

The core objectives of the documentation exercise were to:

- Document the project experiences in a systematic manner on the lines of 'Improving Access to Credit for Rural Communities through Institutional Financial Linkages'; and
- Enhance the knowledge of the project staff on 'Systematization Process'.

1.4 Study Area

The study area covered seven villages in the West Garo Hills District of Meghalaya, namely, Ganol Songma, Chidoagre, Kama Dumitdikgre, Saka Dumitikgre (Chikdekgre), Bawegre, Tapra Alda and Roba Ronggopgre. The Project promoted the six Natural Resources Management Groups (NaRMGs) and twenty-one Self-Help Groups (SHGs) in these villages having a total population of 1302 with 235 households.

1.5 Methodology

The villages for the documentation exercise were selected by the Project Office, which took into consideration their linkages with various financial institutions. Representative samples were obtained from the different economic sections of each village. A total of 42 persons were identified for the exercise, including the Project and NGO Staff members, who were largely involved in the implementation and facilitation of activities charted out by the NaRMGs and SHGs. A group was formed and assigned the task of preparing two sets of questionnaires (Annexure II & III) aimed at obtaining as much relevant information from the villages as was possible. This group was given a time period of three days within which to complete and compile the data collected. The objective of this was to aid the documentation process by recording the experiences of the people of these villages.

Before being sent to the selected villages, the group members were instructed on the usage of the required PRA skills that would be needed during the process of collecting information. An orientation programme was also held for the members, in which an external facilitator showcased a number of interview techniques. Various tasks were assigned to certain members such as conducting personal interviews, managing focused group discussions, tapping into information from secondary sources, tabulating the information collected and taking down notes for

documentation. The information and data thus obtained was quickly but carefully laid out and compiled in this document, for the sake of future referencing.

2.0 The Project

2.1 Introduction

The NERCRMP Project is a joint initiative of IFAD and the Government of India (NEC/DONER). Commissioned in 1998, the Project set out to empower the tribal communities, particularly the marginalized farmers of the upland areas in North East India, with an aim to provide sustainable livelihood pursuits while ensuring optimized functioning of the plans pertaining to Natural Resource Management. The Project covers a total of 862 villages and 39,203 households.

2.2 Objectives

The overall objective of the NERCRMP is to improve the livelihood of vulnerable groups in a sustainable manner through improved management of the resource base in a way that contributes to protecting and restoring the environment. The specific objectives are:

- To promote a more sensitive approach to the design and implementation of development intervention;
- To enhance the capability of the local people to manage technologies and institutions at the village level;
- To increase incomes through the development of more sustainable farming systems and the establishment of non-farm enterprises;
- To make people more aware of the need to preserve and regenerate natural resources particularly in relation to forests and the bio-diversity contained in them.
- To establish effective and appropriate delivery systems for inputs (credit, extension, etc.) and for maintenance of assets and resources;
- To increase the participation of women in local institutions and in the decision-making process within the community;
- To enhance saving capacities and encourage the habit of thrift; and
- To increase access to basic services and infrastructural facilities.

2.3 Coverage

The Project is presently operational in the States of Assam, Manipur and Meghalaya, covering a total of six districts, viz. Karbi Anglong and N.C. Hills Districts in Assam; Senapati and Ukhrul Districts in Manipur; and West Garo Hills and West Khasi Hills in Meghalaya covering 860 villages.

2.4 Components

The Project is composed of six major components:

i. Capacity Building intends to enhance the functioning capacity of the rural communities and participating agencies through various technical and non-technical training programmes, including the payment of service charges to the participating NGOs.

ii. Economic Livelihood Activities (Grant and Loan) provides grant assistance to improve the level of food security of the rural communities and revolving funds for various micro-enterprises, thus enabling more income generation.

iii. Community Based Bio-Diversity Conservation supports the preservation of catchments, while providing the necessary know-how to facilitate the process of declaring an area as a reserve forest, and encourages the proper preservation of the Nokrek National Biosphere reserve area.

iv. Social Sector Activities provide assistance to the initiatives aimed at improving the health and hygiene situation of the rural poor and also supports the construction of low cost latrines and community halls, while initiating various health awareness campaigns.

v. There is also the **Village Roads and Rural Electrification component**, which supports the construction of jeep-able roads/culverts/causeways/foot-bridges, and electrification of the villages.

vi. Project Management, which will take care of the overall costs.

2.5 Modus Operandi

The Project promotes the formation of NaRM-Gs and SHGs in every village and adopts a bottom up approach in the planning process. The communities and Project support team are carrying out a joint PRA exercise. Based on the available resources that have been identified, an annual work plan and budget is being prepared by the CBOs. The implementing agencies, namely the participating SHGs and NaRM-Gs, are given rigorous training on the activities to be taken up. For technical support, a number of Line Departments are actively involved to impart training in the selected villages. The District Support Team supervises the overall implementation of the Project at the district level. The Project has the partnership of around fifty NGOs who monitor the day-to-day activities of the SHGs and NaRM-Gs. The district team also takes care of the financial requirements of the communities. Other than the sanctioned Project fund, the district team, in collaboration with the Regional Society, arranges for additional funds from various financial institutions. The District Support Team is responsible for the overall monitoring and supervision of the various activities conducted under the aegis of the Project.

3.0 Pre-Project Scenario

All the villages selected for the study were either connected with roads or were close to roads. Physical access to the agencies providing services to them was not much of a problem. In terms of credit, a total of 88% of the respondents informed that they have not taken loans from any institutions. Those who availed of loans were mostly extended the service from components of the informal sector, i.e., friends, relatives, neighbours and local money-lenders. Only two persons (comprising 5% of the total) had taken loans from the formal sector. These figures reveal that the households that were in need of loans were dependant on the informal sector and those who were in need of credit were not able to acquire any credit facilities from either of the sources. Support to the community with regards to the process of development, from either the government or the private sector was, to say the least, negligible. Table 1 presents the information gathered from 42 respondents belonging to five different villages.

Table 1: Accessibility of Credit in Project Villages

Village	Sources of Credit/No of Borrowers			Purpose
	Banks	Money Lenders	Friend & Relatives	
Ganol Songma	-	-	-	
Chidaogiri	2	-	-	Productive & Consumption
Kama Dumitdikgre	-	1	-	Consumption
Tapra Alda	-	-	-	
Roba Ronggopagre	-	-	-	
Bawegre	-	2	-	Consumption
Total	2	3	-	

Ganol Songma, a village with 52 households, is the closest to Tura – the district headquarters of West Garo Hills District. Notwithstanding its proximity to Tura, none of the households of this village have taken loans from any financial institution. Moreover, they were not accorded any such service from other agencies including government departments. The situation was also the same for the next village, Chidoagiri that has more than 200 households. Only two households from this village managed to arrange loans from the local bank. As for the remaining villages, none of the households were able to get loans from the various financial institutions operating in the area. Only one household from Kama Dumitdikgre and two households from Bawegre have taken loans from local money-lenders.

4.0 Current Project Scenario

The project interventions in the five villages have had a tremendous impact in terms of access to credit for the rural poor from the institutional sources that were created through linkages. The project initiated the Community Based Organizations (CBOs) such as Natural Resource Management Groups (NaRM-Gs) and Self-Help Groups (SHGs), through which all project activities are implemented. However, the fund provided by the Project seems insufficient to meet the demand for credit from the 1,302 villagers in the five villages. Therefore, external sources of funds are the need of the hour. With the support of the project team, the capacity of the villagers was enhanced and as a result it became possible to borrow a total amount of Rs. 14,60,455 from various financial institutions such as banks, the TATA Motors Finance division and the Block Development Office, for taking up various income generating activities. Table 2 provides the details on the borrowings by different CBOs.

Table 2: Borrowings from Financial Institutions

Village	Activities & Borrowings
Ganol Songma	One NaRM-G has borrowed Rs. 296,026 from bank. The community contributed Rs. 150,000 for the purchase of one mini bus for the purpose of transportation.
Chidaogiri	One Cluster Association borrowed Rs. 257,403 and the Community contributed Rs.272,344 for the purchase of a Mahindra pick-up.
Kama Dumitdikgre	Two individuals gained access to direct loans through KCC loan plan, worth Rs. 16,000.
Tapra Alda	Five SHGs have formed direct linkages with SBI acquiring Rs. 65,000 for various income generating activities.
Roba Ronggopagre	One SHG has direct access to Rs. 296,026 from the bank for various income generating activities. The community also contributed Rs. 150,000. The Block Development Office has also supported one SHG, sanctioning Rs. 25,000 for IGA.
Bawegre	Five SHGs have sourced Rs. 105,000 for various IGAs and one SHG-Federation has sourced Rs. 400,000 from NEDFI to purchase a Mahindra pick-up.
Total	12 SHGs Rs. 491,026
	1 SHG-Federation Rs. 400,000
	1 NaRM-G Rs. 296,026
	1 Cluster Association Rs. 257,403
	2 Individuals Rs. 16,000
	Rs. 14,60,455

5.0 What Really Changed?

Inaccessibility to the formal sector for credit is one of the reasons that hampers poor people in their efforts to come out of the poverty trap. Therefore, attempts have been made at a worldwide scale since the mid-1970s to improve the situation. Experiences indicate that the situation has not been improved as desired, especially in those countries where major populations of the people live in rural areas. However, a comparison drawn between the situation that existed before the implementation of the project and the situation at present in the villages visited during this documentation exercise indicate that there have been significant changes in terms of access to credit for the rural poor from the formal financial institutions. All of the villages were linked with the formal sector of credit either at the individual level or on group basis.

There are clear indications that the SHGs promoted by the project have started to act as financial intermediaries (Table 2) between the formal financial institutions and their members. However, the SHG-Federations promoted by the project have not met with much success in pulling off the same, which includes being one of the exit strategies of the project that aims at a long-term strategy for sustainability.

In Tapra Alda, the manager of a local SBI Branch managed to persuade the local SHGs to avail of the credit facilities provided by the bank. He has informed that he was highly impressed with the discipline maintained by the two SHGs in maintaining accountability through their records with regards to deposits and transactions, and for conducting meetings as scheduled. He tried to extend credit to these SHGs that refused the offer the first time. After some months, through his persistence, he managed to convince them to take a loan amounting to Rs. 10,000 each. On timely recovery of the first loan, the branch manager again extended their credit amounting to Rs. 50,000 each. Since the amount was not really necessary for both of the SHGs, the money has been lent out to the households that needed financial assistance. The only concern of the SHGs is that problems may arise out of defaulting on loan repayments, which is likely to obstruct the process of institutionalization of the SHGs into the SHG-Federations. The success met by the groups has spurred on the process, and they are now willing to apply for loans for the purpose of purchasing vehicles to carry out various commercial activities.

The access to credit has eased the life of villagers after the formation of SHGs and NaRM-Gs in these villages. It is found that all the respondent interviewed have taken loan from either SHGs, NaRM-Gs or Banks. Some of the SHG-Members have taken loan even for 6th times and the amount of loan for each time has increased. The recovery rate is 100 % in the groups as well in the Banks. The CBOs are now planning to go for bigger loans through SHG-Federations and NaRM-G Associations.

6.0 Process of CHANGE

6.1 Project Interventions

The Background of Project Intervention

It is worth mentioning the background against which the Project was introduced. There were no developmental models in the region, almost all of the Government initiatives were apparently a failure, and the communities had almost lost faith in any developmental initiatives. The law and order situation in Northeast is not very encouraging for developmental initiatives. During introduction of the Project some villagers expressed that this Project will be no better than any other projects as a consequence refused to participate in initial phase. In Ganol Songma for instance it was found that the villagers in the initial stage did not accept the Project. There were rumors that the Project is coming from the No.666. The Number 666 has reference in the Bible 'Revelation', referring to devil or anti-Christ. The Holy Father Pope being the Pontiff Head of the Church is equated with the Number 666 by some of the groups who are against the Catholic Church. Since IFAD Head Office is at Rome, IFAD Fund is considered to be coming from the Pope. Acceptance of such fund is considered to an act of sin. As a consequence many SHGs and NaRM-Gs members refused to be the members of the CBO in the initial phase. This rumor delayed in the establishment of CBOs. The same case is also found in some villages in West Khasi Hills and Ukhru districts. However, with the constant efforts of the Project and regular interaction with other NaRM-Gs they came to understand that such propagation about the project was not true. The findings show that there is 100 per cent participation of all households in NaRMGs.

Community Mobilization

Community Mobilization was under taken in these villages from the year 2000 onwards by the project through the Partner NGOs. In the five Project villages four NGOs namely Krima VI, Achik Evangelical Association, Bosco Youth Animation and Integrated Development Councils and New Rompa Mebit Club were worked on contract basis for three years. The NGOs have one Community Coordinators each, who mobilized the villages with the support of Institutional Development Organiser from the District Support Team. After mobilizing the villages the NGOs initiated the formation of SHGs and NaRM-G which took two to six months time. The SHGs and NaRM-Gs are the two pillars on which the Project rests.

Capacity Building Programmes

The project conducted number of trainings on Formation of Groups, Federations, Associations, Group Management, Record Maintenance, Skill Development workshops, etc. Regular grading of SHGs was conducted on half-yearly basis as per NABARD's guidelines in view of group's development. Exposure tours were conducted within the region as well as outside the region namely to MYRADA for

SHGs, NaRM-Gs and NGOs. It was found that from these five villages 4 women and 2 women went to MYRADA. Occasionally Awareness Programmes were conducted for Bankers and CBOs at state and district level, in which a few of the respondents participated. The project has also guidelines for credit linkages to SHGs, NaRM-Gs and NGOs. Under consultancy services each district is provided with District Credit Plans which is available to the CBOs as well to the Bankers. The CBOs are also assisted in project preparation and submission of project proposals. It is very encouraging that some of the Bankers visited project SHGs and encouraged them to take loan. Constant monitoring and evaluations is being carried out by the project especially by the Partner NGOs. The project takes especial care in involving women in decision making during the implementation of the project. In West Garo Hills district NGOs and local Branch Managers from State Bank of India have contributed much in terms of SHGs mobilizations and linkages. Wide doors for credit linkages are opening up for my groups in the districts demanding for more loans.

Development of Small Entrepreneurs

It was found that out of 42 respondents interviewed 15 small entrepreneurs has come up in the five villages. The entrepreneurs have taken up micro enterprises such as petty shops, trade on vegetables, tailoring, weaving and knitting. Some have taken up piggery, poultry and fishery in a big scale. It was found that small and big entrepreneurs are emerging from these five villages.

Fund Mobilization

Every SHGs are encouraged to contribute some amount on weekly or monthly basis. The the five villages covered, it was found that a maximum of Rs.30 and minimum of Rs.10 is being contributed by each members to the groups. On the other CBOs, are provided with IGA grant to NaRM-Gs and Revolving Fund to the SHGs. IGA Grants are used for over all village development activities whereas Revolving Funds are utilized as loans for on-lending to the SHG Members. Additional source of fund is also being sourced by SHGs and NaRM-G from various financial institutions such as Banks, Govt. Departments and Private Companies. It is found that form these five villages a total of Rs.11,00,455 is being sourced by SHGs and NaRM-Gs from various Financial Institutions.

6.2 Formation of Self Help Group and Natural Resources Management Group

Before the Project Intervention in the villages the Project Management team with the concerned NGO went to the villages and obtained permission for the village headman called Nokma. On the agreement on the Nokma, a village meeting is being organized by the NGO, in which all the villagers participated. During the meeting the project philosophy and purposes were explained to the villages. The activities that could be supported under the project were also made clear. On the agreement of the majority of the villagers the Project signed a Social Agreement for the implementation of the Project. Once this initial process was completed the NGOs took over for the formation of SHGs and NaRM-Gs

Formation of SHG

SHG-Movement is not new in the country or in the region. However, it was found that the concept of SHGs was not known by the villagers where the study was conducted. Therefore, it was not an easy task. The NGOs were primarily involved in the formation of SHGs. Almost 80 per cent of the respondents told that they came to know about SHGs and NaRM-Gs from the Partner NGOs. Some of respondents reported that they came to know about SHG Gramsevak (Village level worker from Government Line Department). There were also a few bankers who were involved in imparting knowledge about SHGs.

Formation of SHGs went through various stages. In the initial phase majority of community members were not convinced about SHGs. A handful of convinced individuals had to go door to door to convince like minded individuals to come together and form SHGs. These cases were found in Ganol Songma, Tapra Alda and Chidaogiri villages. In the later part of Project intervention (1 year) it was found that men were also involved in the formation of women SHGs. Seeing the good works and progress made by women men also started the formation of SHGs, for example in Tapra Alda two men SHGs are being formed and are doing well. Establishment of SHGs in some villages took time from three to six months as some of the members were not convinced. For example Songital SHG from Chidaogiri village took six months after 4 meetings to establish.

The SHGs Promoted under NERCRMP is mainly women SHGs. The average size of the group is 15 members. The average monthly savings of the groups is between Rs.25 per month. The average interest rate among the group members is Rs.2 per month. All the SHGs graded annually based on NABARD's grading format which is accepted all over the country.

Formation of NaRM-G

The process of formation of NaRM-Gs and SHGs are more or less the same. However, the composition of NaRM-Gs is very different from that of SHGs. NaRM-Gs are basically village planning body which is composed of 50 per cent male and 50 per cent women. It is found that the formation of NaRM-Gs takes more time than SHGs. In Chitaogere village the NaRM-G was formed on the 7th meeting. In Saka Dumitikgre village NaRM-G formation took four meetings in three months time. It is found that many male members simply participated in the groups, smoking, chatting and lingering around. Due to the constant effort of NGOs and Project team, the villagers were convinced of NaRM-G formation for the overall development of the villages. It was found that in all the five villages NaRM-Gs were successfully formed. Out of five three NaRMGs has purchased one commercial vehicles each under TATA Finance and Credit Linkage with SBI. One NaRM-G has been able to linked with Line Departments the Government.

6.3 Activities of SHGs and NaRM-Gs

In the initial stage the activities of the SHG,s and NaRM-G,s were limited due to limited fund. It was found that almost all the NaRM-Gs are now able to implement the Project effectively with the fund provided by the Project, Institutional Support and their own savings. The following table highlights the activities undertaken in the villages under the study.

SI no.	Name of the village	Activity Done by NaRM-G	Activity Done by SHG
1	Ganol songma	1. Aloe vera	1. Dairy.
		2. Fishery pond.	2. Tailoring
		3. Road construction.	3. Knitting.
		4. Culvert construction.	4. Kitchen garden/season Vegetable garden.
		5. City Ride Vehicle.	
		6. Community hall.	
		7. Low Cost Latrine	
2	Chidaogre	1. Ring well	1. Dairy
		2. Water tank.	2. Women Sanitation Complex
		3. Road construction.	3. Kitchen garden/season Vegetable garden.
		4. L.P School building.	4. land reclamation
		5. Culvert construction.	
		6. Carpentry.	
		7. Vehicle (Mahindra pickup)	
		8. Low Cost Latrine	
3	Galwang Chidekgre. Kama Dumititkgre and Saka Dumititkgre.	1. Road construction.	1. Poultry
		2. Culvertb construction.	2. Piggery
		3. Drinking water.	3. Grocery
		4. Low Cost Latrine	
4	Tapra Alda	1. Cattle rearing.	1. Patchouli nursesey/Plantation
		2. Patchouli nursesey.	2. Poultry
		3. Arecanut nursery / plantation.	3. Vegetable Selling
		4. Culvert construction	4. Piggery
		5. Foot bridge	5. Grocery
		6. Community hall.	6. Stone Selling
		7. Electrification.	
		8. Low Cost Latrine	

5	Roba Ronggopgre.	1. Drinking water.	1. Tailoring.
		2. Road construction.	2. Weaving
		3. Culvert construction.	3. City Ride
		4. Minor irrigation.	4. Dairy
		5. Land reclamation.	5. Poultry.
		6. Low cost latrines.	6. Grocery shop.

6.4 Institutional Development of NaRM-Gs & SHGs

In order to provide on-going support to the SHGs and to promote further expansion of group formation, the Project has taken initiatives to the formation of SHG-Federations (15-25 SHGs) and NaRM-G-Associations (10-15 NaRM-Gs). These two institutions are the apex bodies of SHGs and NaRM-Gs to look in the overall development of the groups. These institutions also take care of marketing of products on cluster basis. However, these institutions are formed just one to two years back. Many of these institutions are registered under Society's Registration Act. In the five villages surveyed it was found that two SHG-Federations are registered and one namely Ku.cholsan SHG Federation is linked to NEDFi.

During the interaction with Ku.cholsan SHG-Federation it was found that SHGs prefers linkages through SHGs rather than Federations. The office bearers feel the Federation is too big (51 SHGs) for them to manage. Due to widespread of villages (11 kms from Federation Office) communication to member SHGs becomes difficult, as there are no means of travels or telephone facilities. It is also found that some of the member-SHG's are not cooperating in terms of attending monthly meetings and group's contribution to the Federation.

The findings shows that the SHGs members have reached only the first level of community based organization i.e. SHG-level. The members are yet to know the roles and advantages of SHG-Federations. Project has achieved in capacitating three to five years old SHGs, however, capacity building programme for the Federations need serious Consideration. It must be noted here that SHG-Movement is on the high track, and it is possible that policy for funding to SHGs might be through Federation. Some Apex Banks like NEDFi and SIDBI fund SHGs only through Federations. Recently NEDFi has funded two SHG-Federations in West Garo Hills. Growth of SHGs needs to grow up to the Federation Level for wider economic growth of SHG-Members.

6.5 Linkages with various institutions

A linkage with various institutions is a must for sustainability of any organization. In the five villages surveyed it was found that there are many contribution factors for credit linkages with various institutions. The factors are:

- Policy set by the Government through Reserve Bank of India (RBI)
- The establishment of dynamic SHGs and NaRM-Gs

- The quality of SHGs especially in terms of timely group meetings, regular contribution and transaction within the groups and with the bank. It is found here that the basic hurdle towards credit linkage depends on the quality of the SHGs.
- Constant effort on the part of Partner NGOs who constantly encouraged and facilitated CBOs for direct linkages.
- Brach Managers (BM). It was found that some were pro-active to the extent of forcing SHGs to take loan.
- Credit Linkage is made possible where there are incentives for SHGs, Bankers and facilitating Agencies. SBI provides Rs.25 per month to all the linked SHGs for purchase of stationary for the groups. There are other incentives for SHGs and SHPIs (Self Help Promoting Institutions) promoted by NABARD. SBI has incentives of Bank Branches that promotes SHGs.

On the other hand there are many other reasons why linkages do take place as desired. It was found that 4 SHGs in two villages out of five villages surveyed were not interested in taking loan from Banks for the groups were finding difficult to utilize the Revolving Fund provided by the Project. This findings call for the need of entrepreneurship development in the villages. The project needs to create job opportunities in the rural communities. This also calls for proper preparation of village plan and budget especially for SHGs (women groups).

7.0 Demonstration Effect

The Project has been able to exert demonstration effects to the neighboring project villages. It was identified during the course of interactions with various NaRMGs and SHGs from the project villages that at least in two different villages namely, Ganol Apal and Gambaregre, the villagers attempted themselves to replicate the modality.

Ganol Apal is the village with 35 households in the proximity of Ganol Songma village right at the road head on the way to Gauwahati from Tura. Introduction of new economic activities such as Aloovera cultivation, procurement of vehicle and construction of a link road to the Ganol Songma from the highway stimulated the villagers from Ganol Apal to form a SHG. As the later village was located at the bus stand on the entry point to the first village, it provided opportunities to them to interact about the process of formation of SHG and benefits that could be exerted from being in the SHG. They further contacted to Block Development Officer in Tura and finally formed two SHGs in their village.

The first SHG in Ganol Apal was formed in September 2003 with 16 members. This SHG meets monthly and collects savings Rs. 20/month and charges Rs. 10 as fine if there are any absentee in the meeting. This SHG has also been registered under Development Office in May, 2005. The next SHG, Niksam, was formed in July 2004. There are 12 members in this SHG. This SHG also holds meeting on monthly basis and collects savings Rs. 20/month. In addition, the SHG also collects Rs. 5/month

from each member for the operational expenses for the SHG. Both of the SHGs are not linked with any financial institution. Fishery and Areca-nut nursery are the two activities carried out by this SHG, and is registered under Block Development Office. All of the members in both of the SHGs are male. Engagement of women in household activities and little knowledge on developmental issues were cited as the barriers for them to be involved as members in the SHGs.

Gambaregre is the village with a household of 28 who tried to replicate the modality. Some village leaders visited the nearby project village, Agisimgre NaRMG, and asked whether they could get support from the Project. As the Project had met the given target for village coverage, it was not possible to expand the Project activities in that village. They formed a SHG themselves and contacted Block Development Officer in Tura. As they were not able to get any assistance neither from the Project nor from the Block, the SHG formed in their initiation was dissolved.

8.0 Emerging Issues

- Results of discussion with a SBI bank Manager from Jengjal reveals that the each bank branch is getting an incentive package worth Rs.5000.00 if they are able to lend to a SHG. The branch would be getting the amount of incentive whether it would be lending to a SHG or SHG Federation. Such a policy strongly discourages the bank branches to link the SHG Federations with the bank which needs to be reviewed.
- It was evident from all the field visits that all types of organizations promoted by the Project such as SHGs, NaRMGs, SHG Federation and Cluster associations are linked with formal sector of credit (Table 2) and are involved in similar types of activities. Considering the long term sustainability of institutions promoted, there is an urgency to redefine and demarcate their roles.

9.0 Conclusion

The Project has made remarkable achievements in linking the promoted rural organizations such as NaRMGs, SHGs and their Federations and Associations with different financial institutions. Three factors were contributory in the process. The first was the quality of village organizations which were basically measured through their regularity of meetings, regularity in collecting & depositing their savings in the banks and repayment rate from their internal lending. The second was the quality of NGO and its workers engaged in implementation facilitation to these CBOs. The third was the conducive policy environment for such linkages. In addition, pro-activeness of the bank staff to provide credit to the rural organization and the quest of the community members to be linked with financial institutions lubricated the process.

ANNEXURE I**Village Profile**

Year of Project Intervention

Name of the Village	Total Population	No. of HH	No. Literate People	Distance from village to Bank	Means of Communication	Type of Roads

ANNEXURE II**Questionnaire - Individuals**

Name of the Respondent _____

Before the Project Intervention	Currently – After the Project Intervention
1. What was your annual Income? Rs.1000 to Rs.5000 Rs.5000 to 10,000 Rs.10,000 to 15,000 Rs.15,000 to 25, 000 Rs.25,000 to 50,000 Rs.50,000 and above	1. Your Current annual Income. Between – Rs.1000 to Rs.5000 Rs.5000 to 10,000 Rs.10,000 to 15,000 Rs.15,000 to 25, 000 Rs.25,000 to 50,000 Rs.50,000 and above
2. Did you ever felt the need for credit before the Project? Yes / No	2. Do you feel the need for loan? Yes / No
3. Did you know the existence of Formal Credit System? Yes / No. What do you know? Sources from which you know.	3. Do you know the existence of Formal Credit System now? Yes/No. What do you know? Sources from whom you know.
4. Did you have access to loan? Yes/No.	4. Did you have access to loan? Yes/No.
5. Did you take loan? Yes / No. – Rs.1000 to Rs.5000 Rs.5000 to 10,000 Rs.10,000 to 15,000 Rs.15,000 to 25, 000 Rs.25,000 to 50,000 Rs.50,000 and above	5. Did you take loan? Yes / No. – Rs.1000 to Rs.5000 Rs.5000 to 10,000 Rs.10,000 to 15,000 Rs.15,000 to 25, 000 Rs.25,000 to 50,000 Rs.50,000 and above
6. What are the sources of Loan – Fiends & Villages Money Lenders Banks Any other - mention	6. What are the sources of Loan – Fiends & Villages Money Lenders Banks Any other - mention
7. For what purposes did you take the loan?	7. For what purposes did you take the loan?
8. Did you repay the loan? Yes/No. what amount?	8. Did you repay the loan? Yes/No. what amount?
9. Reasons for not taking loan.	9. Reasons for not taking loan.
10. Did you have savings before the Project? Yes / No	10. Do you have savings now? Yes/No

Group Questionnaire (Current Status)

1. No. of SHGs formed
2. What is the total amount of savings till date by each group?
3. What is total amount of Revolving Fund Received from Project? Year wise.
4. Saving Rates per groups. Year wise.
5. Loan Received: Banks, Govt. Dept. Pvt. Companies. Any other sources. If no, efforts are made or not. What effort.
6. Purpose of the loan.
7. Did any one encourage you to take loan? If yes who?
8. What are the Group Activities
9. Tell us something about market issues.
10. What are the sources of Credit at present?
11. Has the family income improved? How?
12. Is there any development of Entrepreneurs? Individuals as well as groups.
13. Do you think Replication is taking place in savings and taking loan? Where and How?
14. Do you think that SHGs will sustain after the project? Yes No.
.....

1. Process 1999 to 2005

2. How were the group formed.
3. What are the difficulties in process of formation of groups?
4. How the problems were solved.
5. Monthly/weekly/... Savings. How did you fix the rate of savings?
6. What are the reasons for formation of SHG-Federations? Did you face any difficulties? How did you solve them?
7. Fund Management by the SHGs. (Grant/Loan/Revolving Fund & record maintenance-refer to records)
8. Support received from agencies out side from the Project.
9. How can we have access to Credit:
 - a) From Financial Institutions
 - b) From within the Community/Groups

Federations

1. How many Federations are being formed?
2. What was the process adopted.
3. Problem faced- by SHGs members /NGOs/DST
4. What are the advantages of SHG Federation?

Impacts of SHGs on Women's Quality of Life: Case Study of West Garo Hills in Meghalaya

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1. INTRODUCTION

Project Strategy and Objectives

The North Eastern Region Community Resource Management Project (NERCRMP) is a joint initiative of the International Fund for Agricultural Development (IFAD) and the Government of India. The North Eastern Council (NEC) and Ministry of Development of North Eastern Region (DONER) represent the Government of India.

The overall objective of the project is to improve the livelihood of vulnerable groups in a sustainable manner through improved management of their resource base in a way that contributes to protecting and restoring the environment.

Commissioned in 1988, the project aims to empower the tribal communities particularly the marginal farmers of the upland areas in North East India for sustainable livelihood pursuits while ensuring optimized natural resource management.

The project is presently operational in six districts of three states viz. West Garo Hills and West Khasi Hills in Meghalaya, Karbi Anglong and North Cachar Hills in Assam and Senapati and Ukhrul in Manipur.

The Project is trying to address the critical institutional constraints to development in the North East India. The focus is on introducing approaches which:

1. are more responsive to communities' perception of needs and priorities;
2. involve communities more in decision making and planning;
3. make communities more responsible for management of their development programmes in order to generate a greater sense of ownership of development interventions;
4. build on the traditional values of community participation and utilise the strengths of village institutions and other community organisations.

Two key Community Institutions that the project has introduced are Natural Resource Management Groups (NaRMG) and Self Help Groups (SHG) to carry out the project activities successfully. Whereas a NaRMG is made up of a male and

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female member drawn from each household, an SHG essentially is comprised of an average of 15 to 20 women. The salient reasons for the formation of SHGs are as follows:

- fostering women's participation and empowerment at community level
- serve as a forum for addressing micro-credit needs
- effective fund rotation
- higher level of sustainability
- taking up income generation activities (IGAs)
- establish the habit of thrift and enhance savings
- taking up social issues and social service activities

Thus, using SHGs as a tool for improving the life of the poor women has been one of the key areas of emphasis for the project.

Rationale for the study

It is also felt that since the year 2001 project has been able to make a significant change in this chosen area of emphasis. In fact it is felt that the project performance is excellent and exemplary in improving lives of poor women through SHGs. Formation of SHGs helped SHGs and individual members to take up income generating activities with the help of revolving funds and micro-credit introduced by project intervention. SHGs are also the platform for increasing community cooperation, sharing knowledge and improving skills. All this resulted in the empowerment of women and improved the economy of the rural poor.

However, no data has been collected nor any documentation been carried out on this particular issue to substantiate this impact. The project management would like to measure the scale of the performance, identify any gaps or shortfalls to be overcome, and finally to prepare a sort of blueprint so that the success could be emulated or replicated in other projects around the world.

In light of this, it was decided to assess the impact of SHGs in improving the quality of life of women. This study was carried out in the West Garo Hills district of Meghalaya. A questionnaire was prepared to assess the change after the project intervention and study how the change came about.

Project Intervention Mechanism

In West Garo district, the project is being implemented through West Garo Hills Community Resource Management Society, commonly referred to as the District Support Team (DST) or District Society (DS). This team is supported by seven associate NGOs. NGOs are responsible for implementing project philosophy and the related activities at the field level. They are the main contact point for community members. Monitoring and reporting on project activity progress is also one of their tasks. Thus, NGOs are the key intermediaries between the DS and community members ensuring information flow in both directions.

The District Support Team is comprised of 15 staff members. The project started operating in this district in 1999, covering 868 households in 17 villages. At present, 192 villages comprising 7070 households are being covered.

2. METHODOLOGY

A team of five people conducted the study over a period of four days of field visits to a predetermined number of villages. Two Community Coordinators supported the study team in four villages. Prior to the field visit, the approach method was formulated, broad parameters were defined and based on this a questionnaire was prepared. Income, consumption, empowerment, awareness, health and nutrition status, and linkages with other agencies were selected as the key indicators (for more details see annexure 3). A special section on income generating activities was inserted as these are seen to be one of the successes of the project in improving women's life. Evaluation techniques were strategized to obtain a matrix comprising of the situation before, the current/present status and the process involved.

The target group of respondents included members of female Self Help Groups (SHG), members who had benefited from group or individual enterprise taken up with the help of SHG, leaders of SHG federations and other members of the community such as prominent members, non-members, bank manager, money lenders and the like who could provide an outsider's view besides the direct beneficiaries. While the broad topics covered in the questionnaire related to all interviews conducted, the specific questions related best to the individual SHG members and so was reported on completely by them only.

The parameters for the study are given below:

- Sample method: Random Method of Selection (depending on availability)
- Sample size: 5 villages; 388 HH (Annexure 6)
- Number of respondents: 60
- Number of brief full group meetings: 5 (one in each village)
- Name of villages: Tapra Alda, Anogre, Samingre, Bawegre and Nengja Bolchugre
- Number of SHGs met: 44

In collecting data in the field a few changes were made as per requirement of information and availability of people for interaction. The team was divided into four smaller teams to interview selected respondents for each village. The team also visited sites of some of the enterprises that the groups or the group members are involved with such as the Patchouli oil distillation plant.

Secondary data was obtained from WGHCRMS records and status report cumulative upto April 2005.

3. FINDINGS

What changed?

A significant change in most indicators was noticed in the villages visited and also reflected in the secondary data reported for the West Garo Hills area covered by the project.

Not all respondents reported on the full questionnaire, which was most appropriate for individual SHG members. However, the rest did provide some general information regarding change in women's life after project intervention. Some of these are summarized below:

Table no.1: Responses on changes brought by project

Query	No. of respondents (out of 60)
Increase in income	45
Improvement in consumption pattern	30
Empowerment	48
Improvement in health and nutrition	25
Increase in work burden	20
Awareness	38
Cooperation and unity	35
Linkage with line Departments	26
Skill development	28
Improvement in Income Generating Activities	24

1. Change in income

An increase of 33% to 120% in income, with an increase in savings by as much as 4 times, with amount increasing from Rs.10/- to Rs.200/-was reported. Improvement in the wages for women was at the tune of 30-50%. No respondent reported a decrease in income after the project intervention.

SHG – a saviour

“After the death of my husband, I could not take sufficient care of my jhum plot, and our small family did not get enough food to eat. But now, I have joined the SHG and taken a small loan from the group. This has made it possible for me to stop jhum activities and take up selling vegetables. Now we have sufficient food to eat and besides this now I can also save 500 rupees per month.”

*Mrs. Podini Marak, 50, Member, Chesrang Kotok SHG
Tapra Alda village*

Improving resource use through SHGs

Most of the poor targeted by the project consumed all they earned and savings were rare and negligible. As the value of savings was promoted through SHGs, not only did members start saving in the group but also individually on their own. They opened personal saving accounts in the banks. In general members save anywhere from Rs20 to Rs70 per month now.

There are also some instances where people who were saving earlier have reduced saving now as they can depend on the relatively cheaper and more accessible SHG funds in case of emergency and thus can make better use of their income. Gitson T. Sangma says, “I saved about Rs70 per month before joining the SHG, but now I only save Rs50 or less. I can depend of the group funds if there is immediate need.”

2. Consumption pattern

Definitely improved; while 100% of the respondents have reported an increased expenditure on food, a few had also reported on purchasing luxury items such as TV, tape recorder, etc.

3. Women empowerment

It was found that women now have more of a say in both household and community level matters than before project intervention. Discussions at SHG meetings and compulsory rotational conducting of SHG meetings has helped the women overcome their fear of public speaking and raised their confidence level as expressed by many women interviewed.

4. Increased cooperation and unity

Mutual respect between husband and wife and love and respect for each other were reported to have increased, with the husband helping the wife more. It was also discovered that the group members were helping each other in various activities such as orchard/plantation preparation and other works for individually owned plots.

5. Health & nutritional status

It was reported by more than half of the respondents that the health & nutritional status has improved after project intervention. This came about due to improved income, health program organized by the project, cleanliness drive undertaken by SHGs in the villages, encouragement from fellow SHG members to go for regular check-ups for themselves and their children and easy access to credit for treatment.

6. Work burden

Majority reported that the work burden had increased but income/output had increased. A few reported that the work burden had reduced due to the SHGs helping each other, while the rest reported that the work burden remains the same, but output/production has increased.

Work Burden

While most respondents reported an increase in working burden for the women, they also felt that it was for their betterment and did not see this as an adverse impact of the increase in activity promoted through SHGs. Several also felt that actually it is easier to tackle this work burden now as women help each other and men help their wives. Several women felt that it didn't feel like working more as they had time to socialize with fellow members while they worked. They work, chat, and enjoy together and all this while improving their livelihood.

7. Awareness

Majority (69%) of those interviewed are now more aware in the fields of health & hygiene, group organization, education, technology, marketing, linkages and environment.

8. Linkages with line departments and financial institutions

Most of the SHGs interviewed have already received loans from the bank with amounts varying from Rs.1000/- to Rs.50000/-, with half of the groups having received their 2nd and 3rd loans already. Kucholsan SHG Federation of Bawegre cluster and Gisiksan SHG Federation of Nengja Bolchugre cluster have been linked with NeDFI and loan amount of Rs. 4 lakhs and Rs. 5 lakhs respectively has been approved. DRDA had sanctioned an amount of Rs. 11 lakhs to the Federation for construction of a patchouli distillation unit and marketing shed.

Group Enterprise

Sundare SHG of Bawegre village have a big story to tell. Starting off with 70 saplings of patchouli a member brought back home from a training she attended on patchouli cultivation at Tezpur, Assam, replicate and sold 1800 saplings @ Re.1/- . Got 1 bigha of land donated from an old couple for whom a low cost 2-rooms house was made with Rs.22000/- from the IAY scheme. Used the donated land to build a 1-room school building for Total Literacy Campaign (TLC) and a pre nursery school with a Rs.150000/- grant from the JGSY scheme. Teaching is voluntary and purchased play toys for the children from SHG contribution. Planning to use the remaining plot of donated land for expanded cultivation of patchouli. And they do not stop here but are looking forward to a bright tomorrow with a future plan to start a weaving training cum production center to help out uneducated poor female members of the society.

9. IGAs (Income generating activities)

Income Generating Activities (IGAs) is one of the arenas where the project had improved upon a lot from the previous scenario where the villages could hardly make ends meet. More than half of the respondents reported usefulness of new IGAs introduced by the project which include patchouli nursery and cultivation, distillation, other Medicinal and Aromatic Plants (MAPs), petty shops, kitchen garden, clothes business, bamboo business, stone chips, livestock, fishery, vegetables, wet terraces, land reclamation, carpentry, areca nut nursery, jatropha, rice mills, etc. Existing activities were upscaled and improved including livestock, vegetable growing and selling, arecanut, etc. An increase of 32% and 21% can be observed in the growth of group enterprise and individual enterprise respectively.

10. Skill

Trainings and exposure programmes imparted by the project had resulted in a remarkable skill improvement (50 %). Cash management, record keeping, food processing, entrepreneurship, various skill trainings, etc. are some of them, which are appreciated by the SHG members.

Improved Farming Techniques

“From 2 kg seeds of ginger, I have been able to produce 8 maunds (320 kg) of ginger by practicing the improved farming techniques taught to us by the project staff. Earlier, 2 kgs used to produce only 2 maunds. The quality of the ginger is also much better than before.”

Mrs. Nobalin Sangma, Member, Chesrang Kotok SHG, Tapra Alda village

How did this happen?

IFAD project's philosophy & concept has been framed to demonstrate a new approach to development focusing on interventions, which are technically appropriate, culturally sensitive and institutionally effective and sustainable. The key emphasis of the project is sustainability beyond project life.

The project recognized that women's participation in development is as important as that of men. As a result, the Gender Equity & Empowerment Programme (GEEP) specially created to infuse and motivate rural womenfolk in the system of social mobilization was used by the project. (See annexure 8 for detailed description of GEEP). This strategy begins with a participatory process of social mobilization followed by formation of SHGs, building an institution promoting increased participation especially of women. The platform of SHGs is then used to help community members in planning for their development with the available resources using tools such as wealth ranking, resource mapping, watershed mapping etc.

Once the community is successfully mobilized and their awareness and capacity to save, loan and manage cash is improved, training and exposure is provided for different income generation activities as the community needs. From the year 1999 when the project started its activities in West Garo Hills district, number of SHGs increased by about one and a half times till the year 2005. See table below.

Table no. 2: Growth in number of SHGs in the project village year-wise

Year	Number of Villages	SHGs formed	Number of Households
1999-2000	17	3	868
2000-2001	-	22	0
2001-2002	43	109	1486
2002-2003	0	30	26
2003-2004	126	297	4185
2004-2005	6	59	505
Total	192	520	7070

Source: WGHCRMS Status Report cumulative upto April 2005

Along with training and exposure, financial assistance is also made available. From the year 1999, project's investment in target villages increased from Rs.19.6 lakh to almost Rs.680 lakh over six years.

Table no. 3: Project investment in villages

Year	1999-2000	2000-01	2001-02	2002-03	2003-04	2004-05
Amount (Rs Lakh)	19.6	51.4	90	139.2	37,6.5	676.8

Source: WGHCRMS, Tura

As SHG members become socially empowered working together and economic condition improves with increasing savings and income, SHGs are encouraged to form federations to improve credibility with banks and other lending institutions and help linkage with existing financial institutions and line agencies.

As seen in the table below, it is reported that the capacity of the SHGs improved consistently as reflected in the increase in grade A and B SHGs. From 10% in the 1st year, the Grade A figure increased to about 50% by the end of 2004. This factor, together with the formation of SHG Federations, has helped in giving the line departments and banks more confidence in the groups.

Table no. 4: SHG Grading record over the years (2001-05)

Year	Number of SHGs	Number of SHGs Graded	Grade A	Grade B	Grade C	Grade D
2001-2002	134	71	8	45	15	3
2002-2003	164	144	12	97	23	12
2003-2004	223	151	43	82	17	10
2004-2005 (up to Dec. 2004)	520	302	144	110	48	0

Source: WGHCRMS, Tura

It is observed that through this process of project intervention, the groups have become capable and confident of taking up social and economic activities. As new more participatory institutions are built, women get an opportunity to participate in their own and community development process. Increased savings, greater interaction with other women and improved awareness have helped build women's confidence. For instance the rotational leadership responsibility given to members provides them the opportunity to take charge, speak in public and lead in every meeting. There is an increase in the savings of the community, in groups as well as

individually which has led to economic stability. There is increased access to credit as cost of funds is reduced and saving habit has improved.

Training on income generation activities are a key element in exposing women to improved ways of cultivation, new crops, livestock rearing and several non-farm activities. Apart from this women's awareness about health, hygiene, and education is improved tremendously. Cooperation and unity have come to be valued.

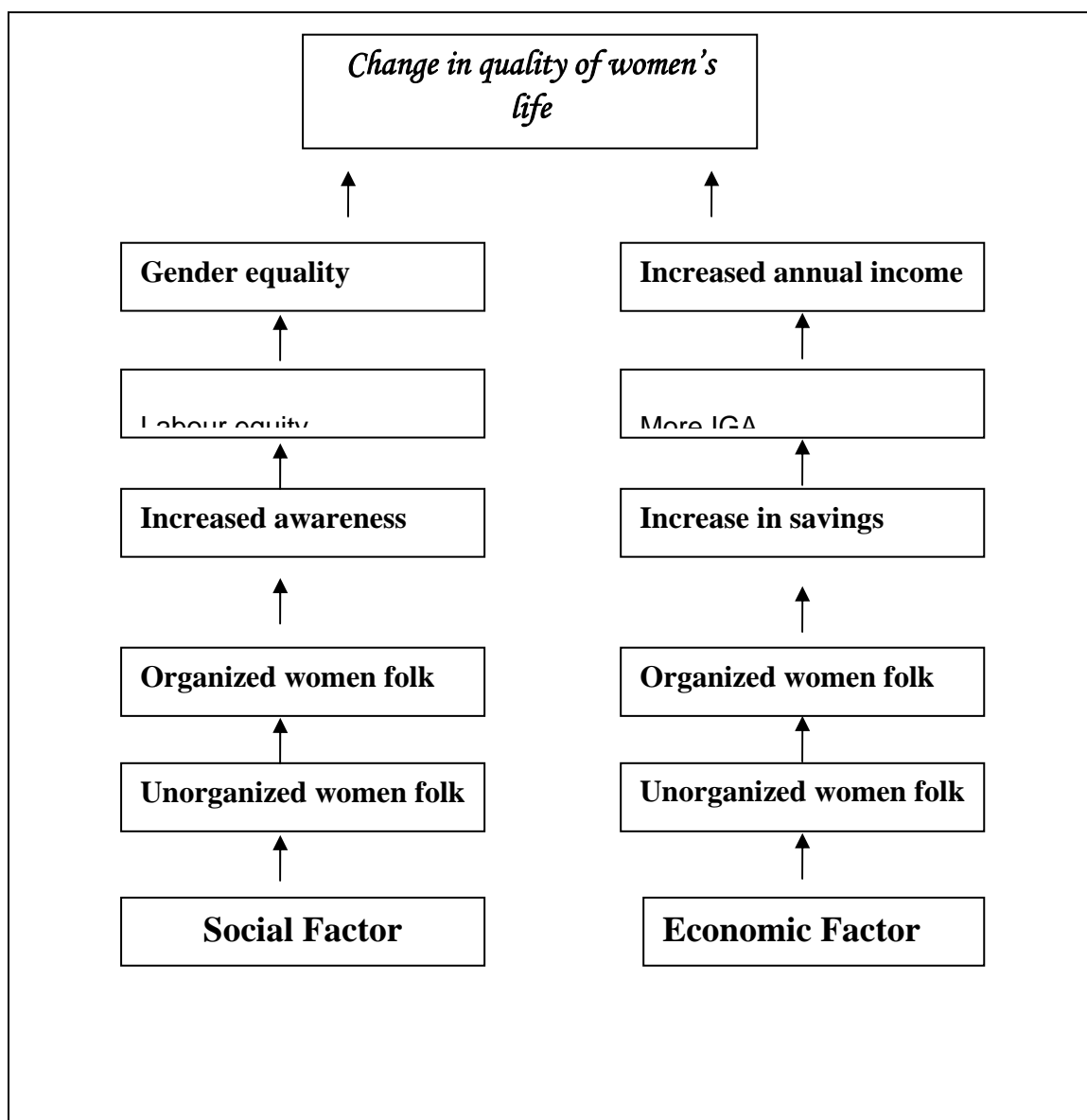
According to the respondents, group organization, skill training, keenness of women to change helped in this process of empowerment. Changing mindset and improving capacity has helped them to participate better in both household and community affairs. They are able to negotiate a better place for themselves in the society and have come to be respected by husbands.

Increased confidence helps promote Group Enterprise

- * Fair Price shop : Norombi SHG, Bawegre
Confidence level increased because of numerous trainings through the project; 10 members of the group had once gone on an IFAD-sponsored exposure trip to Andhra Pradesh. They were confident enough to approach the government department directly for a PDS license, without any assistance from DS/NGOs. Have a vision of opening 6 more Fair Price shops and a mini-bus.
- * Tangbangchi SHG, Nengja Bolchugre
Enterprises taken up by the group: Goatery, Fair Price shop, Dry fish, Rice mill
Before the project, the people were afraid of outsiders/new faces. This fear has decreased now due to increase in knowledge/awareness, going to various new places, meeting a variety of people, trainings, etc. as a result of the project intervention. The group savings, excluding interest received and other incomes, is Rs.7889/-.

SHG has served as a common platform and forum for knowledge and problem sharing, brought about an improvement in the lifestyle of the women and through them in the communities, and an increase in their confidence to negotiate for their own development needs.

Thus both social and economic processes have brought about this change in women's quality of life. Before the project intervention women were unorganised, where the economic status could not be improved inspite of availability of rich resources and continual efforts. The improvement was initiated by organizing the women folks into Self Help Groups through mobilization and various exposure and training sessions. Formation and working in groups induced awareness and the women folks started saving as well as borrowing. The improvement in the confidence, Income Generation Activities, labour equity and income followed in parallel. The outcome as can be seen during the study was an overall increase in the quality of women's life. See below an illustrative chart.



Box: Process in the Change of women's Quality of Life

4. CONCLUSION

The success behind the Project cannot only be termed as financial support given by the Project to bring change of income & livelihood for the community as a whole. We could learn from our field studies, from the respondents that the secret of success in this Project within the short period of years are through the introduction of Project Philosophy and concept of SHGs and Village level NaRM Group. The Guiding Principles of the NERCRMP (Regional Society) and with the co-ordinations between the District Support Team the NGOs have first been ensured in building capacity for themselves to carry out the assigned works and disseminate the dimensional Project approaches in shaping and molding the mindset of the community which give them the basic knowledge in overall management of their own affairs.

Study on Business Approach, Marketing Practices and Promotion of Model Enterprises: Case Study On CBOs of Karbi Anglong Community Resource Management Society

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Bidhayak Das²⁶

1. INTRODUCTION AND PURPOSE OF STUDY

The project aims to focus on business development at micro level in the project villages especially in the area of agri-business and micro-enterprise development. The project has been supporting establishments of a network of market institutions by involving the NGOs/SHGs/Cluster associations, Federations so as to take up real time marketing and improving the economic well-being of the community. In this regard the project has assigned the Business Development Officer (in consultation with the Marketing Coordinator) and other sectoral divisions to prepare a business plan and strategy for business development. SHGs are being encouraged to visualize business opportunities, with special focus on fruit processing, weaving, bamboo mat making, broom plantation which have ethnic and traditional value and have the potential for attracting prospective buyers. These products also have the uniqueness in suiting other forms of markets—regional, national and even international.

The project has undertaken different types of activities and initiative to promote business and Income Generating Activities (IGAs) through institution building, capacity building and training, skill enhancement, savings and loans, linkages and coordination between CBOs, time management, participatory planning, building market linkages and other support systems. To study and analyze the process of transformation that has taken place the study was carried out. The process of Systematization and Documentation, which incorporates the participatory way of documenting experiences and lessons from the community, organizations and project teams, was used to analyze the conditions that prevailed before the project intervention, after the project intervention and the changes that took place.

2. METHODOLOGY AND TOOLS:

The team initially comprised of four persons but subsequently the number reduced to three, as one member was taken ill. The study was carried out spanning over a period of 10 days of which three days were spent on the field and seven days in

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orientation exercises, formation of teams, debriefing, report preparation and final presentation. Places of field visits included:

- ◆ Malongkisir (**CKKA cluster**)
- ◆ Mokindur (**Rongjangphong cluster**)
- ◆ Tyikpi (**Tika cluster**)
- ◆ Munjili Tiniali (**Rongchek cluster**)

Secondary data²⁷ analysis was also done during the process of report preparation. Prior to the Field Study the approach to the systematization and documentation was designed, wide ranging issues surrounding the developmental intervention were discussed and a strategy developed on the basis of which primary data and feedbacks from the Community Based Organizations (CBOs), NGOs, Traditional Institutions, other groups and individuals were collected. The background of the living conditions of people²⁸, the challenges that existed before initiating the project, the formation of the CBOs, building of these institutions, developing a business approach & market linkages, role of the traditional institutions in the overall participatory process, inter-linkages amongst clusters, Blocks, Subdivisions, capacity building and training of CBOs, Increased income generating activities, improved tools and techniques, overall changes on the status of women in the society through SHG movement, etc. were identified as key indicators for the study. The focal point of the study was to document the transformation process that has taken place after the project intervention.

Structurally the study was done using:

- ◆ Selective sampling²⁹
- ◆ Sample size. The size of each sample was taken considering the different types of activities the CBOs were involved in.
- ◆ Focus Group discussions (FGDs): Three in one village and two in three villages.
- ◆ Interviews: One individual in each village and two groups in three villages.
- ◆ Household visits: Two households were selected in two clusters based on activities undertaken by SHGs and NaRMG Associations. Owing to lack of time, and handicapped by the absence of one NGO member who was a part of the team as well the fact that the community is busy in transplantation of paddy and weeding in the jhum fields, household visits in all the four villages could not be undertaken.
- ◆ Site Visit: One local market at Birsingki and two daily markets at Baithalansu and Hamren were also studied. The idea was to understand the market dynamics and look at cost-benefit analysis with linkages to marketing practices.

²⁷ Secondary data was obtained from NERCORMP Project Implementation Manual, Base Line Surveys, UNOPS study on Rural Institutions and Project Management (North Eastern Region Community Resource Management Project for upland Areas, DST reports and record books of SHGs, NaRMGs, Cluster Associations and Federations.

²⁸ The socio-economic status of the community before the project intervention

²⁹ Four villages were selected based on the presence of CBOs working in different capacities but aiming to achieve the same goal of improved livelihood, increased income, the business approach adopted by them, marketing practices and increased participation of women.

However, even as there was not much shift from the strategy that was adopted to study the project villages, some minor need-based changes were made depending on the ground situation. The team visited the Rice Mill and Agar Batti (Incense Stick) making process, Maintenance of water distribution system, Low Cost Latrines and Livestock management processes at Malongkisir, Home Gardens, poultry and piggery rearing and rice beer making units at Mokindur. In the other two villages that is Tyikpi and Munjili Tiniali most of the time was spent on FGDs.

Videos documentation and still photography was also a part of the exercise

3. BACKGROUND

The community, where the documentation was carried out lived under abject poverty, depending mostly on shifting cultivation and whatever resources were available in the forest. Knowledge of sustenance and managing livelihoods was at its lowest. There was no concept of homestead gardens or any alternative form of income generating activity which resulted in total dependence on shifting cultivation as the main source of food and income.³⁰

3.1 Market accessibility

Prior to the project, accessibility to the markets were very poor, mostly due to the deplorable road communications systems as well as absence of adequate knowledge about marketing systems and linkages. The only markets—Amser, Birsinnki, Baithalangsoo and Hamren (covering about 10 kilometers)—could be reached after trekking for hours. Women had to walk carrying heavy loads to the market.

Village	Distance from Hamren (km)	Distance from Birsingki	Distance from Baithalangsoo	Means of Transport	Remarks
Malongkisir	45	15	20	Mostly people traveled on foot	Feedback from community elders/NGOs
Mokindur	55	9	30		Information collected from interviews and DST surveys
Tyikpi	12	-	5	Situated next to roadside. Few traveled on vehicles depending on availability and travel fare	
Rongchek	25		50	Mostly people walked to the market	

Moreover, these markets too did not fetch proper incomes as more often than not the price fixing was under the control of the middleman.

3.2 Migration of people

Low income levels and poverty forced most people to migrate to neighbouring states like Meghalaya and also to the more prosperous districts of Assam in search of better livelihood options.

³⁰ In the Jhum lands the communities practiced mixed cropping and most of what was produced was subsistence farming. This feedback was received from the communities, local village chiefs and verified with previous data collected during different types of studies

3.3 Awareness amongst the community on Banks and MFIs

Knowledge about banks and micro finance institutions too was very poor which allowed the moneylenders (loan sharks) to exploit the people. The only system of loan procurement that is known to have existed was an informal arrangement between the people themselves. Groups of 10 to 15 persons would team up to borrow paddy or money lasting for well over a year. The interest percentage for loan repayment would sometimes be as high as 50 per cent per annum. In cases where the borrower failed to repay the loan on time the interest rate would double. However, this system benefited, if at all, only a few.

The status of women was reduced to managing households, working in jhumfields and carrying water after long distances. They were not allowed to speak or preside over the occasional meetings or gatherings and bore the burnt of domestic violence. There was no awareness about family planning and childcare, health and hygiene. In fact in many villages people did not even wash their plates/utensils³¹ after use either for lack of water or for not wanting to discard a habit that was passed on to them by their previous generations.

4. INITIAL HURDLES:

The first real attempts by the IFAD to plan and implement the Livelihoods project met with resistance from the community. People were afraid and suspicious that the project came with an agenda to convert them to Christianity³², especially when they were informed through different sources that IFAD is based in Rome. The community put up strong resistance, especially by Hindu dominated villages. Also it was not easy to shift from existing traditional practices, though process to a system of thinking that was entirely new and unheard of. Further strong political influences³³ on the community and existing groups (which exist even today) provided a big challenge and stood in the way of total participation by the community. As for farmers and cultivators who were entrenched in the traditional methods of shifting cultivation were not very keen to adopt new methods of cultivation that they thought would make them give up their old system of practice.

4.1 Information dissemination before project implementation:

The passage of information flow through the different strata in the society took time as sources of communication with the villagers were few and not easy to establish. Lack of communication facilities too add to the difficulties that were encountered. Every piece of information about the project had to be carried out through local partner NGOs which at sometimes created confusions mostly owing to different forms of interpretations about project activities and structures.

4.2 Infrastructural bottlenecks and hygiene

Improper hygiene and poor physical infrastructure (no lodging or meeting places, community hall, bad roads, poor water distribution systems etc.) prevented the project staffs and NGOs from carrying out a systematic awareness building exercise. All these came as big challenges before the project planning and implementation process.

³¹ Information collected from Rongchek Cluster during FGDs with Association members

³² This story was narrated at Munjili Tiniali at Rongchek cluster and Chinthong cluster

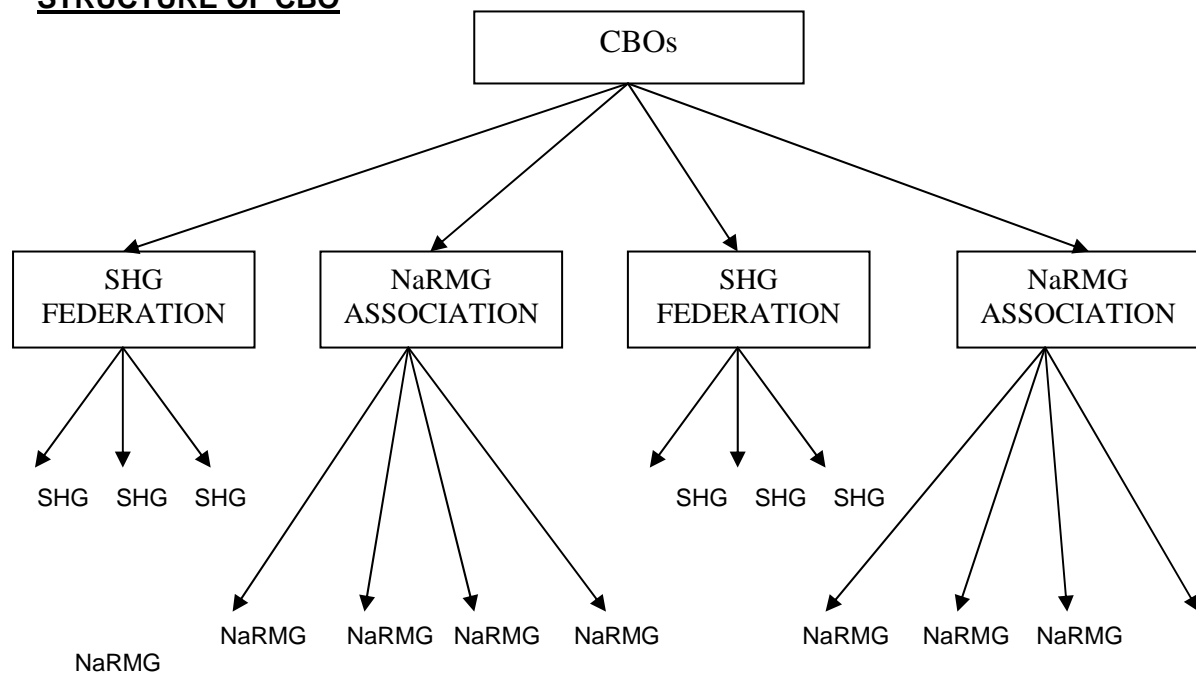
³³ This information was uniform in all the villages that were selected for the documentation exercise.

4.3 Overcoming the challenges

These challenges were overcome after repeated meetings and discussions and gradual acceptance by the community to try out newer and alternative forms of livelihood management practices. What brought about a perceptual change was the way the project was designed to enhance the capacity of the community through group activities and formation of Self Help Groups (SHGs).

5. INSTITUTION BUILDING:

STRUCTURE OF CBO



After formation of NaRMGs and SHGs a lot of capacity building activities have been carried out by the project by giving them training on various aspects such as positive attitude building, organisation management, book keeping, building revolving funds, maintenance of records, auditing, holding regular meetings, agenda prioritization, varied income generating activities options, market dimensions, resource mapping, formulation of Annual Work Plan Budget (AWPB) and plan of action, and laying down future road maps. All these contributed towards institution building.

5.1 Group formation, strengthening of institutions (CBOs):

Later on this led to formation of NaRMG Association and SHG Federation. For instance, in Chinngthong area 10 NaRMGs and 40 SHGs were originally formed which later led to the formation of NaRMG Association called CKA and SHG Federation. In fact in the process of formation is an exciting experience and has its own story to tell. After the formation of one NaRMG, the other villages followed suit and there was almost a chain effect.

5.2 Response from the community and process replication:

Villagers attribute this institutional building exercise to the progress of one village which prompted neighbouring villages to request the project office to incorporate them in the participatory process. Thus, various activities undertaken by the CBOs

triggered off a process of replication that helped easier expansion of project. Encouraged by the improved level of livelihood management, maintenance of savings and funds, with direct or indirect linkages to banks and financial institutions and better understanding of the market conditions many more male and female members of the community participated in the project and joined CBOs.

5.3 Funding and participation for self sustenance:

As strong bonds developed between villages through NaRMGs and SHGs, all NaRMGs began to contribute Rs. 50/- each per year initially and now Rs. 100/- each annually for NaRMG association fund. Also Malongkisir NaRMG donated a plot of land for Association office campus and building besides some financial support from the project. In all their activities NaRMGs and SHGs actively participate even by contributing their own labour.

6. TRADITIONAL INSTITUTIONS: LINKAGES WITH CBOS & PARTICIPATION

Against the backdrop of extreme underdevelopment, and a feeling of neglect by state administrations and governments, and a certain amount of disillusionment amongst the community and local institutions the NERCORMP/KACRMS project incorporated Traditional Knowledge Systems as an essential component of the intervention initiative so as to be able to express a new development approach which focused on technically appropriate, culturally sensitive and institutionally effective intervention practices. The project intervention faced the challenge of not disturbing the sensitivities of these institutions that have existed for centuries. The Traditional institutions in Karbi Anglong play an important role in decision making and land use at the village level.

6.1 A Case study from Malongkisir:

In Malongkisir Traditional institutions are actively participating in planning and execution of development activities. From the Sarthe down to the Habe, the leaders of traditional institutions are facilitating in the process of better land management and land use. These village chiefs are opening up to the idea of giving out lands for practicing shifting cultivation, encouraging modification of jhum and are also involved in income generating activities.

For instance the Boragoanbura, Mensing Teron is a member of a SHG and he has been instrumental in initiating a number of development activities together with the community. He has participated in the process of bringing water supply to the village and encouraging setting up home gardens. The benefits of IGAs is clearly showing on him as he has managed to build a concrete house (the only one that a community member has managed to make, the other concrete house in the village belongs to a former leader of the Karbi Anglong Autonomous District Council). His daughter Hunmili Teronpi too is an active member of the SHG Federation and is a member of the agarbatti and weaving activity that has been started in Chingthong cluster.

The other thing that highlighted was about the functioning of the traditional institutions and its functions. According to him the fact that a traditional practice of giving Rs. 50 or ten KGs of rice as annual tax to the Pimpo (the chief of a particular local institution) has not stopped and has not been disturbed by the project intervention is a case in point of how the project focuses on cultural sensitivities. The Pimpas all of whom live in a single village use the tax to *pray for the well being of the people and development of the people*.

7. BUSINESS APPROACH AND MARKETING STRATEGY/LINKAGE:

CKKA Cluster:

After the project intervention small quantity of varied vegetables, agri-horticulture products, and handicrafts from the project started appearing to markets. This prompted the NaRMG leaders who formed a market committee and established a local weekly market at Mynser village that is held on every Tuesday. Earlier the villages of Chinthong cluster had to go Amser weekly market which was 8 kms away from cluster office. Now Mynser weekly market is just 0.5 kms from the then office. Another small local market known as Lanngtuk Apim every Monday, has also been established and it is about 5 kms from the cluster office which is the center point for all villages of the CKKA. This has greatly relieved the community particularly women folks who can now easily sell all surplus food crops and value added goods and buy their food and clothing requirement without traveling long distances.

7.1 CKKA cluster linkages with other markets:

The CKKA is also well linked with other far away markets like Baithalangso (regular as well as weekly – on Tuesday), Birsinki weekly market on Friday, and distance once like Nellie, Hamren and others. Now the community is accruing to these markets easily with the assistance of SEBA¹.

Product Shift and volume change in Chinthong Cluster

Sl. No	Before Project	Quantity	Price	Sl. No	After Project	Quantity (quintal)	Price Rs/
1	Ginger	N.A.		1	Ginger	16.5	3-4/kg
2	Pumpkin			2	Pumpkin		
3	Sesamum			3	Sesamum		
4	Chilly			4	Chilly	8.9	20-50/kg
5	Maize			5	Maize		
6	Yam			6	Yam		
7	Mats			7	Mats		
				8	Lac		
				9	Cocoon		
				10	Broom	4.5	15-18/kg
				11	Handicraft		
				12	Turmeric	0.3	
				13	Bamboo		
				14	Brinjal		
				15	Beans		
				16	Tapioca		
				17	Cucumber		
				18	Ash gourd		
				19	Squash		
				20	Pineapple	1.88	3-5/p
				21	Papaya		

7.2 SEBA the marketing linkage point:

SEBA is the main linkage point between the community, CBOs and the buyers/sellers to different markets. In fact, unlike earlier days, now all market information pertaining to prevailing market price, quality control, assessment and return of sale proceeds and profits is carried out by the Association in consultation

with the SEBA who is trained in this aspect. This is initiated so as to ensure that the involvement of middleman is marginalized and communities get maximum return for their products that come from Home gardens, Jhumland, terraces, and value added products like bamboo mat. In the earlier system, the food crops mostly find their way through the middleman and limited direct selling by the villagers themselves. The villagers heavily depended on middleman who was the only source of market information and transportation that prompted the middleman for manipulation in weighting and measuring as well as in prices which was always in the advantage of the middleman.

Ever since the project intervened in these villages, there has been shift in the marketed products as it can be seen from the following table:

7.3 Cluster Association and SEBA linkages.

CKKA has now developed various market linkages through the initiative of SEBA. They have partnered with the other SHGs of different Associations for setting up a marketing outlet in Diphu, the district headquarter which is in process and Terminal markets of Kolkata and Delhi for marketing of ginger. The Association is in process for marketing of incense sticks that is being produced by SHGs in different important markets of the region.

As shown many food crops and vegetables have now newly entered the market owing to project intervention in the form of home garden, terracing, Jhumland management.

7.4 Defects in Marketing Tie-ups

In CKKA the marketing of ginger, through NERAMAC proved to be a total failure because of various reasons like lack of storage facility in and around the project villages, lack of grading and packaging skills amongst the communities, defective marketing method/system of NERAMAC, inefficiency of NERAMAC staff, profit driven motive of NERAMAC has hampered in linking for broom marketing.

7.5 Linkages with other groups and NGOs:

Inter cluster linkages, intra group communication between Federations and SHGs and also links with other NGOs, in this case BRO has helped in value addition of already existing marketable products. This process of linkages has helped in change of mindsets and has led to more sharing and activities such as capacity building and training between different groups.

7.6 RONGCHEK NaRMG ASSOCIATION: Setting up Market infrastructure

In this Association the business approach and marketing revolved more around creation of physical structures like godown/collection centres and a permanent weekly market known as Lumta weekly market on Thursdays. It has built a 60 x 31 ft building at Hamren for Common Facility Centre (CFC) for producing various bamboo products. Rather than depending on SEBA alone whose active involvement is just 3 – 4 months old, the Association has taken active role in marketing various products e.g. broom and ginger.

7.7 Establishments of Markets and bamboo mat making experimentation:

The establishment of Lumta weekly market was primarily for bamboo mats which is another main occupation of the villagers around it. Approximately, 3000 mats per week which comes to 2 – 3 truckloads are coming from this market alone. Like

CKKA, in Rongchek cluster also a shift in product is observed. While traditional items like ginger and paddy has decreased there has been an increase of quantity of mats and other new products like broom are making way to markets like Khanduli, Shillong, Jowai, Guwahati, Lanka, Nagoan, Hojai, etc.

7.8 Broom cultivation and marketing: A Success story

The cluster Association has managed to get the Mahaldarship (Trading Rights of broom for 1 year) this year for which they paid Rs. 1.25 lac to the District Council. Earlier the tender floated by KAAC is usually procured by the well to do and influential people who buy the broom from villages at throw away prices. This year the Rongchek cluster Association in collaboration with SEBA could sell about 50-60 metric tons of broom @ of Rs. 18-22/- per kg, and the villagers could get prices ranging between 15-18/- per kg. Even for bamboo mats, with the help of the project the Association has linked to a number of buyers who have come to Lumta market and studied the feasibility of direct linkage to terminal markets/end users. Though the buying-selling arrangement is still on, it has impacted the market by raising the price of mats from Rs. 20/- per mat (6 x 4 feet size) to Rs. 27/- and even to Rs. 30/- during off-season time (transplanting and weeding season).

The Cluster Association is also entering into another business initiative i.e. setting up of a CFC for making bamboo mat board in collaboration with TBBL a Mumbai based company. For this, the Association has already signed a MoU with the company, which is going to invest over Rs. 60 lac. The Association in this venture will only contribute in the form of leasing the CFC building for setting up the factory. In the profit sharing arrangement it was agreed between the two that the Association would get 30% of the profit accruing from the factory. Besides this the Association is on process of producing and marketing of auxiliary bamboo products like tea coaster, tea tray, and saucer out of laminated bamboo mats for which marketing linkages is on process with Godrej Company.

7.9 Shortcomings identified and problems faced:

Marketing initiatives in the project areas is faced with a number of difficulties such as lack of adequate marketing facilities like storage, transportation, marketing skills, and efficient marketing agencies. This has led to some shortcomings in the marketing aspect. For instance, the presence of middleman has not been completely removed; the team found that even SEBA at times depended on the middleman to market food crops and other value added products like bamboo mats.

7.10 CHINTHONG FEDERATION:

In Chinthong cluster, the Federation is working in close collaboration with the Association. The inter mixing of members between the Association and the Federation has to a large extent helped in complementing each other in marketing and developing a sound business approach. Following the NERAMAC marketing experience the Federation decided to have a series of meetings with the Association so as to be able to understand the marketing linkages better and become a part of the overall structure where the SEBA has started playing a major role.

7.11 Exposure trips and Market visits:

Federation members have started visiting markets to gather market information (weekly) with SEBA. Federation members are now coordinating with Associations, NGOs, community leaders, market committees trying to expand the local market so

that they can reduce time or avoid or avoid going to far markets for better time management.

7.12 Entrepreneurship Development:

The Federation members are also playing an active role in entrepreneurship development such as agarbati making, weaving centre, and setting up of rice mills for which they have opened a joint bank account with cluster Association. Besides this, both in Tika and Chinthong cluster, SHG Federations are encouraging the SHG members to open grocery shops, and roadside shops.

7.13 Value addition

In **Tika** also Federation members are taking part in business and marketing activities. In particular they are involved in selling their agri/horticulture products at Langchingbar weekly market held every Friday, Boithalangso and Hamren. Apart from this, the SHGs members like Rasinjah are doing value addition in food crops i.e. food processing unit producing mixed fruit jam, jelly, pickle, squash, etc. They are now in the process of obtaining Food Product Order (FPO) certification with the support of the project. They are also partnering in opening market outlet in Diphu, and entering into a buy back arrangement with Ricky Food Products in Guwahati, from where they receive training.

7.14: Gaps in Marketing linkages

The team have studied that more capacity building is required in planning business strategy especially with absence of facilitating agent like SEBA. Marketing of ginger for example has ran into rough weather last year owing to inadequate marketing facilities. For example ginger was sold at Rs. 2/- per kg. So most community members feel that “it is better to sell locally even at low price than to take out and suffer loss. Last year 8 quintals of ginger rotted owing to lack of storage facilities and low return prices for sale in the markets.”

7.15 SHG MOKINDUR:

SHG members are actively involved in business marketing though more in the individual capacity than in-group level. Mostly now they are selling agri/horticulture products and local wine to the market through SEBA who collect these items at the collection point (point till where the vehicle can reach). Earlier they had to walk 88-100 kms down to the market for selling/buying. Now all market concern information is collected by SEBA and disseminated to SHG and NaRMG members. Thus SEBA has become a link for the SHG. In return to all services provided by SEBA, the SHG pays service charge to SEBA ranging from 1-3% depending on the product that he facilitates the marketing.

7.17 NaRMG:

NaRMG members are also involving in business and marketing at the individual household level. In CKKA some NaRMGs facilitate marketing by way of collecting ginger produced in the village and hand over to the cluster association for marketing by SEBA. There is also coordination between the NaRMG and SHG in CKKA. The team also found that in Rongchek and Tika cluster, the coordination between CBOs in relation to business and marketing is weaker than other Association like CKKA.

7.16 An SHG success story:

In this village, a significant development that could be termed as not a direct outcome of the project intervention is the formation of a new SHG by women in the age group of 18 to 25 years. Surprisingly, this formation process of the SHG has come in a village where the level of capacity building and training is extremely low. The literacy level too is not encouraging. However, not allowing the shortcomings to get in their way, young women from this village decided to go ahead and set up an SHG. They make local rice beer from whatever contributions they have collected to form a savings account and sell the produce to increase their savings. They have also succeeded in managing to convince the village to give them a plot of land to start IGAs. To start with they are planning to start pineapple cultivation. They are taking training from SHGs from other villages and also from the NaRMG members. The formation of the SHG has helped in diversifying group activities. Older SHGs (two in all) are helping them with whatever little training they can impart.

Challenges posed:

- ◆ Non-repayment of loans
- ◆ Loan disbursement to semi skilled and non-skilled members
- ◆ Poor Linkages to MFI
- ◆ Lack of coordination between institutions
- ◆ Inadequate participation of elderly male and female
- ◆ Male domination
- ◆ Lack of proper training in marketing
- ◆ Lack of Storage for perishable commodities
- ◆ No physical infrastructure for business development
- ◆ Materials/Planting materials/saplings not reaching on time

8. INSTITUTIONAL LINKAGES:

Cluster Association have built good institutional linkages with NGOs, Government line Departments and others besides the funding project agency.

8.1 Linkages with other groups:

In CKKA, the Association is in close ties with the Lamps Society of Chinthong Block from which they got the abandoned building and reconstructed to make their Cluster office. The Association also obtained a plot of land around the building donated by the Malongkisir NaRMG for office campus and farming. They have linked with DRDA in terms of group housing, PHE for water supply and PWD for road. In fact they have submitted a memorandum to the CEM of KAAC for improving the PWD road existing in Chinthong area.

In one way or the other, they are linked with local NGOs like Athur Society, Farming society, Rural Development Society, Klirdap Welfare Society, in capacity building. They continue to have good relations with traditional institutions, ICDS for health and sanitation related issues.

Rongchek Cluster Association has established links with KAAC for broom sale, Hamren Town Committee and ASEB and PHE for construction and setting up of CFC. They are linked to Mahindra & Mahindra for vehicle finance, insurance company for vehicle and pig insurance and bank linkages.

9. CAPACITY BUILDING AND TRAINING:

- ◆ Inter cluster training
- ◆ Setting up a model farming centre for farming in the CKKA cluster office.
- ◆ They are open to the idea of giving training to any CBOs, individual, groups that are interested to avail training.
- ◆ Training that are given earlier are on book keeping, mud block making, KINGFISHER, LIVE, GRAS.
- ◆ SEBA training to have a backup plan on team building mentoring.
- ◆ SEBA is also facilitated by KINGFISHER for future sustainability.
- ◆ In 2006, 16 participants from 16 cluster Association receive various training in Chinthong Cluster Association office and 10 NaRMG also receive similar training.
- ◆ Training on maintaining home garden.
- ◆ In Rongchek the cluster Association have coordinated for giving training to NaRMG and SHG. A LIVE member who received training from Veterinary in Khanapara, RRTC in Umran, Centre for Rural Development in Guwahati has in turn given 4 trainings in the last 2-3 months where 11 NaRMG member attended the training.
- ◆ In Mokindur, training for SHG was given by NaRMG, SEBA, Associations, Federations and NGOs, like RADS, RDS, on savings, loan disbursement, loan repayment, book writing, approach for inter loaning management, problem solution, weaving, value addition, organising health camps, time management, group activities, networking, maintenance of corpus fund.
- ◆ In Tyikpi village SHG members received training on value addition like pineapple juice, mango juice, livestock keeping from NGOs facilitated by DST. Besides these they also received training inputs on Aleo vera cultivation, group insurance, auditing, banking system, holding meetings, confidence building from the SHG Federation.

10. PARTICIPATION: Community, women, traditional institution, and NGOs.

Right from the time of formation of CBOs the project encouraged on community participation. Since then, in all group activities like PRA, social mapping, formulation of AWPB and plan of action, resource mapping, the community actively participated. Apart from regular meetings (once/twice a month) people disseminated information through words of mouth; social house visits by neighbours, roadside shops, etc. (In CKKA). In case of any default by a member, he/she is expelled from the membership until amicably settled.

11. STATUS AND ROLE OF WOMEN IN DECISION MAKING

Prior to the project, there were lots of inhibitions on women participation in public affairs and decision making such as not allowing to attend meetings, or go to school. Women had to perform all domestic works including fetching of water, child care, drudgery while going to fields and market. However, in the post project intervention the scenario has completely changed and they are now not only having their own groups of SHG, Federation and Association but they are actively participating and

taking leadership in Cluster Association. Hunmili a girl of 20 years is a women representative in Cluster Association and she is very much involved in all decision making process.

Women now are relieved from tortures from drunken husbands and even discouragement from attending and participating in group or Association activities. Hence there has been a lot of improvement in the status and role of women since project intervention either directly or indirectly.

12. EXIT STRATEGY AND SUSTAINABILITY:

The CBOs are now aware that the project is winding up on 2008 and are therefore concerned about sustainability and improved livelihood management. Following are some of the issues that perhaps needs to be looked at.

Concerns

- **Linkage with MFI:** Better linkages with banking MFI and institutions is a must for post project successes. Formation of the KANIM at district level by all SHGs by contributing Rs. 8000/- is a positive development.
- **Social Security:** The community is concerned that all interventions of the project may not sustain in the absence of an alternative. The community in Mukindur village want the project to continue for three more years while Tyikpi residents want it to remain for another 20 years.

Strengths:

- ♦ **Resource utilization:** The community is taking keen interest to ensure that the resources available to them is properly utilized and preserved for future sustainability. For example Bamboo in Rongchek area.
- ♦ **Capacity Building:** The community is confident that they are now able to stand on their own and are concerned that more capacity building is required to face the stiff competition from the market world, particularly in entrepreneurship development. Social infrastructure: The community felt that the project could not do much in this aspect and therefore the need for infrastructure like storage facility, road, electricity, transport and communication, market facilities still stands.
- ♦ Attempts at integration of future development intervention initiatives involving Government departments and agencies on the principles of the IFAD model. The attempt is to upscale the present success initiatives that have been undertaken.
- ♦ Women are more confident now to attend meetings and organize activities that benefit the community as whole.

13. RECOMMENDATIONS:

1. Capacity Building: More capacity building by way of training and exposures to both SEBA and community is required for improving marketing skills like grading and packaging and post harvest management.
2. Infrastructure: Market infrastructure like proper storage and good transport system is very essential to reduce spoilage, weight loss, etc and to fetch higher price.

3. Market Linkage: Strong and good market linkage with efficient agencies and business houses is required.
4. Capital for SEBA: Some capital support to SEBA is very essential so as to enable him facilitate business to the community more efficiently.

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QUESTIONNAIRES

1. Roles of CBO's in Business and Marketing.
2. Being a member of the CBO's; has there been a reduction or an increase in drudgery of women (Time Management).
3. What role was played by the DST/NGOs in facilitating /mobilising the CBO's.
4. What is the various capacity building given to you by the DST/NGOs? Is there a need for more training? What and why.
5. What are the impacts/benefits that the CBO's receive? (Individual/groups).
6. What role was played by the traditional Institution or other institutions in the formation of the CBO's.
7. What was the status of the Moneylenders before the project and after the Project intervention?
8. What are the varied activities of the CBO's apart from the fundamental works?
(Measure or observe their dynamism).
9. If answer is jhum? Is it before or after project intervention? How many members are still practicing jhum? Why? Did you receive any capacity building regarding this? If yes? By whom and how many? What are the benefits you get from jhum. Where do you market the products?
10. What were the kinds of support that the CBO's provide to each other?
11. Was there any Enterprise existing before the project intervention?
12. What were the products marketed before the project intervention?
13. What were the products marketed now.
14. How this change in production took place?
15. What were the marketing problems faced before the project intervention?
16. Any changes in the problems now? How?
17. How the project intervened to solve the problem?
18. What are the enterprises developed through project support?
19. Capacity building in marketing and business.
20. Credit and linkages.
21. From where (Jhumland, Fallow, Home garden) did your surpluses (for sale) come to market?
22. How have you being membership of CBO impacted on your cultivation system.
23. Traditional values of community participation and utilisation of the strengths of village institutions and community organisations.
24. Involvement of communities in decision making and planning.
25. Sense of ownership of development interventions.
26. Is the business approach more responsive to community's perception of needs and priorities?
27. Are community institutions more self-reliant?
28. Broader representation including women, youth, and the marginalized groups.
29. Accountability and transparency.
30. Women's participation.
31. Problems faced by the communities while selling their products/services/goods.
32. How the CBO's facilitate the strength and weaknesses of the large and small farmers?

PROFILES OF THE CBOs IN STUDY VILLAGES

	Village/CBO Studied	Cluster/Federation	No. of NaRMG/SHG	Date/year of Formation	Activities	Market Linkages	Distance from Hamren
1	NaRMG Association/Malonkisir	CKKA	10	15.11.99	Mud block making, training on fee basis, Purchase of Cluster Association vehicle, Plantation of ginger, pineapple, banana and jatropa.	SEBA	45 km
2	SHG/Mukindur	RONGJANG-PHONG	3	November 2005	Wine making, supply of food items and kerosene fuel and weaving.	SEBA	55 km
3	SHG Federation/Tyikpi	TIKA	22	8.12.04	Setting up of food processing units for jam, jelly, pickle, and juice, petty village shop, internal lending, piggery and vegetables.	SEBA	12 km
4	NaRMG Association/Munjili Tiniali	RONGCHEK	11	August 2001	Value addition on bamboo products like mat and baskets weaving, broom selling and binding	SEBA	25 km

The Enabling Sector: A Study on water, sanitation & health in Karbi Anglong in NERCORMP-IFAD project villages

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1.1 Introduction

The KACRMS, a joint project of IFAD and GOI, has been in operation now for over 6 years with a mandate to create and improve livelihood opportunities, with environmental sustainability, for a predominantly under-privileged rural population. It has sought to do this by organising and funding collectives and creating local institutions in 166 project villages. The basic thrust is to help supplement subsistence farming with some cash incomes. To this end, a capacity building effort is being made to make the village communities more market oriented.

Yet, a market orientation would be of little use if the beneficiaries of these programmes do not have phones to communicate with; an educated work force that can negotiate with the market and supplement livelihoods by service incomes; a healthy work force; or, a road network that can speedily export the goods it hopes to sell to distant markets. Yet, in the mandate of KACRMS, there is just a line to take care of this critical, enabling infrastructure, and the last in a list of objectives:

“To increase access to basic services and infrastructure facilities”

The project perhaps realises the critical nature of this sector, yet is hampered by the fact that infrastructure requires very large investments, way out of the reach of any agency but the state. The project has, thus, attempted to intervene selectively, in areas that are more feasible. Equally important to the basic infrastructure is the creation of local self-help institutions which will outlive the project life. These institutions have multi-faceted (and often unexpected) functions beyond their immediate functionality: Self Help Groups (SHGs) and Natural Resource Management Groups (NaRM-Gs) not only enhance the capacity of the village community to increase trade and livelihoods, but also cement social cohesion, collective action, conflict resolution and revive traditional value systems.

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1.2 A systematization exercise was conducted from June 25th to July 3rd, 2007, in Hamren, to document the project activities in four chosen areas, conducted by four study teams. This report sets out the findings of one of these study teams that looked at the social and infrastructure sector of the project. The study team narrowed its focus to three interconnected themes from the myriad ones associated with the sector: drinking water, sanitation and access to health care. During the course of this study, the study team visited four project villages in West Karbi Ablong, out of the 166 project villages. The study was sponsored by ENRAP/IDRC, and hosted by the KACRMS.

The systematization process, a participatory methodology developed by development researchers in Latin America, attempts to document the impact of a project or a process by looking not just at the outcomes but also the process. One of the key factors for a successful systematization is the careful formation of a team, and the understanding of the roles of the team members. Usually, the inclusion of a member of the beneficiary community is essential. The study is done using a range of participatory techniques, and a mix of quantitative and qualitative indicators.

The team formation for the health, sanitation and drinking water study was rather chaotic and unplanned, but the team was lucky to have two members from NGOs, Augustine & Prakash, who have farming/rural backgrounds. One member of the team, Dhrubajit, was unable to fully participate in the process as he was indisposed. Some others had to take time off to attend to urgent personal work. All in all, though, it was a cohesive team, though it could have been more balanced in terms of skills.

2.1 Background

The project has chosen 166 villages in the western part of Karbi Anglong district, mainly concentrating in the upland rural areas of Hamren Sub-Division. The area is predominantly hilly, with average elevation of 350 to 450 MSL. The average maximum temperature and minimum temperature in the district is 35° and 18° Celsius respectively. The average annual rainfall of Hamren sub-division is 1212 mm. The total population of Karbi Anglong district as per 1991 census is about 6,62,000. The density of population is about 64 per sq. km. Hamren sub-division population is only about 195000 as per 1991 census and the population density is about 38 per sq km.

The region is blessed with a rich biodiversity, and the forest cover is nearly 80%. People grow a rich variety of crops. Jhum is widely practiced. Water availability from natural sources is excellent, through the year. In terms of infrastructure, however, the region is quite under-developed. Electrification is very poor: only 6 out of the 166 project villages are electrified; road connectivity is not as poor, but serviced poorly by public transport, that too only in the trunk routes.

In terms of health, the area is very prone to malarial epidemics, and mortality and distress due to this is very high. Apart from this, infections related to poor sanitation are common. Due to inconsistent nutrition intake, malnutrition is also a seasonal problem. On the other hand, the health care infrastructure is extremely poor. The traditional healers are good for only a very few ailments, while modern medicine access is poor and difficult. Every village has access to year round, natural source of water: be it a stream or a dug well or a spring. However, line department's pipelines, where they exist, are mostly dysfunctional. Since the natural source of water (a

spring or a stream) is usually at a distance, it means severe hardship to carry water for all the household needs. Usually this task is done by the women: not only do they spend precious time on this, it encourages making do with insufficient water. For sanitation, it has been the practice of villagers to go out in the open and defecate. Before the project intervention, there was no felt need to correct this practice. Only a few had built latrines before the project intervention. The old practice was a cause of spreading infections, and was also inconvenient, especially for women, at night or during the rains.

3.1 Setting the boundaries for the systematization documentation

Project Area / Location: 166 project villages in the western part of Karbi Anglong, an autonomous district of Assam in North Eastern India.

Project Stake-holders: Local population. Line Departments. KACRMS (Karbi Anglong Community Resource Management Society) which represents International Fund of Agricultural Development and Government of India. Several local NGOs (non-governmental organisations) like Bosco Reachout, Jirsong Agricultural Society.

Project starting date and duration: 2001-2008.

Project Health Objectives: To provide a preventive infrastructure for better health: safe sanitation and drinking water. In addition, to understand the health care problems of the project villages, and use that understanding to provide the villages with timely information on health care, awareness and capacity to help themselves.

Project Health Strategy / approach: To conduct occasional health camps which would generate awareness, and also provide medical relief, especially to women. To strengthen the capacity of the traditional healer, and providing medicinal gardens. To provide sanitation facilities. To create a cadre of village volunteers (FCC, or first contact carer), by training them in health issues. To provide safe drinking water to as much of the project villages as possible.

Project Health Components: **Village Health Volunteer (FCC) Scheme; Health Camps & Awareness Generation; Strengthening the traditional medicine systems.**

Health Context & Problems: The area is very prone to malarial epidemics, and mortality and distress due to this is very high. Apart from this, infections related to poor sanitation are common. Due to inconsistent nutrition intake, malnutrition is also a seasonal problem. On the other hand, the health care infrastructure is extremely poor. The traditional healers are good for only a very few ailments, while modern medicine access is poor and difficult.

Health: Previous Activities: The line departments have conducted some programmes on filtering water and personal hygiene.

Project Drinking Water Objectives: **To provide access to safe drinking water in selected project villages. To relieve the women from the burden of carrying water, and to favourably impact on health of the community.**

Project Drinking Water Strategy / approach: Drinking water as a community resource: not a private one. To make water accessible to ALL in the target villages. To utilise the existing natural resources of water (like springs). Repairs of existing infrastructure, wherever feasible.

Project Drinking Water Components: Retrofitting of the existing infrastructure;

Provision of fresh infrastructure in the form of pipelines, reservoirs, ringwells; Awareness about boiling water & storage.

Drinking Water Context: Every village has access to year round, natural source of water: be a stream or a dug well or a spring. However, this meant carrying it manually from the source to the homes.

Drinking Water Problems: Since the source of water (a spring or a ringwell) was at a distance, it meant severe hardship to carry water for all the household needs. Usually this was done by the women, and it resulted in time spent on this, as well as some back problems, and also in-sufficient quantity of water.

Drinking Water - Previous Activities: Line departments had made piped water supply in some of the villages, but by the time of the project start, it was in poor (often non-functional) condition in most of the project villages.

Project Sanitation Objectives: To improve sanitary conditions, keep the village environment free, to prevent diseases associated with poor sanitation.

Project Sanitation Strategy / approach: To provide LCL (low cost latrines) in partnership with the community Through NARM-Gs, by providing technical advice and funds; to generate awareness about safe drainage and kitchen waste management.

Project Sanitation Components: Low cost latrine; Habitat management (drainage and disposal of kitchen waste).

Project Sanitation Context: It has been the practice of villagers to go out in the open and defecate. Before the project intervention, there was no felt need to correct this practice. Only a few had built latrines before the project intervention.

Sanitation Problems: The old practice was a cause of spreading infections, and was also inconvenient, especially for women, at night or during the rains.

Sanitation – Previous Activities: None.

4.1 The analysis – health

HEALTH: Component I: Village Volunteer (FCC) Scheme

Criteria 1: Awareness of FCC	+ive aspects	-ive aspects	Unknown aspects
Indicators			
Persons who accessed services of FCC in FGD	A majority went to the FCC as first point of contact in one village About 5-6 out of 25 present in another village.	None in another	
Persons who have heard of them	Almost everyone in 1 village	A few people have heard of the FCC in another	

HEALTH: Component II: Health Camps & Awareness generation

Criteria 1: Impact on awareness generation	+ive aspects	-ive aspects	Unknown aspects
Indicators			
Participation	Over 300 attended		
Attendance by villagers	Very popular		
Incidence of illness	Malaria epidemics stopped. Several other improvements have been cited by villagers.		

(These tables are summaries. Detailed descriptions are available in Annexure 1)

The three main components of the project are awareness generation, training of community master trainers, and strengthening of the traditional medicine systems. These components were to be delivered through the chosen mechanisms of organising health camps, training of FCCs, and promoting medicinal gardens. In Tai-ik Pi, the health intervention has fared very poorly. The FCC is in Borpu-I, but no one had accessed her for advice; nor had she conducted any training in this village. In case of medicine systems and health, this was not even supported by the project. In Borgaon, the FCC was a useful contact for the villagers, but again, the project did not support any initiative for awareness generation or traditional medicines. In Arsong II a health camp was supported in 2007, but no FCC or traditional medicine was supported. In Malongkisir, the villagers prefer going to a private nurse rather than the FCC, and regular health camps have been held for the last 3 years. A traditional medicine garden has also been supported.

4.2 The lessons learnt and recommendations – health

The overall picture from the above analysis might seem to give a mixed picture, but if seen in the context of the health care access situation in Karbi Anglong, the project has failed in its primary objective of creating awareness. For example, rarely has the FCC (first contact carer), a master trainer, done her mandated task of training villagers in her cluster. Further, given its position, the project should be undertaking awareness generation in malaria prevention, as the people in the villages are frequently reeling under malaria epidemics. Yet, there is no awareness we encountered in the villages visited of simple prevention technologies – like elimination of breeding spaces. Given the extremely poor health access provided by the public health system, and the difficulties of poor communications and terrain, the project can do a lot more in preventing illnesses by empowering people with information – a function mandated for the project, and which it is eminently in a position to do.

The Invisible Impacts: Womenpower & Health

The Self Help Groups (SHGs) are predominantly a village collective of women to encourage them to take up small businesses and encourage the savings habit. Yet, SHGs end up doing a lot more than their mandate. For example, in the Kai Archim SHG in Putsari approached a doctor, Dr. Mahendra Das from Nelli, to help in organising a health mela 2006. The doctor contributed with medicines, finances, and his expertise. Over 700 patients attended the mela. Out of these, 70% tested positive for malaria. Obviously, there was a huge pent up demand for medical care which was unaddressed. Cleris Teronpi, the SHG Treasurer, was the force behind this effort, says: “since there is no doctor nearby, we discussed this in the group meeting and approached the Joint Director in Diphu”. Based on advice from the doctors at the mela, the SHG came back and installed dustbins in the village to inculcate a sense of cleanliness in the village.

Thus, SHGs are a platform for collective action for women rather than merely a forum for economic progress.

Courtesy: Rupsing Timung, Systematization group “SHGs & Women Empowerment”, 2007, Hamren.

The Invisible Impacts: The value of education

Perhaps the most interesting outcomes of the project are those that were not intended. In Arsong II, there was no school or any school building. The children, like their parents, had no access to primary education. But with the project starting its activities in 2003, a cadre of educated staff and project workers started visiting the village regularly. With exposure to an educated class, the villagers began valuing education, and got inspired to assert their right to educate their children. They lobbied aggressively with the line department to sanction a school building. By 2005, the village had a school building and today, all their children are going to school. As Kungri Beypi put it: "before the project interventions, we haven't thought of sending our children to school. But now we want our children to go to school. Before that we did not know the value of education".



School Building at Arsong II: Photo: Kailianlal Vaiphei

4.3 The analysis - sanitation

SANITATION Component I: Provision of Low Cost Latrines (LCLs)

Criteria 1:	+ive aspects	-ive aspects	Unknown aspects
Participation			
Indicators			
Usage of those who have LCLs	Nearly all those who have LCLs	Small children do not use.	
Ratio of participating households	A majority of the village has constructed LCLs at their own cost	About 35% of the village still remains uncovered.	Why allocated funds were diverted from this activity to electrifying the village is not clear
Upkeep of LCLs	In good condition		
Women Perspective	Feeling secure, appreciate the privacy.		
Criteria 2:	+ive aspects	-ive aspects	Unknown aspects
Impact on Sanitation			
Indicators			
Cleanliness of private spaces	Open areas as well as LCLs kept very clean		
Cleanliness of Public spaces	Cleanliness of the village improved		
Disease occurrence	Much lesser incidence of diarrhoea, ringworm.		
Criteria 1:	+ive aspects	-ive aspects	Unknown aspects

Sustainability			
Indicators			
Quality of Construction	Even after 6 years, still in good shape.	Pit not deep enough. Life of the LCL will be much shorter.	
Continuation after project completion	The 6 households which were formed after the LCL project completion in 2001 have all made LCLs with their own resources.		

SANITATION: Component II: Habitat Management (Drainage & Kitchen Waste)

Criteria 1: Impact on Cleanliness	+ive aspects	-ive aspects	Unknown aspects
Indicators			
Cleanliness of kitchen washing area	Generally very clean in one village	Lower cleanliness levels in another	
Presence of flies, stagnant pools of water	Negligible in 2 villages	Quite high in another village	
Cleanliness of kitchen washing area	Very clean		
Presence of flies, stagnant pools of water	Negligible		

(These tables are summaries. Detailed descriptions are available in Annexure 1)

The two main components of the sanitation programme of the project are provision of LCLs (low cost latrines) and habitat management. The LCL component has been a runaway success, so much so that several non-project villages are building them (see box: The Invisible Impacts: creating a need). Excepting for Borgaon, where construction is still going on, all indicators have been favourable. In Borgaon, the project funding per unit has been halved to Rs. 1000, so that critical compromises have been made of the quality. This may impact the sustainability of these LCLs.

Similarly, the habitat management – drainage and safe disposal of kitchen solid waste – shows up positively in the Project Description. However, it is not clear if this can be correlated to the project intervention, as each village seems to have its own overall standards of cleanliness which goes beyond the handling of solid and liquid wastes.

4.4 Lessons learnt – sanitation

Clearly, the success of the LCLs have important lessons. Though we have not investigated the reasons for this, a few features of the intervention are noteworthy:

- Fulfilling a felt need of the community
- Participatory decision making
- Partnership – an asset creation that requires contribution (in the form of labour) from the beneficiary.

The Invisible Impacts: Creating a need for low cost latrines (LCL)

One of first initiatives the project undertook in the social sector was the support for covered latrines with septic tanks. Before the project intervention, the common practice was to defecate in the open, in the 'jungle' a little distance away from home. This was not only a cause for increasing incidence of several infectious diseases, but also unsafe and inconvenient, especially for women. With the support for 19 villages in 2001, and another 41 in 2003, the project designed LCLs became a model for many other villages, outside the project villages.

So much so that during the present study, even those villages which did not get project support for LCLs had built their own LCLs with their own resources. In Arsong II, 30 out of 47 households have made their own latrines; again, in Tai-ik Pi, 27 out of 30 have made their own latrines. In Malongkisir, the 6 households which were not covered by the project funded LCLs in 2001, have all made latrines from their own resources. Says Sika Hansepi of Tai-ik Pi: "we used to be harassed by mosquitoes and leaches when we went into the open to defecate. The covered latrines are more hygienic, and healthier"



A LCL made with community's own resources in Arsong II

4.5 The analysis – drinking water

DRINKING WATER: Component III: Awareness about boiling water, using filters, etc.

Criteria 1: Impact on awareness generation	+ive aspects	-ive aspects	Unknown aspects
Indicators			
Usage of boiled drinking water	100% boiling for drinking in 1 village	None in two villages	
Number of people trained from the 2 villages		Probably no one	

DRINKING WATER: Component II: Provision of new infrastructure (pipelines/reservoirs)

Criteria 1: Equity	+ive aspects	-ive aspects	Unknown aspects
Indicators			
Coverage	100% in 1 village	Only 80 out of 126 households covered in	

		another	
Criteria 2: Quality of Access			
Indicators			
Reliability	Year round, round the clock		
Water Quality	good.		
Waiting time		There are queues during winter as flow is less.	
Criteria 3 Participation			
Indicators:			
Coverage	About 2/3rds of the village.		
Flexibility of project	Decision making was participatory – e.g. some villagers were allowed to chose between water & road		

There are two ways that drinking water access is approached in the project: by retrofitting existing but non-functioning infrastructure, and by installing fresh infrastructure. In the villages visited by us, no retrofitting was carried out though the possibility existed. All villages visited by us had good perennial sources close to the habitations, and 3 out of the 4 villages had been supported by the project. In case of Tai-ik Pi, the villagers opted out of drinking water in favour of electrification (see box on flexibility). All indicators for this activity are positive, and this intervention has been especially helpful to women, as it saves them the time and trouble of carrying water over distances, though some women miss the space when small groups of women met at the water source and exchanged gossip.



The second component is of creating awareness about boiling water before drinking. Out of the two villages visited, one felt this was not necessary as their water was of very good quality (Tai-ik Pi), and all people of Arsong II boiled water. The awareness created about this concept does not seem to have worked in the other two villages.

Project Flexibility: Participation in decision making

When the project was initiated in Arsong II, in 2004, a budget allocation was made for both water supply and LCLs. However, the village demanded that all funds be diverted to installing the water supply. Later, a new arrangement was worked out, again based on demand: some households wanted the option to choose between either a water connection or road access. It was the flexibility of the project which allowed this.

On the other hand, many times this flexibility may be in conflict with project objectives. For example, In Tai-ik Pi all the funding was spent on a single activity: providing electricity for the village, in 2004. With the budget getting exhausted in this single activity, no funds have been available for any other activity like water supply, LCLs, etc. though SHGs and NaRM-Gs was funded. Moreover, the village had no economic use of electricity planned when they demanded it.

4.6 The lessons learnt – drinking water

As with LCLs, the drinking water strategy of the project was very successful as it fulfilled a felt need of the community. In the absence of the line departments repairing their infrastructure, the project stepped in just in time.

4.7 Concluding remarks

Overall, the indicators exhibit a very positive outcome for the project project fares quite positively from the indicators, displaying responsiveness to the demands of the beneficiary community, and showing flexibility in its approach. Excepting for the health sector, there are few gaps between intention and execution.

5.1 Acknowledgements

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Describing the experience (village specific descriptions with indicators)

1. PROJECT VILLAGE: TAI-IK PI

Component I: Provision of Low Cost Latrines (LCLs)

Activities: Not project funded, as all the initial budget was spent on electrification of the village.

Materials/Resources: NA

Main Achievements: NA

Difficulties faced: NA

Unexpected Results: The village got exposure to the concept of LCL from other project and non-project villages, as well as awareness generation, got motivated into making their own LCLs, at their own cost. Today 30 out of 47 households have their own LCLs. Sika Hansepi: “ We used to be harassed mosquitoes, leaches, when we went to the open to defecate. So we decided to make our own covered latrines. Its more hygienic, and less diseases.” The village made LCLs use the same design as the project LCLs. Water is not a constraint. Some of the villagers, who have not made LCLs, continue to go to the jungle.

Criteria	1:	+ive aspects	-ive aspects	Unknown aspects
Participation				
Indicators				
Usage of those who have LCLs		Nearly all those who have LCLs	Small children do not use.	
Ratio of participating households		A majority of the village has constructed LCLs at their own cost	About 35% of the village still remains uncovered.	Why allocated funds were diverted from this activity to electrifying the village is not clear
Upkeep of LCLs		In good condition		
Women Perspective		Feeling secure, appreciate the privacy.		

Criteria 2:		+ive aspects	-ive aspects	Unknown aspects
Impact on Sanitation				
Indicators				
Cleanliness of private spaces		Open areas as well as LCLs kept very clean		
Cleanliness of Public spaces		Cleanliness of the village improved		
Disease occurrence		Much lesser incidence of diarrhoea, ringworm.		

SANITATION: Component II: Habitat Management (Drainage & Kitchen Waste)

Activities: Awareness created.

Materials/Resources: Not funded.

Main Achievements: Villagers following the recommended practices: using pits for kitchen waste, and drainage of liquid waste into the kitchen garden. Kitchen waste is also gathered in a place and burnt at regular intervals.

Difficulties faced: None.

Unexpected Results: None.

ANALYSIS:

Criteria 1: Impact on Cleanliness	+ive aspects	-ive aspects	Unknown aspects
Indicators			
Cleanliness of kitchen washing area	Generally very clean		
Presence of flies, stagnant pools of water	Negligible		

HEALTH: Component I: Village Volunteer (FCC) Scheme

Activities: Training of village volunteer as health advisors.

Materials/Resources: training provided by KACRMS.

Main Achievements: An FCC volunteer from a nearby village (Borpu-I) was trained for this function.

Difficulties faced: Very rarely anyone even aware of this person in Taik Pi.

Unexpected Results:

ANALYSIS:

Criteria 1: Awareness of FCC	+ive aspects	-ive aspects	Unknown aspects
Indicators			
Persons who accessed services of FCC in FGD		none	
Persons who have heard of them		A few people have heard of the FCC	

HEALTH: Component II: Strengthening of traditional medicine systems

Activities: Not supported by project in this village.

Materials/Resources: No funding.

Main Achievements: NA

Difficulties faced: NA

Unexpected Results: NA

HEALTH: Component II: Health Camps & Awareness generation

Activities: No health camp organised by project nearby.

Materials/Resources: NA
 Main Achievements: NA
 Difficulties faced: NA
 Unexpected Results: NA

DRINKING WATER: Component I: Retrofitting of existing infrastructure

Activities: Not project initiated
 Materials/Resources: NA
 Main Achievements: NA
 Difficulties faced: NA
 Unexpected Results: NA

DRINKING WATER: Component II: Creating New Infrastructure like pipelines/reservoirs/ringwells

Activities: Not project initiated
 Materials/Resources: NA
 Main Achievements: NA
 Difficulties faced: NA
 Unexpected Results: Villagers very happy with the springs/wells they have made themselves, and do not want a piped supply. Moreover, the village is proposing to make 3 ringwells with their own funds.

DRINKING WATER: Component III: Awareness about boiling water, using filters, etc.

Activities: Training programmes of selected NaRM-G & SHG members. Not known if Tai-ik Pi participated.
 Materials/Resources: Cluster Training Programme.
 Main Achievements: Awareness generation.
 Difficulties faced:
 Unexpected Results: villagers aware but not boiling water as they believe the water quality is very good. All people use muslin filter.

ANALYSIS:

Criteria 1: Impact on awareness generation	+ive aspects	-ive aspects	Unknown aspects
Indicators			
Usage of boiled drinking water		None	
Number of people trained from this village		Probably no one	

Project Village: BORGAON, Amri Block.

SANITATION: Component I: Provision of Low Cost Latrines (LCLs)

Activities: Provision of LCLs to a part of the village by a grant & technical assistance.
 Materials/Resources: Grant of Rs. 63,000/-
 Main Achievements: Still under construction

Difficulties faced: Because of the low budget of Rs. 1000 per LCL, they have had to sacrifice quality: the pit is not deep enough.

Unexpected Results:

Criteria 1: Sustainability	+ive aspects	-ive aspects	Unknown aspects
Indicators			
Quality of Construction		Pit not deep enough. Life of the LCL will be much shorter.	

SANITATION: Component II: Habitat Management (Drainage & Kitchen Waste)

Activities: Awareness created.

Materials/Resources: Not funded.

Main Achievements: Villagers following the recommended practices: only some are using pits for kitchen waste, and drainage of liquid waste into the kitchen garden. Many gather kitchen waste and burn it periodically.

Difficulties faced:

Unexpected Results: None.

ANALYSIS:

Criteria 1: Impact on Cleanliness	+ive aspects	-ive aspects	Unknown aspects
Indicators			
Cleanliness of kitchen washing area		Lower cleanliness levels	
Presence of flies, stagnant pools of water		Quite high	

HEALTH: Component I: Village Volunteer (FCC) Scheme

Activities: Training of FCC.

Materials/Resources: Training of FCC.

Main Achievements: One person trained from the village

Difficulties faced:

Unexpected Results:

ANALYSIS:

Criteria 1: Awareness of FCC	+ive aspects	-ive aspects	Unknown aspects
Indicators			
Persons who accessed services of FCC in FGD	A majority went to the FCC as first point of contact		
Persons who have heard of them	Almost everyone		

HEALTH: Component II: Strengthening of traditional medicine systems

Activities: Not supported

Materials/Resources:

Main Achievements:

Difficulties faced:

Unexpected Results:

HEALTH: Component II: Health Camps & Awareness generation

Activities: No health camp nearby.

Materials/Resources:

Main Achievements:

Difficulties faced:

Unexpected Results:

DRINKING WATER: Component I: Retrofitting of existing infrastructure

Activities:

Materials/Resources: Rs. 70,110/-

Main Achievements: Construction of two Community Hall.

Difficulties faced:

Unexpected Results:

DRINKING WATER: Component II: Provision of infrastructure

Activities: Pipelines & reservoirs.

Materials/Resources: Grant of Rs. 75,580/-

Main Achievements: Community access points created. 80 out of 126 households are able to access. The others have another source, a stream.

Difficulties faced: The other 46 households were geographically distanced.

Restricted budget, so only 80 households covered.

Unexpected Results:

ANALYSIS:

Criteria 1: Equity	+ive aspects	-ive aspects	Unknown aspects
Indicators			
Coverage		Only 80 out of 126 households covered.	

Criteria 1: Quality of Access	+ive aspects	-ive aspects	Unknown aspects
Indicators			
Reliability	Year round, round the clock		
Water Quality	Quality is good.		
Waiting time		There are queues during winter as flow is less.	

DRINKING WATER: Component III: Awareness about boiling water, using filters, etc.

Activities: Training programmes of selected NaRM-G & SHG members. Not known if Borgaon participated.

Materials/Resources: Cluster Training Programme.

Main Achievements:

Difficulties faced:

Unexpected Results: villagers aware but not boiling water as they believe the water quality is very good. All people use muslin filter.

ANALYSIS:

Criteria 1: Impact on awareness generation	+ive aspects	-ive aspects	Unknown aspects
Indicators			
Usage of boiled drinking water		None	
Number of people trained from this village		Probably no one	

PROJECT VILLAGE: ARSONG II

SANITATION: Component I: Provision of Low Cost Latrines (LCLs)

Activities: Not project supported

Materials/Resources:

Main Achievements:

Difficulties faced:

Unexpected Results: Made with own resources.

SANITATION: Component II: Habitat Management (Drainage & Kitchen Waste)

Activities: Not project supported

Materials/Resources:

Main Achievements:

Difficulties faced:

Unexpected Results:

HEALTH: Component I: Village Volunteer (FCC Scheme)

Activities: Not supported for this village

Materials/Resources:

Main Achievements:

Difficulties faced:

Unexpected Results:

HEALTH: Component II: Strengthening of traditional medicine systems

Activities: Not supported by project

Materials/Resources:

Main Achievements:

Difficulties faced:

Unexpected Results: Most villagers practising for some specific ailments/conditions, like snake bites, stomach ache, jaundice, etc.

HEALTH: Component II: Health Camps & Awareness generation

Activities: A health camp held in 2007.

Materials/Resources: Funded by the Health department.

Main Achievements: Health camp with testing and consulting facilities, free medicines,

Difficulties faced:

Unexpected Results:

Criteria 1: Impact on awareness generation	+ive aspects	-ive aspects	Unknown aspects
Indicators			
Participation	Over 300 attended		

DRINKING WATER: Component I: Retrofitting of existing infrastructure

Activities: Not supported

Materials/Resources:

Main Achievements:

Difficulties faced:
Unexpected Results:

DRINKING WATER: Component II: Provision of pipelines to enable access

Activities: Access through pipelines.

Materials/Resources: Rs. 175,600/-

Main Achievements: 30 out of 47 households. Rest opted to use funds for road construction.

Difficulties faced:

Unexpected Results: Flexibility in project approach, in allowing villagers to opt for either water access or road construction.

ANALYSIS:

Criteria 1:	+ive aspects	-ive aspects	Unknown aspects
Indicators: Participation			
Coverage	About 2/3rds of the village.		
Flexibility of project	Decision making was participatory – e.g. some villagers were allowed to chose between water & road		

DRINKING WATER: Component III: Awareness about boiling water, using filters, etc.

Activities: Awareness generation through NaRM-Gs, SHG meetings.

Materials/Resources:

Main Achievements:

Difficulties faced:

Unexpected Results:

ANALYSIS:

Criteria 1: Impact on awareness generation	+ive aspects	-ive aspects	Unknown aspects
Indicators			
Usage of boiled drinking water	100% boiling for drinking		
Number of people trained from this village		None	

PROJECT VILLAGE: MALONGKISIR

SANITATION: Component I: Provision of Low Cost Latrines (LCLs)

Activities:

Materials/Resources: Budgeted. Amount Rs. 63,950/-

Main Achievements: 30 households out of 36.

Difficulties faced:

Unexpected Results: No provision for new households. Once a project is completed, no continuous process provide for newer households. In this case, the 6 households that did not get LCL support came up only after LCL project completion. The 6 households made the LCLs with their own funds.

Criteria 1: Sustainability	+ive aspects	-ive aspects	Unknown aspects
Indicators			
Quality of Construction	Even after 6 years, still in good shape.		
Continuation after project completion	The 6 households which were formed after the LCL project completion in 2001 have all made LCLs with their own resources.		

SANITATION: Component II: Habitat Management (Drainage & Kitchen Waste)

Activities: training & one time financial support

Materials/Resources: Rs. 775/-

Main Achievements: Every household is practising Habitat management.

Difficulties faced:

Unexpected Results:

ANALYSIS:

Criteria 1: Impact on Cleanliness	+ive aspects	-ive aspects	Unknown aspects
Indicators			
Cleanliness of kitchen washing area	Very clean		
Presence of flies, stagnant pools of water	Negligible		

HEALTH: Component I: Village Health Volunteer (FCC) Scheme

Activities: Training of FCC from same cluster (Umraji)

Materials/Resources: Small grants one time (Rs. 1500), plus for livestock Rs.1750/-

Main Achievements: Awareness programmes, training of villagers.

Difficulties faced:

Unexpected Results: Another nurse (private) is also operating in the area, and villagers prefer going to her.

ANALYSIS:

Criteria 1: Awareness of FCC	+ive aspects	-ive aspects	Unknown aspects
Indicators			
Persons who	About 5-6 out of 25		

accessed services of FCC in FGD	present.		
Persons who have heard of FCC	Almost everyone		

HEALTH: Component II: Strengthening of traditional medicine systems

Activities: Medicinal garden. Maintained by SHG.

Materials/Resources: Rs. 1000/- (traditional medicine).

Main Achievements:

Difficulties faced: Impulse to go for modern medicine when ill.

Unexpected Results:

HEALTH: Component II: Health Camps & Awareness generation

Activities: 3 health camps in the last 3 years, in the cluster.

Materials/Resources: Health Dept. funded the programme.

Main Achievements: Doctors, nurses, free medicines distributed. Esp. for malaria.

No epidemic after the project.

Difficulties faced:

Unexpected Results:

ANALYSIS:

Criteria 1: Impact	+ive aspects	-ive aspects	Unknown aspects
Indicators			
Attendance by villagers	Very popular		
Incidence of illness	Malaria epidemics stopped. Several other improvements have been cited by villagers.		

DRINKING WATER: Component I: Retrofitting of existing infrastructure

Activities: Not supported.

Materials/Resources:

Main Achievements:

Difficulties faced:

Unexpected Results:

DRINKING WATER: Component II: Provision of new infrastructure to enable access

Activities: Access from source (stream) to access points, usually very close to their homes.

Materials/Resources: Rs. 497,611/-

Main Achievements: 36 out of 36 have got coverage

Difficulties faced:

Unexpected Results:

Criteria 1: Quality Access	+ive aspects	-ive aspects	Unknown aspects
Indicators			

Reliability	Year round, round the clock		
Water Quality	Quality is good.		
Coverage	100% coverage		

DRINKING WATER: Component IV: Awareness about boiling water, using filters, etc.

Activities: Not Supported.

Materials/Resources:

Main Achievements:

Difficulties faced:

Unexpected Results:

Field Checklist

1. DRINKING WATER

Drinking water objectives of KACRMS: To provide access to safe drinking water in selected project villages. To relieve the women from the burden of carrying water, and to favourably impact on health of the community.

Strategies/Approach: Drinking water as a community resource: not a private one. To make water accessible to ALL in the target villages. To utilise the existing natural resources of water (like springs). Repairs of existing infrastructure, wherever feasible.

Indicators to assess progress:

1. Time to fetch water
2. Reliability of access: availability thru the year, thru a day
3. Quality of water
4. Condition of the infrastructure
5. Proximity to all homes - Equitable access
6. Specific impact on women's health/time

Specific questions for discussions with the community:

1. What is the source of your drinking water?
2. How long does it take to fetch water from the source?
3. What is the distance from your home to the source? Is it very far?
4. After easier access (if at all), is there any impact on women's health?
5. After easier access (if at all), is there any impact on the time spent by women on fetching water?
6. Do you get water regularly? Throughout the year? Through the day?
7. After easier access, is there any impact on cleanliness?
8. Does easier access mean availability of water for home gardens?
9. Are there Qs? Conflicts over water?
10. In what condition is the reservoir/ringwell/pipelines. Are there frequent breakdowns?
11. What is the quality of water? Does it need to be boiled?
12. Do you boil water before drinking?
13. Do you have cases of jaundice, other water borne diseases?
14. How do you store water at home?
15. Any other sources of water?

2. SANITATION:

Sanitation objectives of KACRMS: To improve sanitary conditions, keep the village environment free, to prevent diseases associated with poor sanitation.

Strategies/Approach: To provide LCL (low cost latrines) in partnership with the community Through NARM-Gs, by providing technical advice and funds; to generate awareness about safe drainage and kitchen waste management.

Indicators to assess progress:

1. Actual Usage of LCL. Conditions of the built LCLs – maintenance, etc.
2. Percentage of coverage in target villages.
3. Change in overall sanitation conditions.
4. Awareness of Habitat management concepts.
5. Gender perspective on sanitation, LCLs, etc.
6. Incidence of sanitation specific diseases: ringworm, scabies, gastroenteritis.

Specific questions for discussions with the community:

1. Has LCL created additional demand for water?
2. How are LCLs being used – with water or some leaves/wood shavings, etc.
3. How many of those who have LCLs using them?
4. Is maintenance happening – what is the condition of the LCLs. If they are not being maintained, why?
5. After about 5 years, do you feel it was worth it? Or would you have preferred the earlier method? Why?
6. How many of the village households have got LCLs (percentage/numbers)
7. Preference of different family members – children, teenage children, male/female, adults, very old people.
8. How do you dispose off kitchen waste? What is the drainage system?
9. What is the degree of awareness of the Habitat management concept?
10. Have LCLs had a +ive health impact? Or negative? Or any unexpected result?
11. Have the incidence of ringworm, scabies, gastroenteritis gone down significantly?
12. What is the overall impact of better sanitation on the health of the women in particular, and the community in general?

3. HEALTH:

Health objectives of KACRMS: To provide a preventive infrastructure for better health: safe sanitation and drinking water. In addition, to understand the health problems of the project villages, and use that understanding to help the villages with information and to provide a network of village volunteers who can guide the villagers with medical advice.

Strategies/Approach: To conduct occasional health camps which would generate awareness, and also provide medical relief, especially to women. To strengthen the capacity of the traditional healer. To provide sanitation facilities. To create a cadre of village volunteers, by training them in health issues. To provide safe drinking water to as much of the project villages as possible.

Indicators to assess progress:

1. Effectiveness of health camp, esp. on women – awareness, specific benefits
2. Effectiveness of the FCC in health – access, awareness, quality of advice.
3. Impact of Sanitation programme on health.
4. Impact of Drinking water programme on health.
5. Role of the traditional healer.

Specific questions for discussions with the community:

1. What do you do when you have illness? Who do you go to?
2. How far is a health centre/chemist from your home? How do you go there?
3. What are the most frequent diseases you faced in your day to day life?
4. Have you heard about the Village Volunteer? Do you think the Volunteer provide you the guidance on good health services?
5. When was the last Health Camp held near your village? Did anybody of you went there? Did you find it useful? If yes, What did you find?
6. Has the sanitation programme has made any difference to your health?
7. When you are going to traditional healer and when you are going to Doctor?
8. Which one out of these two is better according to your opinion?
9. What are the external support you require to strengthen the capacity of the traditional healer so that he/she can give better services to you?
10. What do the women do in their child delivery time for getting medical support?
11. Do you have medicinal gardens?

ANNEXURE III

TECHNIQUES FOR DATA COLLECTION:

Field Study

1. Focus Group discussions
2. Transect walks for observation and discussions
3. Home visits during transect walks.
4. Observation
5. Intensive one to one interviews or small group (2-3) discussions.
6. Village Mapping.

Secondary Sources

1. Village Action Plan
2. Status Report
3. Baseline Survey

Processes at Village level

1. Introduction and Ice Breaking
2. Briefing on purposes of our visit – ‘Coming here for learning’
3. Information about this project – about their likes, dislikes, their experiences,
4. Picking up Social Sector issues –
 - a. About LCL/sanitation
 - b. About Drinking Water
 - c. About Health-care access
5. One or two family visit for knowing their story on –
 - a. Changing life due to project
 - b. Gain or loss in the project
 - c. Increased / Decreased income (livelihood)
6. Focus Group Discussion among men and women to know –
 - a. What are the Gender discrimination they faced earlier and now ?
 - b. Any improvement in their social status/social security?
 - c. What are the Group Action the women has started to do?
 - d. For getting income
 - e. For Social Benefit
 - f. Transact Walk for getting overview of village physical structure and boundary?

Profiles of villages

Tai-ik Pi Village:

The village Tai-ik Pi is under Tika cluster. The total geographical area is approximately 1400 bighas. It is located between Hamren sub-division and Baithalangso (8 km). The people of the village are Karbi and language is Karbis with the population of about 163, male – 29, female – 32 and children – 37. The village has one L.P. School with 2 teachers. None of the villagers are employed in govt, semi govt, private and their main source of income is wages/labour (in terms of money) and also selling product crops. Every household from village are depending on agricultural from jhum, wet terrace and kitchen garden. The main crops cultivated are paddy, maize, pumpkin, til and lemon. Approximately 80% of them are depending on jhum cultivation and jhum cycle is 5 years. Some of the fruits and vegetables cultivated from the villages are jackfruits, mango, arecanut, papaya and ladies finger. The villager are mainly depends upon stream and open well. And the main diseases occur in the village are malaria, dysentery and gastric.

Borgoan Village:

It is under Borgoan cluster. The total geographical area is about 500 ha. The village is divided into two parts i.e. Borgoan-I and Borgoan-II. Villagers are all Karbis and their main livelihood is from rubber plantation which was handed over to the villagers in 2005. To look after rubber product, they have committee members to run and business and distributed money generated. Some of the other plantations are bamboo, tea, broom, pine apple, chilly, banana, beans and ginger. Practices of jhum in the village is less in term of area. Jhum cultivation is mixed cropping system. The village had water supply provided from PHE in 1975, due improper maintenance of the pipeline, the system in the unusable from 2000. After the project intervention, due to the less amount of funds, they manage to get from nearer source with water reservoir in three part of the village. The villager also has *Terank* (club) especially for youth boys, and girls and women are not allowed to enter. This place is used for meeting, gathering, etc. The village also have village road provided by the PWD. The project initiated LCL and gives to Borgoan-I which most of them are under construction. One SHGs member Konica Katharpi said “The project have help us a lot especially in giving aware about the meaning of meeting, we now used to attend meeting and have courage to talk, and now have the guts to talk with the outsiders”.

Arsong-II Village:

Arsong-II village is under Rongehidi cluster. It is 25 km distance from Hamren town (in short-cut) and 12 km from Jengkha. The PWD kutchra road passes through the middle of the village. There are enough land for permanent jhum cultivation and the soil is very fertile but due lack of awareness practiced only shifting jhum cultivation. Wet terrace is practice after the intervention of project. They also came to know about selling of vegetable in the market. Traditional medicine especially wound, snake bites, gastric problem, etc is well known by the villagers. But for pregnant women prefer more the modern doctor. The project funds were utilized in road construction, drinking water, raring animal, etc. 17 household do not have LCL.

Malongkisir Village:

It is one the village of Chinthong cluster which is the oldest cluster. The breath of the village is about 3 kms with the length of about 6 kms. Its is located about 101 km from Hamren sub-division. The community of Malongkisir has no access to market, health, credit and other basic welfare facilities. The nearest centre for marketing, medical treatment, banking etc is Umpanai and Ulukunchi. There are 36 household with approximate population of about 200 people. Main cultivations are rice, broom, patchouli, pineapple, orange and bamboo. They don't have other source of income besides agriculture and livestock. 70% of the population depends on jhum for their livelihood. 90% of the community is below poverty line. The literacy rate of women is 20% only. In spite of poor connectivity (un-metal road) are very bad, the project intervention have great change in the area like improvement of cleanliness, having water supply almost to each household, better management of land use, and as a cluster they had vehicle purchase by loan.

SHIFTING CULTIVATION AND FOOD SECURITY: A study from NERCORMP-IFAD Project Villages of Karbi Anglong District, Assam

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INTRODUCTION

“Food Security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life.” World Food Summit, Rome. (1996).

Food security may be defined as availability of food through improving production at individual household level, enhancing the income through alternative sources and easy access to nutritious food for sound health and development.

“Till 2000AD the people lived in hand to mouth situation. The daily wages was half kg rice. There was not a single family where their produce (rice) could last throughout the year, and had to go to neighbouring *Nepali* community frequently, for borrowing maize as they did not have the purchasing capacity. Even for borrowing, they had to be accompanied by a guarantor for assured repayment, and that too, a GB only. The villagers had no idea of preserving rice for the lean period, and they usually sold their whole produce in the form of flat rice for the procurement of their daily needs like salt, kerosene, cloth etc. Cash crop production was unknown. When in 1999 AD Bosco Reach Out (BRO) surveyed the village for IFAD intervention, and in 2000 AD IFAD project started its implementation works in this poor remote village.” *Franchis Enghee (Village Gaon Bura, Mujong Village)*.

Communities have their own perception of food security. The present study has been done in 6 sample villages out of 162 villages where NERCORMP-IFAD is working in Karbi Anglong District.

BRIEF BACKGROUND OF IFAD-NERCORMP PROJECT

North Eastern Region of India enjoys rich natural resource base and biodiversity hotspot compared to other part of the country. But the region is not being systematically harnessed to generate wealth as a result of which the region is being considered backward. In deed many of the communities, particularly those living in the upland areas, continue to suffer with poverty and hunger. Shifting cultivation

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remains one of their main livelihood occupations. Against this back drop and in order to initiate a development, the North Eastern Region Community Resource Management Project for Upland Areas (NERCORMP) was launched since 1999 in three states of North East, viz., Assam, Meghalaya and Manipur with two districts each. In Assam Karbi Anglong and North Cachar Hill district is included in NERCORMP. The main interventions of the project are:

- Community institution building
- Livelihood improvement
- Health & Education
- Village infrastructure development
- Natural Resource Management & Biodiversity Conservation.

OBJECTIVE OF THE STUDY

The main objective of the present study is to assess and evaluate how the various interventions implemented by the project have changed the pattern of Jhuming and its implication on food security. The question we are asking is 'Can this changes sustain'?

METHODOLOGY

Following the process of Systematization, a 4-member team was formed to conduct field study that spans over a period of 3 consecutive days, covering 2 villages in a day. Prior to field visit, an orientation exercise was held for planning of field work and data collection, division of responsibility within the group, preparation of checklist for data compilation in the field, preparing a framework for report writing supplemented by secondary data for final presentation. The whole exercise spanned over a period of 10-days. A wide range of parameters that includes household numbers involved in Jhum, wet terrace before and after the project intervention, various IGA taken up through the project intervention, background and living condition of the people, forest resources particularly NTFPs contributing to food security, increase in production and productivity, variety of crops, improved tools and techniques and design support were identified as key indicators. The focus of the study is to assess and document the transformation process of the community on food security through the project intervention.

PURPOSE OF THE STUDY

KACRMS has been extending financial assistance to different project villages in the district. A good amount of the fund was channelized to different villages on Jhuming, Biodiversity conservation, Fallow management and various activities on IGA so as to improve the economic well being of the tribal communities (the Karbis and Tiwa) of the district. The various IGA activities taken up by the project includes both on-farm and off-farm activities. Also crop intensification and diversification has been taken up in different project villages which in turn further replicated to other non project villages in the district. To assess and evaluate the progress and changes brought about through project interventions, a documentation was carried out using "systematization" process as popularized by ENRAP.

VILLAGE PROFILE

Mujong: The village is 23 km towards south of Hamren (sub-divisional HQ), with 29 household and population 152 under Chinthong Development Block,

Hamren sub division, Karbi Angling, Assam. The major sources of food security other than rice is through the production and sale of ginger.

Umpho: The village is situated 28 km from Hamren with 28 household and population of 131 under the Chinthong Block of Hamren sub division, Karbi Anglong, Assam. The main food crop production is rice; important cash crop is ginger.

Mulokbong: The village is situated 25 km east of Hamren and the village has got 21 household with population 101 under Rongkhang Development Block of Hamren sub Division, Karbi Anglong Assam. Besides paddy, the village produce Patchouli, an aromatic plant from which cash income is generated.

Longpai-IV: The village is situated 27 km west of Hamren with 18 household and a population of 97 under Chingthong Development Block, Hamren sub Division, Karbi Anglong, Assam,

Natdral: The village is situated 80 km north of Hamren with the 52 household and population of 280 under Amri Development Block of Hamren sub Division, Karbi Anglong Assam. Its major sources of food security is rice and chilli production.

Khawrwkrai: The village Khawrakrai is situated 75 km away from Hamren towards north with 55 household and population of 302 under Amri development Block of Hamren Sub Division, Karbi Anglong, Assam. The major crop other than rice is chilli.

LAND HOLDING SYSTEM

Traditionally land belongs to the village community with the Gaon Bura (GB) as the traditional head. Prior permission of the GB is required for cultivation of *jhum* land. At present, however, in case of perennial crop cultivation (eg. Broom, Pineapple, Bamboo & Gomari) the land is owned by the cultivator with prior permission of the GB. But, if the plant density is very scarce, then the land will not belong to that individual. As for the Tiwa tribe, the land traditionally belongs to an individual. Both the tribes do not have *patta* in *jhum* lands, except for permanent cultivation and residential areas. In Mulokbong village under Rongkhang Block, the land is distributed to every household and every piece of land is registered with the government. Now with the decreasing land area for *jhum*, people are becoming aware for the need to occupy larger areas for their future need, since lands are being converted to permanent plantation, growing of commercial crops and home gardens.

KEY FINDINGS OF THE FIELD WORK

- Overall area of *jhum* has visibly reduced
- Food security of the people has been improved.
- The area under cash crops has increased dramatically.
- The pattern of cultivation is becoming more organized than before.
- There is enhanced natural resource base.
- Overall economic, ecological and social security of the communities has increased.

JHUM

Jhum has been the traditional source of livelihood, though it could not meet the yearly food requirement. Therefore, to compensate their livelihood requirement they were dependent on alternative sources of food collected from nearby forest like jack fruit, tapioca, wild yam, bamboo shoot etc. On the other hand, *jhum* was deeply rooted in the traditional socio-economic and religious lives of these tribal communities. *Jhum* is practiced for a period of one to two years in a particular plot of land, after that they shift to a new plot. Main crop are rice, maize, sesame, chilly, pumpkin, colocasia, cucumber, beans, yam.

Table 1: Status of *Jhum* and productivity

Name of the village	Total number of Household	No of family practicing <i>jhum</i>		Individual Area (Bigha) average.		Production per unit <i>bigha</i> in mon (rice) Average	
		Before project	Now	Before	Now	Before	Now
Mujong	29	29	4	3-4	1-2	4-5	5-7
Umpho	28	28	Nil	5-6	Nil	-	-
Mulokbong	21	21	8	4-5	2-3	3-4	4-5
Longpai-IV	18	16	11	2-6	1-2	4-5	5-6
Khawrakrai	55	40	40	3-5	3-5	3-4	2-2.5
Nadtral	52	52	52	4-5	5-6	4-5	4-5

*Source: Personal interview.

Jhum area has reduced drastically (Table 1.), except in Nadtral and Khawrakrai of Amri Block, where the area remains almost constant, due to the increase in productivity by incorporating plants like broom grass, bamboo and lac. *Jhum* area per person has also reduced because of other activities like wet rice cultivation, homestead gardens and growing of commercial crops like ginger, pineapple, chillies, and also with the plantation of crops like broom grass, bamboo and cinnamon. Cultivation of chillies as a commercial crop in *jhum*land is being taken up in Khawrakrai and Nadtral village. Overall, though there is presence of *jhumias*, but most of them have wetland terrace for rice cultivation for their food requirement. Homestead gardens, which were little known, is practiced by almost all the households now. Mostly rice is intercropped with broom grass and bamboo in the *jhum* field. As the cycle of shifting cultivation moves on, the area under broom grass is increasing, as it is giving 8-10 times more cash returns than rice (Table 2.). In due course of time as the area of broom grass increases, the area under food production may decrease due to scarcity of land. Though the income may be more, sustainability of the land has to be taken into account in the near future. Almost all the plantation such as broom grass, bamboo, cinnamon, is being taken up along with *jhum*, so that income starts in the following year. Low productivity is still a challenge in *Jhum* areas.

BUSINESS IS HOT

"I know about what Food Security means. I was still small and my sister was a baby, when my father died. My mother raised us as best she could. I still remember those days, when we had to have only pumpkin and bamboo shoots each year for two to three weeks due to shortage of rice. Like us there were other families too. But now we have enough food available round the year. Last year itself I got Rs.15,000/- (net income) from selling 1.5 tons of chillies, in addition to *jhuming* and rearing cattle".
Mitharam Maslai (*Khwarakai village*)

I am RICH

Mr Samsing Teron (*Mujong village*) was a very poor man. Life was not in his favour that his house was burned to ash twice by accident. By that time, IFAD project started functioning in their village, and he could avail a loan of Rs.5000/- for terracing. In the first year he cultivated ginger along with turmeric, and got a bumper harvest. He sold his produce and kept some for seed purpose for the next season. The next year also, he cultivated ginger, and in new terrace took up agroforestry of pine-apple and lemon. This way he could get a regular additional harvest each year from the same plot, and within a three years period, he bought an AUTO RICKSHAW. This helped him to carry at least 500-600 nos of pine-apple whereby he earns around Rs.2000/- to 2500/- a week during the peak season of pine-apple, in addition to other sources of income. He now calls himself "RICH".

Table 2: Comparison on investment and return for rice and broom grass

RICE	BROOM GRASS
<ul style="list-style-type: none">• Input in seed, personal time, weeding @ Rs.2,000/- <i>bigha</i>• Yield = (maximum) 7 mon = 280 kg/<i>bigha</i>• Price (paddy) = (maximum) Rs.7500/ton	<ul style="list-style-type: none">• Total cost for collection of seed and sowing per hectare (7.5 <i>bigha</i>) is Rs.2,000/-• Yield = (minimum) 1 ton/<i>bigha</i>• Price (broom) = (minimum) Rs.10,000/ton

JHUM MODIFICATION AND FALLOW MANAGEMENT

The jhum cycle is remaining constant at 6-7 years since the inception of the project, though the *jhumia* families are less in numbers, because the family cultivates the land in cycle within an area allocated to them. Also, they depend not on *jhum* alone, but also other sources of livelihoods such as Wet Rice Cultivation, homestead garden, besides earning through daily wage labour. Fallow management was virtually unknown. (Now cash crops such as broom grass, bamboo, bay leaf, cinnamon, and gooseberry are being grown as part of jhum

management). There is no production from fallow land of one or two years. Training on jhum and fallow management was given with income and expenditure analysis, inflow outflow analysis, land capability classification etc to show what could be produced in the fallow land after harvest of main crop. The villagers were advised to plant some leguminous plant like Pigeon-pea and Drumstick. But this practice is not followed by all the village. In Nadtral and Khawrakrai where pigeon pea is grown as a host plant for rearing insect producing Lac. Cash crops like broom, cinnamon and bamboo are grown in the jhum plot as a mixed crop, so that the next year they could harvest the crop as an additional income from the fallow land. Now all the brooms for the market are from the cultivated plot only, and collection of wild broom is negligible. Besides, they harvest Bamboo within 4-5 year after jhum and Cinnamon in the 6th year onwards. These activities on the fallow land give an additional income

Food for thought

John Engty, (70 year) of *Mujong village* narrates about how before the project intervention in the village, not a single household in the village had enough food to last throughout the year. Therefore during months of food scarcity the villagers went to nearby forest to collect rootstock of *Dioscorea* (Yam) and tapioca for food. However with the implementation of the project in the village, every member of the village could avail loan to take up various activities like piggery, goatery, weaving, ginger cultivation, etc. thereby helping many families to sustain food throughout the year.

for their livelihood. Soil and moisture conservation practices during shifting cultivation are not much being adopted. Even the trees that are felled and burnt are left lying. These logs/wood/poles/firewood cannot be marketed due to transport constraints. It can neither be taken, as firewood for domestic use as it is easily available in the village surroundings.

WET RICE CULTIVATION

Wet rice cultivation is one of the major trust areas in the project by which pressure on forest can be reduced. Farmers were encouraged to expand the wet rice area with grant ranging from Rs.2000-2500/- per bigha as labour support for new wet terrace development. Irrigation water is mostly available from nearby water source. Rice grown in wet terrace gives an average yield of 10-12 mon per bigha of land, whereas in case of jhum land it is 5-6 mon per bigha. Here, the labour cost is more, but the returns per area is almost double that of the yield from jhum. Variety of crop is not found, but is made available from the homestead gardens. Terrace rice cultivation is the major factor that brought about the reduction in *Jhum* in these areas. As of now, the expansion of wet rice cultivation is becoming less, which is partly due to less availability of proper land area for development of wet terrace and partly because higher income is generated through growing of crops like broom grass, bamboo and chilly than income from wet rice cultivation.

Table 3 : Status on area and production of WRC

Village	Total number of household	No of household practicing WRC		Area (Bigha).		Production per unit bigha in mon(rice) Average	
		Before project	Now	Before	Now	Before	Now
Mujong	29	16	25	1-2	3-4	4-5	5-7
Umpho	28	13	28	3-4	4-6	10-11	11-12
Mulokbong	21	3	6	1-2	2-3	7-8	10-12
Longpai-IV	18	12	14	2-10	2-15	7-8	8-9
Khawrakrai	55	13	16	2-6	6-10	6-8	8-10
Nadtral	52	10	17	2-6	3-5	8-9	10-12

*Source: Personal interview.

HOMESTEAD GARDEN

The main objective of developing home garden is to cultivate some vegetable crop grown in jhum fields to meet their daily consumption, to reduce pressure on jhum and also act as a source of increased income. Almost all the houses have their surroundings uncultivated. Therefore different horticultural crops can be grown besides saving their time and also meet some of their requirements. At present farmers are growing vegetables in their home gardens. Previously the produce sold in the market was less. But now, with more production, farmers are selling their produces to nearby markets, while also meeting their varied needs. There is a trend of homestead gardens areas expanding each year and also the income from it, not taking into account the produce consumed domestically. The project encourages locally available resources and therefore transfer of technology for scientific method of cultivation was easier. Adoption of modern technique of cultivation of crops like

pine-apple, ginger, broom grass, papaya etc is being practiced, which brings in more cash returns.

Table 4. Some source of income from Home gardens

Village	% of households practicing home garden	Approximate Area per household	Major crops (Common to all the villages)	Average annual Income(Rs)/ household
Mujong	80	1kothaa-1bigha	Pumpkin, Mesta, Colocasia, Brinjal, Ladiesfinger, Spine gourd, Bitter gourd, Papaya, Mustard, Mustard leaf, Beans etc.	1000-6000
Umpho	75	0.5-1 bigha		2000-4000
Mulokbong	75	0.5 bigha		2000-4000
Longpai-IV	60			
Khawrakrai	55	1kothaa-0.5 bigha		3000-10000
Nadtral	80	0.5-1bigha		5000-20000.

Source: Personal Interviews

6. FOREST:

From time immemorial the Karbi and Tiwa people are dependent on forest resources for food, fodder, fuel wood etc. for their daily subsistence. One of the main agenda of KACRMS is Biodiversity conservation through community

Sustainable Wild life?

Mr Philip & Mr Jakob from Umpho village totally depend on *Chepan*- a type of Lichen, sold to nearby Khanduli market. They collect the available *Chepan* from the nearby forest and sell it @ of Rs. 40-50/- per kg and earn around Rs 2000/- per week. According to the villagers, this is the main source of income for both of them. For Philip and Jakob, and many other families of similar villages in Karbi Anglong, it is important that forests are maintained as common property resources for their sustainable livelihoods.

participation in preserving and conserving community forest, catchments area protection and sacred groove protection. There are around 140 sq. km community reserve forest within the project villages with written community bye laws. In some village there are patches of forest protected for this purpose, which is locally called community forest. The village can collect NTFPs from this forest for their household consumption, but for other purposes they have to take prior permission from the village Goan Burah or any assigned person from the village community. On the other hand, many of the springs that the villagers use, originate from

Mr. Bronson Ronghang a resident of Mulokbong village has narrated how cultivation of Patchouli dramatically changed the economy of his family. In 2002, KACRMS project introduced 2000 no of patchouli seedlings to him out of which only 1500 no survived. The growth of the crops was profused and within a year he managed to develop about 1 lakh of patchouli cuttings from his planted area. He was the pioneer in patchouli cultivation in Karbi Anglong and people visit his field frequently to learn from him. He developed a nursery in his residence named "ATUR NURSERY" and manage to sell around 1 lakh seedlings and got 80,000/- in second year. In 2003 he got Rs. 88,917/- by selling 1,35,780 Patchouli saplings at the rate of Rs. 0.75/- per sapling. In 2004 he sold 2,33,396 saplings and got Rs. 1,76,067/-. In 2005-06 again he got Rs. 30,000/- by selling 1000 kgs of dried leaves at the rate of Rs. 30/- per kg. He could construct a semi-pacca house out of the patchouli cultivation. At present he is having a plantation of two hectare land under patchouli cultivation.

such conserved forests. Therefore, protecting these patches indirectly protects the natural resources and the biodiversity of that area. Some of the NTFPs exploited from the villages that we visited are given in Annexure 1.

These are not only consumed but also sold in local markets. Some of the NTFPs are sold as raw materials for medicinal purposes. There are several families who are depending on NTFPs for their livelihood. Land is available but they prefer to collect the wild plants as it is more income generating than what they usually get from jhumming.

OTHER SOURCES

Besides land based activities the project also emphasized on other non-farm enterprises to enhance the livelihood of the poor families. For the livestock sector major thrust were given to Piggery, Goatery, Poultry and Duckery providing improved breed through the village level veterinary volunteers in most of the villages. Pig rearing is more popular, especially the exotic breeds. Though not in large scale, yet the benefit as a source of income has increased as compared to local breed. Fencing the Kitchen/home garden greatly control or prevent animals in destroying the crops.

Weaving is another common activity, which is in fact a traditional practice among the Karbis like most other upland tribes in NE India. The project provided trainings on weaving for women in most villages.

Honey bee cultivation is most common activity in most project villages. In Mijong village apiculture has dramatically improved through the development of agro forestry system to stimulate the production of perennial horticultural crops like litchi, mango, orange etc.

Out of the different alternative sources, the following five major interventions show the inputs vs. output in some of the villages.

Table-5 : Investment and return out of different intervention

Name of the SHG member	Name of SHG	Activity	Category	Quantity sold (2006)	Rate /kg	Loan availed	Income generated
Himoni Madar	Plasa	Ginger	IGA	5000kg	4/-	15000/-	20000/-
Sarmir Madar	Ruphari	Lac	JFM	1050kg	90/-	10000/-	95000/-
Premika Mithi	Plasa sakarm	Broom	JFM	1100kg	15/-	3000/-	17500/-
Argina Tokbipi	Rupjili	Piggery	IGA	2nos	-	2500/-	9000/-
Omphu Ronghangpi	Minder	Goatery	IGA	2nos	-	1000/-	8000/-

Source: Personal interview

CONCLUSION

The study has shown very encouraging signs of project impacts in terms of addressing shifting cultivation and improving food security situations through various interventions. The communities have learned that changes in their economy can be

brought through small changes by way of systematic interventions and cultivation of jhum. In a short span of time, many have tasted the fruit of their labour. Replications of the activities are seen among non-project members, and they have adapted to the changes taking place around them. New members who were critical at the beginning are now the role models that adoption to new methods of cultivation could in deed be remunerative.

However, one of the key lessons for the project is that transformation of jhum can take place only if holistic approach to development is considered. System integration has to take place according to the means and capability of the farmers, that too gradually and methodically. Jhum land can be easily converted into horticultural crops, homestead gardens or forests. However, sustainability is best ensured if the farmers are facilitated with livestock, honeybee and similar other activities.

The other lesson is that community's perspectives for totally giving up jhum is often different and misunderstood by many development planners and workers. The perception of the communities is that jhum can still support them, if not supplement their needs and income. The sheer diversity of crops in jhum gives them that opportunity for income during the long gestation periods of many of the horticultural crops.

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ANNEXURE -1

SI No	Traditional name	Scientific name	Parts used	Availability season	Local market rate
1	Pharklom	<i>Clorodendron</i>	Leaf	Year round	Rs. 5/
2	Siluka	<i>Terminalia chebula</i>	Fruit	Nov-Feb	muthi
3	Jok-an	<i>Phlegascanthus</i>	Flower	Winter	Rs. 10/kg
4	Serota	<i>thyrsiflorus</i>	Leaf/twig	Year round	Rs.5/muthi
5	Methanthrokdi	<i>Serotia serrata</i>	Root	Do	Rs 2/muthi
6	Hanthu	<i>Raulfia</i>	Leaf	Do	Rs 10/kg
7	Re atso	-	Leaf	Do	Rs 5/muthi
8	Tesoketo	<i>Solanum indicum</i>	Fruit	Do	Rs 5/muthi
9	Thenkising	<i>Cinamon</i>	Bark	Do	Rs 5/muthi
10	Me-abap	<i>Kalancho pinnata</i>	Leaf	Do	Rs 20/kg
11	Nok	<i>Sacharrum officinale</i>	Stem	Do	Rs 10/kg
12	Pri	<i>Calamus rotang</i>	Stem	Do	Rs 5-10/kg
13	Engkian	<i>Richinus communis</i>	Fruit/leaf	Do	Rs 10
14	Plimplam	<i>Dilinia indica</i>	Fruit	Do	muthi
15	Chepru abap	<i>Cassia alata</i>	Leaf/bark	Do	Rs 10/kg
16	Sah	<i>Thea chinensis</i>	Shoot/leaf	Do	Rs 1 /frut
17	Hanfli	<i>Entada scandens</i>	Fruit	Do	Rs/kg
18	Sondon	<i>Moringa olerifera</i>	Fruit	Dec-Feb	Rs 10/kg
19	Hanjor	<i>Xanthoxylum sp</i>	Fruit	Do	Rs 5/kg
20	Thebongkang	<i>Physalis peruviana</i>	Fruit	Do	Rs 30-
21	Bamboo	<i>Bamboosa sp.</i>	Whole	Do	40/kg
22	Broom grass	-	plant	Nov-Dec	Rs 10/kg
23	Tree bean	<i>Xanthoxylum</i>	Flower	Do	Rs 5/kg
24	Tejpatta	<i>roxburghii</i>	Fruit	Do	Rs 15-20
25	Lichen	<i>Cinammomum tamala</i>	Leaf	Winter	no
26	Satgora	-	Whole	Winter	Rs 10-
27	Suksini	-	plant	Winter	15/kg
		Wild yam	Fruit		Rs 5/muthi
			Root		Rs 2/muthi
					Rs 20./kg
					Rs 20/kg
					Rs 10/kg

Understanding SHGs and the process of Women Empowerment: A study from selected villages of the NERCORMP-IFAD in Karbi Anglong District, Assam, India

Lakhiram Timung⁴³

Rusing Timung⁴⁴

Bikram Rongpi⁴⁵

Amba Jamir

I. Introduction

Keeping in mind the overall objectives of the project "... to improve the livelihood of the vulnerable groups in a sustainable manner ...", the Karbi Anglong Community Resource Management project has specific interventions that contribute towards institution building, capacity building of such institutions and ensuring their sustenance through market and credit linkages. Further within this larger agenda are the specific project interventions related to the following:

- i. To establish effective and appropriate delivery systems for inputs (credits, extension, etc) and for maintenance of assets and resources;
- ii. To increase the participation of women in local institutions and in decision-making processes within the community;
- iii. To enhance the savings capacity and establish the habit of thrift

In other words, the above mentioned points are directly related to the formation, capacity building and support of SHGs – particularly women SHGs; the involvement of women in decision-making activities and the process of their empowerment in the overall design of the project is what the documentation team will be attempt to study.

2. Objectives and Limitations of the Study

2.1. Objectives of the Study

- (i) Study and describe the role of women SHG in the process of empowerment of women;
- (ii) To document SHG activities that empower women and improve their quality of life;
- (iii) To understand and describe the process of project interventions in facilitating and promoting SHG activities; and

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- (iv) To prepare a document that will feed into project planning, implementation and monitoring; and also be of value to SHGs and the communities they serve.

The report is specifically based on the basis of evidence gathered from the communities, the SHGs and other beneficiaries that the study team visited and met with from 28th to 30th June 2007. The primary data was further analyzed with available secondary data directly relevant to the teams study objectives. The first part of the report deals with the status of communities before the project and then the project interventions with regard to formation of SHGs. The activities of SHGs and their impacts – both at individual and community levels – have been analyzed to understand and highlight the process of women empowerment. The last part of the study examines the institutional capacities of the SHGs; their relationship with other agencies, volunteers and institutions; and finally at the possible exit strategies of SHGs and related issues.

2.2 Limitations of study:

In spite of the team's best efforts to ensure that the study is holistic and comprehensive, there are a number of limiting factors which are presented as follows:

- (i) Besides the facilitator, all other team members are new to the process;
- (ii) The systematization exercise is a hands-on learning experience from which the report is our final output;
- (iii) The number of days in the field was limited and detailed investigations could not be undertaken. However, all possible efforts were made to meet a cross-section of stakeholders and ensure that all information collected is evidence-based, relevant and peer reviewed;
- (iv) The villages selected⁴⁶ for the study did not include the older phase-I villages which could have given us a deeper perspective.
- (v) Given the context of the topic being documented, the absence of a women team member was a handicap, particularly when it came to discussing the more personal issues of women.

⁴⁶ The study team was not involved in the selection villages for documentation



A Self Help Group (SHG) meeting in progress in Karbi Anglong District
(*Photo: Dr. Vincent Darlong*)

3. General Aspects: Description and Background

3.1 Description of study area

Karbi Anglong, formerly known as Mikir Hills, is located in Assam, India. The district of Karbi Anglong is divided into two unconnected parts with the district of Nowgaon in between the eastern and western parts. The district has a high poverty rate and is home to one of 'the most vulnerable tribal people of the north east (India)'.⁴⁷ The project in Karbi Anglong is implemented in Hamren sub-division located in the western part of the district. An overview of the study area is given below for quick reference:

3.2 Overview of study sample

No	Parameter	Numbers
1	Sample Size	4 villages ⁴⁸
2	Number of households	221
3	Number of respondents	118
4	Number of general meetings	4
5	Number of SHGs met	13 ⁴⁹
6	Number of non project villagers interacted with	3
7	Names of villages visited	Putsari Rongjangphong Borpu Arong Doloi Arong

3.3 Profile of Villages Visited

Name of the village	No. of Households	Population	No. of SHGs	TYPES OF ACTIVITIES	
				IGA Livestock's	Social
Putsari	76	428	5	Ginger, broom, bamboo, Piggery, Goatery, Poultry, Grocery, weaving and Food processing.	Health camp, School fencing, Cleanliness drive, Opening Zero balance Account, Trainings to non project village
Doloi Arong	39	214	2	Ginger, Grocery, weaving, Pig rearing, Duckery, Poultry, Lac marketing	Village cleanliness drive, Social Mobilization for Polio
Rongjangphong	59	350	3	Ginger, Broom, Turmeric, Grocery, Piggery, Poultry, Goatery	Road clearing
Borpu Arong	67	368	2	Pineapple, ginger, piggery, goatery, poultry, weaving, broom,	Village cleanliness drive.

⁴⁷ Activity Report, April 2007. KACRMS, Hamren, Karbi Anglong.

⁴⁸ The number of villages visited was four (4) but SHGs from eight (8) villages were met with.

⁴⁹ Two SHGs came on their own to meet the study team.

3.4 Social institutions, groups and status of women:

The communities visited by the team were that of the hill Karbi tribes where traditional village headmen (*Asarthe*) and council of elders (*Mekar*) governed the village and all decisions for the community were centered within them. As in all patriarchal societies, there was very limited role for women in decision-making, except in household, social and agricultural activities. Women however, in some villages had equal right to participate in public hearings (*mei*) which was a form of social justice system.

According to the women interviewed girls would often be married by the age of 15 to 17 almost 10-15 years ago. Education was also not given any priority for girl children as it was felt that they would be married off to another family. Health services were also very poor and most people continued to repose their faith in traditional healers (*thekere*).

The social groups where women met or got together for activities of their own interest were in the form of *Ajir* or *Teran* groups. An *Ajir* group literally is a system where women take turns to work for and help each other or in other times where they collectively worked to earn money. The *Teran* was also similar except that in this case, women would pull-in money, buy products, resell them and then share the profit. Such groups however, were not organized for any long term purposes and therefore were not sustainable.

3.5 Economic and political status:

The quality of life and socio-economic status of women before the project were very poor in most villages. Ms Jumaly Ronghangpi, a primary school teacher and member of Atur SHG commented, "Before the project, none of the women had any sense of saving. Even if women earned, the husbands would take it; today after the formation of SHGs, everything has changed." Women not only had to part with their earnings but there were no avenues for credit facilities or loans. Such situations often led to money-lenders and others taking advantage of the poor families.

On the other hand, when women take non-timber forest produces (NTFPs), vegetables, fruits and brooms to markets outside the village they had to sell everything to *mohuldars*. This is a system where an individual is given marketing license by the authorities and he would set the price and buy all produces from the farmers. The practice still continues but at a much reduced level after project intervention.

3.6 Lack of awareness

The status of women was not only lower than men but they often had no access to information and often were poorly informed and not aware of even basic issues related to hygiene, nutrition, health or even income-generation activities.

4. The Experience Itself

4.1 The Systematization Process:

The selection of topics and formation of teams was done by the District Support Team (DST) of the Karbi Anglong Community Resource

Management Project (KACRMP). The team members⁵⁰ for this study consisted of:

- (i) Mr. Lakhiram Timung – M&E Assistant, DST
- (ii) Mr. Rupsing Timung – Supervising Officer, Borkok Farming Society
- (iii) Mr. Bikram Rongpi – Research Fellow, DST
- (iv) Mr. Amba Jamir – Facilitator

The team had an orientation on what is systematization, what its objectives and purposes were and how to do it. Once this was done, a gap analysis of the topic and the areas to be visited was also undertaken in the plenary with all other teams. The team then got together and started the crucial process of preparation of questionnaire and field strategies. This involved identification of sub-themes, development of lead questions and story line, formation of field check-list and also identification of tools and strategies that might be applied in the field for data collection as well as, for data analysis. Secondary data analysis was applied through out even during and after field work. The group presented its plan of action to the plenary and received feedback, comments and ideas which the team reworked and improved upon before setting out to the field.

The field trip spread over three nights and two days covered four villages. It must however be mentioned here that although the team visited four villages, we met SHGs from eight villages and interacted and dialogued with over 13 SHGs and their members. The team was ably supported everywhere by the partnering NGO staff (community coordinators), NaRM-G officials and others. The team's schedule of visit and events can be referred to in *Annexure II*.

Upon entering a community, the team would meet with the village elders and other officials. Often the SHG members and others from the community – along with almost all the children in the village – would be waiting for the arrival of the team. After the initial greetings, quick general meeting was the first item of business to be conducted with the community. A rough outline is as follows:

- (i) Introduction of team members;
- (ii) Explanation to community members of purpose of team's visit;
- (iii) Quick explanation of systematization and its benefits;
- (iv) Q&A session;
- (v) Group formation – if required, for small group discussions;
- (vi) Group discussions –
 - o Team huddle in between group discussion to see what information is coming and to cross check process flow;
 - o Secondary data review – SHG books and records, NaRM-G records etc
- (vii) Site visits to SHG activity areas;
- (viii) Key informant interviews and transect walks;
- (ix) Meetings with men, children and non SHG members of the community;⁵¹

⁵⁰ See details in Annexure

⁵¹ See details in Annexure

- (x) End of day data analysis and process review.

During the team's first 'end of day review' meeting, the team decided to change strategy with regard to focus areas. The team realized that we were often drawn into issues of SHG activities – and this was not really our focus area. Unless the activities were highlighting women empowerment, we decided not to pursue each and everything that SHGs were doing. The change of strategy was helpful as it allowed the team to focus on more relevant issues the next day and so on.

4.2 Data collation, analysis and reporting

Each member individually wrote down case stories and statements got from respondents during group discussions and interviews. This was done before the data collation and analysis, lest those small bits of information got lost amidst all the other field data. Team members shared field data analysis, compared notes and referred to secondary data to cross verify information and stories from the field. Each member used meta-cards to write down issues and information collected from the field and the team collectively analyzed the data according to the following headings:

- (i) Background
- (ii) Formative stage ad process
- (iii) Activities
- (iv) Challenges
- (v) Impacts – individual and social
- (vi) SHG Networking
- (vii) Institutional Capacities of SHGs
- (viii) Exit strategy

The cards were then collectively analyzed, cross-checked and reviewed to ensure that the information was evidence based and relevant to the objectives of the study. Each and every bit of information is analyzed by applying a number of tools such as case studies, peer review, cause-effect analysis, force-field analysis, secondary data review and deliberations. A report writing format was developed as a table of content and team members distributed writing responsibilities according to the different sections of the report. The write-ups were then collected, further analysis and finally compiled into this report.

5. The Analysis

With regard to data analysis and reporting it in the document, the team had to consciously make a distinction between SHG activities, their institutional processes and activities that facilitated the empowerment of women.

5.1 SHG Formation

The project has a prescribed process for formation of SHGs in project villages and these are generally observed across all villages. What however came out as interesting and a good example of the empowerment process of these older women SHGs was their role and involvement in facilitating the formation of new SHGs even in non project villages.

Atur SHG lights the way

Two women and one man from Laru village, 30 Kms away from Putsari village visited the village. The women visited the weaving centre of the Atur SHG (*atur* in Karbi means 'light') and inquired about the activities of the SHG. They returned to their village shared their experiences and a week later, the women from Laru sent a request to Atur SHG help them in forming their own SHG. Five members of the Atur SHG in May 2006 then visited Laru village and more than 80 women participated in the training provided by them. This culminated in the formation of three (3) SHGs in Laru village, a non-project village under Chinthong Block, Karbi Anglong, Assam.

Source: Ms Dreamila Ronghangpi, Putsari village

The sense of belongingness among the women group also prevailed or increased in the village through monthly SHG meetings and discussions. Their level of confidence has increased through numerous trainings on weaving, value addition, holistic health, financial management and fibred extraction.

5.2 Capacity building and project interventions:

There are two types of capacity building inputs provided through the project through its partner NGOs. The first stage is during the inception and formation of the SHGs where they are given trainings on vision building, leadership, organizing and conducting trainings, fund management etc. While these have been helpful and productive, what the SHGs really require on the later stages are trainings and exposures on marketing activities, networking and value addition. Ms Gladysbon Durongpi of Putsari village *"Our products are now growing well and we are beginning to sell them. However, we do not have sufficient skills when it comes to costing our inputs or pricing our products."*

5.3 Income generation activities:

This is one of the major interventions where the project has improved the socio-economic conditions of the communities, as well as, greatly facilitated the empowerment of women both as individuals and as a community. With regard to the introduced activities, most of the respondents found it very useful and many had even up-scaled their activities, particularly on broom cultivation, animal husbandry, grocery shops and even off-farm activities.

Business strategy

The income generation strategies of SHGs differed from one to the other. In the case of the Dengjirso SHG, they would buy un-harvested spices, broom and bamboo from farmers when the prices are low. Given the high fluctuation in price, the SHG harvests the products only when the market prices are favourable and sale the produce at the weekly market.



According to all respondents, the formation of SHGs and the introduction of income generation activities have helped them to have more and better livelihood options. It has also freed them from money lenders through borrowing money from SHG corpus fund. The team however concentrated mainly on activities run by SHGs and even that on activities where the

empowerment of women was particularly evident. The table below highlights the two broad types of activities undertaken by the SHGs met by the study team.

Income Generation	Social
Handloom products	School fencing
Ginger farming	Health camps
Piggery	Opening of zero balance accounts for poor people
Broom cultivation	Cleanliness drives
Pineapple plantation	Night classes
Fruit processing	Ensuring social harmony
Goat rearing	
Poultry	
Grocery shops	
Purchase and resell of produces	
Weaving classes	

SHG Social Services

Apart from income generating activities SHGs like the Atur SHG in Putsari undertake social activities such as erecting of school fence, market cleanliness drive, and night classes to illiterate members, health awareness programs and promoting training to non SHGs women in the form of cash book maintenance and concept of SHG.



5.4. Loans from SHGs transform lives

The availability of micro-credits from the SHGs are immensely transforming the communities visited by the study team. SHG members, as well as, non-members of the community are benefiting from SHG loans. The activities facilitated by such loans range from personal to group initiatives.

The Teenage Grocery Story

In December 2005, Ms Alonly Teronpi an 18 year old from the village of Putsari lost her father and was left alone with just her sister and their mother. Agriculture was their only source of income and so she joined the Pangland SHG with new aspirations. She secured an amount of Rs 2000 from the SHG and together with her own contribution of Rs 3000 and started a small grocery store in the village. Today, Ms Teronpi has an average sale of Rs 500 per day at a profit rate of 20%. She has paid off her loan and her shop continues to support her and her mother and sister.

Source: Personal interview with Ms Alonly Teronpi on the 28th June 2007 at Putsari Village

5.5 SHGs as Entrepreneurs

The SHGs are not just sources of micro-credits but are also entrepreneurs in the communities they serve. The case of the Atur SHG in Putsari village is a case of interest to be described and documented as it highlights how SHGs are growing and maturing in their activities. Their activities have not

only empowered women individually but also as a collective. In many of the villages visited, there were SHG shops and cash crop cultivation activities.

From Fuelwood Sellers to Weaving Training Centre and more

In the beginning, the Atur SHG started by collecting fuelwood and selling it for profit and fund-raising. By 2005, they decided to invest Rs 6000 to build a small building, buy materials and started a weaving centre. As they continued their activities, they approached the block development office and received support to go for further training. Once the women were trained, they started commercial production of handloom products, as well as, started weaving training classes.

The SHG also has ventured into fruit processing activities and have started producing fruit juices, jams and in the process of making mango pickles and other value added produces.

Source: Small Group Discussion with Atur SHG members on 28th June 2007 at Putsari Village

5.6 SHGs as Public Educators

Most of the SHGs besides income generation activities also provide public services and awareness campaigns to educate the community on a number of issues. Some SHGs ran adult literacy classes for their members during meeting days, whereas, others ran night classes. They also organized awareness campaigns on cleanliness and sanitation not just within their own villages but also in non-project villages. More than 80% of the respondents said that they have benefited from such initiatives and amongst this, the major benefactors were women and children.

5.7 SHGs as Health Extension Workers

Besides initiating activities only from within, some SHGs like the Kai-Archim SHG of Putsari village reached out to line departments like the Health department and organized health camps, vaccination camps and provision of medicines.

5.7 Loan repayment

The issue of loan repayment can be reviewed from two perspectives – one of that of loan recovery rate and the other from the issue of how SHGs are supporting members in repaying old debts from money lenders. Overall loan repayment from internal lending is above 85%, while the repayment of bank loans is almost 100%. The 100% record of loan repayment could be because of the fact that the more progressive SHGs only have received bank loans.

On the other hand, are cases of how the micro-credit facilities availed by SHG members are transforming their destiny and saving them from the grasp of money lenders.

Debtor to Indebted

Mrs Sika Tissopi a poor widow from Borpu Arong joined the Dengjinso SHG in the year 2003. She then took a loan of Rs 2000 (Rupees two thousand only) from her SHG to repay her old loan of Rs 2000 from a money lender, who had insisted that she mortgage her 6 bighas of fertile wet rice fields. Mrs Tissopi repaid her loan, got back the land and now successfully cultivates it. According to Mrs Sika Tissopi, "this would not have been possible for such a poor widow like me. I would have lost the land for ever but the SHG has saved me and my land from such money lenders."

As told to Lakhiram by the subject on 30th June 2007 at Borpu Arong Village.

5.8 The silent testimonies of empowerment through SHG activities

The success of any project intervention, particularly when it involves SHGs are often looked at from economic perspectives and not from the other subtle but powerful stories of how SHGs have impacted individuals and the community at large. The following stories are presented below to describe impacts as told to the study team by numerous women from different SHGs.

5.9 Enhanced Social Cohesion

In the village of Borpu, the Secretary of Apurkimi SHG, Mrs Sintu Teronpi unfortunately passed away after complications arising out of child birth. The members of the SHG on hearing of the problem immediately assembled to be at her bedside. Legend in this part goes that a dying person often waits for the loved ones and according to Mrs Basapi Ingtipi, her sister-in-law only breathed her last after the arrival of all SHG members. She comments, *"It may seem a simple thing to many others but for us, it was very meaningful and precious. The introduction of SHGs have really enhanced social cohesion and sense of belonging amongst women in the community."*

5.10 Impact on personal and family hygiene and health

Before the inception of the project, women did not sandal or wash as often as now. However, after joining the SHGs, women have to attend meetings or visit banks, and have started wearing sandals and becoming cleaner. They not only wear cleaner clothes but in the process of it all, the children are also washed and attired in cleaner clothes. *"Our involvement in SHGs has greatly influenced our overall cleanliness, personal hygiene and health not only for us but also for our family"* – Mrs Moina Ronghangpi, Chirilangso SHG, Doloi Arong.

In the villages of Doloi Arong and Rongjangphong, cooking pots were usually left unwashed over the fireplace until the next usage. After the formation of SHGs, this practice has now completely stopped and women now wash and store away the dishes and even ensure that the cooking areas and the house are clean. This was necessitated by the fact that SHG meetings were held on rotational basis in members' homes and members therefore started maintaining their homes in a much better way.

5.11 Enhanced confidence of women

"The thought of going to banks was a scary thought for me and I could never imagine ever going to banks. However, after joining the SHG, I felt more confident and went to the bank, met the officials and deposited the

groups money in our account” – Mrs Bijuli Teronpi, Atur SHG, Putsari Village.

Such statements, as simple as it may seem are testimonies that very silently express the empowerment of women through their involvement with SHG activities. In another case, Mr Joel Phangcho, Church Elder of Putsari village comments, *“After almost 35 years of marriage, I have never known of my wife ever going out of our village. Her joining the SHG has greatly transformed her and today she had traveled not just to Diphu (the district head quarter which is about six hours drive) but even visits the bank nowadays”*.

Collective action and pride

Women SHGs like the Atur SHG had adopted weaving as a matter of Karbi pride and also as an income-generation enterprise. Before their intervention, most women no longer too to weaving but now seeing the success of the SHG, many have taken it up. The SHG members are very proud that they have play an important role in the revival of traditional weaving and imparting training to other non SHG women which had never happen before the formation of SHG. They are also very proud of developing new style and design of traditional shawl, jackets, shirts and wrap-arounds

5.12 Increase on saving habits

Before the advent of the project, none of the women in the village had any saving bank account and saving was not inculcated in their culture. However, with increasing SHG activities, the women are learning to save, open bank accounts and are even influencing men to start operating bank accounts.

Influence on Men

According to Mrs Amphu Timungpi of Borpu village, her husband would often take and keep all their earnings. However after she joined the Atur-Kimi SHG, her husband Mr Basa Teron on seeing and understanding her activities now fully supports her. He now drops her to SHG meetings and hands over his earnings to her for saving in the bank.

Source: Mrs Amphu Timungpi as narrated to Mr Rupsing Timung on the 30th June 2007.

5.13 Enhanced sense of social security

The involvement of women in SHGs and their constant interactions have greatly enhanced their sense of social security as well as, their cooperation and unity. “Today we know what is happening in the village and we respond to each other’s needs, be it financial, health or otherwise, as best as we can.” – Mrs Rahiala Deronpi, Ruptasen SHG.

5.14 Increase in school enrolment and value for education

The enrolment of children in schools has increased in almost all the project villages where SHGs are active. This is an interesting factor because there is no direct intervention from either the project or from the SHGs with regard to education. However, the awareness generated in SHG meetings has played a major role in ensuring that parents sent their children to school. This is further collaborated by the fact that with increased income generation community members have more sources of income and can

afford to pay school fees. Another important factor is that earlier for numerous reasons, girl children were not given priority for education but this now changed.

5.15 SHGs promoting domestic and social harmony

Amongst its many activities, the SHGs have been very efficient in combating vices and resolving issues of domestic violence in the community. They have efficiently created awareness amongst women and men in the communities and in the process empowered women from being abused and harassed.

5.16 Enhanced confidence of women

“The thought of going to banks was a scary thought for me and I could never imagine ever going to banks. However, after joining the SHG, I felt more confident and went to the bank, met the officials and deposited the groups money in our account” – Mrs Bijuli Teronpi, Atur SHG, Putsari Village.

6. Challenges

6.1 The Implementation Process

While the introduction of activities and process of formation of SHGs have been very successful, there were evident gaps with regard to timely release of funds. On the other hand, the mid-course capacity building processes according to SHG members was not forthcoming enough.

6.2 Lack of marketing capacities of SHGs

While the SHGs are good at growing products or producing value added products, they are often at loss when it comes to marketing their products. This is further compounded by the lack of awareness of market prices and norms, as well as, the lack of negotiating skills.

6.2 Lack of post harvest technologies and infrastructure

As discussed above, the production of crops by SHGs is high but often the members do not have the requisite skills to store large quantities of what they produce. This is particularly essential for products like ginger which often do not have a good shelf life.

6.3 Poor linkages with and support from line departments

The sustainability of SHGs and their continued capacity building even after the phasing out of the project is crucial. In this regard their relationship with line departments and agencies need to be strengthened and streamlined.

6.4 Certification and legal processes for SHG products

While the SHGs are now producing good produces, they do not have the requisite registration or certificates to sell consumables as per Indian law. It is therefore essential that the SHGs are not only made aware of this requirement but also given directions on how they should go about it in this regard.

6.5 Linkages to MFIs

The knowledge of SHGs with regard to MFIs is very limited. They need to be provided training and awareness of MFIs, investments and other institutions in this regard.

Comments and recommendations got from community

- *Required community need based training and it should be viable*
- *To maintain transparency*
- *Loan priority should be given more on productive purpose*
- *Activity should be selected based on place, market demand and soil status*
- *More capacity building training on marketing, financial management and training on management of Agriculture and Livestock activities*
- *Facilitate linkage with line dept.*
- *Facilitate linkage with veterinary Doctor*
- *Facilitate market linkage*
- *Facilitate Bank linkage*
- *More training on MFI*
- *Relationship between SHG and SEBA, GRASS, LIVE, Kingfisher should be improved*
- *SHG federation and NaRMG association relationship should improve*
- *Relationship between SHG to SHG in the village should be improve*
- *Support required for legal registration of SHG food processing products*

7. Acknowledgements

We would like to express our gratitude to NERCORMP-IFAD and ENRAP for this opportunity of undertaking this exercise. We thank the village communities for their input, information and generosity. We would also like to thank the PM, KACRMS for the facilities and to Adrian Marbaniang for his initial macro-level input. We are particularly thankful to Ms Shalini Kala of ENRAP and Dr. Vincent Darlong for their comments and suggestions to the initial draft of the present report.

Questions got from District Support Team

General Questions:

- 1) What motivated you to form the SHGs?
- 2) What activities are you doing? Why and how did you decide to do this?
- 3) Can you tell us the impact of the SHG movement on the women in the following areas :-
 - i) Economic situation \Social status in the society
 - ii) Their level of decision making and in implementation process.
 - iii) Domestic sphere (household-wife relationship, liquor consumption of male, male dominance in domestic decision making affairs)
 - iv) Educational level.
 - v) Rise in consciousness level of their rights and of others
 - vi) Are they aware about the new MFI which is coming in to the District? If yes, what is their feeling about the benefits to be get by them from the MFI?
- 4) Some initial questions on functioning of SHGs
 - i) About regularity of saving
 - ii) Lending process
 - iii) members awareness about all financial transactions
 - iv) regularity of meeting
 - v) regularity of repayment
 - vi) social action taken by SHG
- 5) What is the status of marketing various commodities from the village before coming of the project?
- 6) What are the products marketed after Project?
- 7) What are the problems faced by the communities in marketing their product?
- 8) What are the attempts made by the project to solve these problems and ease the process?
- 9) Are the communities aware about business approached initiated by the project with selected focused product?

From Regional Society, Shillong

- Overall improvements and impacts at household level (eg. Economy, hygiene, children education, health, sanitation, domestic violence.....)
- Overall changes on the status of women in the society through SHG movement [increased social and political role / voices / responsibilities / decisions makings of women in the society]
- Intra-and inter-SHG relationships: overall changes
- Intra-and inter-women relationships: overall changes

Group Activity : Tuesday 26th June 2007

Secondary Data sources:

1. Quarterly SHG status Reports
2. Grading Report
3. Activity Reports
4. Loan Repayment schedule
5. Books and accounts
6. NaRMG meeting minutes register

7. Bank records
8. Baseline survey
9. Social agreement
10. MCO report from RS

Historical background

- Status of women (Health/education/marriage/ workload)
- Socio/Eco/political
- Social institutions / women groups

Source of information

- a. SHG members
- b. Village headman
- c. Community members
- d. NaRM-Gr.

Formation of SHG

- a. Selection of members
- b. Procedure- rules & regulations
- c. Decision-making process
- d. Selection of activities

Problems/challenges faced by SHGs

- a. Domination of male
- b. Marriage and unmarried members
- c. Communication gap
- d. Information facility
- e. Fund absorption capacity
- f. Institutional linkages/MFI

Activities

- Agriculture products
- Credit facility
- Weaving
- Value addition
- NTFP (broom)
- Groups' activities

Social activities

- Health camp
- Cleanliness drive
- Institutional support
- Domestic violence

Impacts (benefit + ve)

1. Personal
 - . Health
 - . Nutrition
 - . Increase awareness
 - . Education /children
 - . Lifestyle
 - . Social security

- . Sense of empowerment & belongingness
- . Livelihood options increased
- . Freedom from loan Sharks
- . More confidence/ voice

2. Social / Group

- Social cohesions
- Community development
- Reduced domestic violence
- Land use & tenure system
- Community health

Community awareness

- a. Health
- b. Cleanliness
- Social capital
- Human resources capacity
- Entrepreneurship

Impact Negative (-)

- a. Time management
- b. Increased work load
- c. Less time with family

SHG federation

- Process and procedures
- Roles & functions
- Impact/ benefit for SHG groups
- Capacity building
- Institutional support
- Access to loan

Institutional capacities of SHGs

- Project initiated trainings
- Weaving
- Exposure visits
- Agri. Expo
- IITF
- Food processing
- United

Areas for further interventions

1. Micro finance linkage
2. Marketing linkages
3. Quality control & certification regimes
4. Involves SHG
 - SEBA
 - Kingfisher
 - GRASS
 - LIVE
 - NaRMGs
 - Village plans

Impact Of Market Development Activities On Economic Well Being Of The Vulnerable Groups: Case Study On Weaving, Woodcraft And Apiculture in Ukhrul District, Manipur

Ningdhar Muinao⁵²
Standhope Shatsang⁵³
Janessaline M. Pyngrope⁵⁴
Shalini Kala⁵⁵

INTRODUCTION

The North Eastern Region Community Resource Management Project (NERCRMP) is a joint initiative of the International Fund for Agricultural Development (IFAD) and the Government of India. The North Eastern Council (NEC) and Ministry of Development of North Eastern Region (DONER) represent the Government of India.

The overall objective of the project is to improve the livelihood of vulnerable groups in a sustainable manner through improved management of their resource base in a way that contributes to protecting and restoring the environment⁵⁶.

Commissioned in 1999, the project aims to empower the tribal communities particularly the marginal farmers of the upland areas in North East India for sustainable livelihood pursuits while ensuring optimized natural resource management.

The project is presently operational in six districts of three states viz. West Garo Hills and West Khasi Hills in Meghalaya, Karbi Anglong and North Cachar Hills in Assam and Senapati and Ukhrul in Manipur.

Ukhrul is one of the hill districts of Manipur state with an approximate population of 1,45,000. It is inhabited mainly by the major tribes of *Tangkhul Nagas*. However, besides them there are also other tribe like *Kukis* and *Maring*. The district has well defined traditional Institutions called *Village Council*, which is like a tiny republic. Women are generally excluded from the village council.

Ukhrul District Community Resource Management Society (UDCRMS) started functioning in 1999 as an implementing agency of NERCRMP. It covers 103 villages out of the total 235 in the District. Activities of the project are implemented through partner NGOs and Community Coordinators.

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⁵⁵ Programme Coordinator, ENRAP, IDRC, New Delhi

⁵⁶ Refer to relevant project document of NERCRMP

The main components of the Project are:

1. Community Institution building
2. Livelihood improvement
3. Health and Education
4. Infrastructure
5. Natural Resource Development

Purpose of Study

UCDRMS has been supporting Weaving, Woodcraft and Apiculture for their potential to improve economic well-being if taken up on a large scale with proper skills and other support. In terms of penetrating new markets, these are unique because they have their own ethnicity and traditional values and heritage/culture. At the same time they can be modified to suit various markets whether regional, local, national or international. Product differentiation can take place to cater to different market demands.

UCDRMS has taken several steps in the past to promote these activities including training, loans, building market linkages and the like. To assess the progress and impact of these activities this study was undertaken. Systematization method of documentation was used. This method is a self-evaluative and participatory way of documenting project experiences and lessons. Systematization helps in analyzing the situation before the project intervention, the situation after the project intervention and the process of change.

METHODOLOGY

A team of four people conducted the study over a period of seven days, including visits to the field (Ngainga, E-Tusom and Kumram villages) and secondary data analysis. Prior to the field visit, the approach to the study was formulated, broad parameters were defined and based on this a questionnaire was prepared. Increased income, improved tools and techniques, increased production & productivity, training, design support etc. were selected as the key indicators. The main focus was on the process of change due to project intervention

The target group of respondents included members both the direct beneficiaries as well as those associated with these three activities. For an outsider's view some community members were also interviewed.

The parameters for the study are given below: -

- Sample method: Selective method of sampling⁵⁷.
- Sample size: This varied according to the concerned activities⁵⁸: -
 - ✓ Weaving: 5 weavers, Headman (Awunga), CO, spouse of the weaver, non-beneficiaries, SHG group giving the loan, shop keepers (town area).

⁵⁷ Sampling was carried out in the respective three mentioned villages because they are practicing and have a comprehensive set of activities, which are related to the documentation exercise carried out.

⁵⁸ At present there are 18 skilled weavers in shuttle loom in Ngainga, 12 woodcraftsmen in Kumram and 19 bee keepers in E. Tusom, who have been supported by the project activities.

- ✓ Woodcraft: 3 woodcraftsmen, CO, shopkeeper (town area), non-beneficiaries.
- ✓ Bee keeping: 3 beekeepers, CO, Headman (Awunga), beneficiaries' spouse, non-beneficiaries.
- Number of Focus Group discussions: 3 (one in each village)
- Name of villages: Ngainga (Weaving), E-Tusom (Apiculture), Kumram (Woodcraft).

When collecting data in the field, a few changes were made as per requirement of information and availability of people for interaction. The team visited the weaving centre in Ngainga, saw the bee boxes of the beneficiaries in East Tusom and also the woodcraft items made in Kumram village. Videos and pictures have been taken so as to substantiate the documentation process.

Secondary data was obtained from UDCRMS records, status report cumulative upto September 2005 and SHG's and NaRM-G's record books.

WEAVING

BACKGROUND

The **Tangkhul Naga** weavers of Ukhrul district of Manipur have retained strong traditional weaving skills and designs. The Naga weavers use a loin loom made of local wood and bamboo. This body-tension loom is used to weave strips of fabric that are then stitched into final products. As with many traditional textiles, the product design is specific to gender and status. Currently, all weaving by the Tangkhul Naga is being done with synthetic yarns, and there is little natural fiber available locally. Weaving is one of the sources of cash income for the community. All weaving products are sold either within the village or in the Ukhrul town. All this is true of the study village that is Ngainga.

The patriarchal society to which the tribal weavers belong poses interesting and somewhat atypical challenges for entrepreneurial assistance. Like poor women throughout the world, they lack access to capital, to training and to education. They are working as entrepreneurs while taking full responsibility of the household and family. However, there are several local women's organizations that are highly committed to reviving and promoting these the traditional skills.

STATUS BEFORE PROJECT INTERVENTION

The traditional Naga loom takes much time in production as compared to shuttle loom⁵⁹ and is also a strain on the weavers back and eyes. Keeping this in mind, the Manipur State Government set-up a weaving centre in Ngainga in July 1991. 15 shuttle looms were provided partly through grant and a part through loan. The Women's Society⁶⁰ of Ngainga was responsible to pay back the Rs.1.25 lakhs loan.

⁵⁹ Shuttle looms are used by the Meiteis, the dominant community of Manipur. Shuttle looms are better designed than the traditional Naga looms, saving time and reducing health hazards for the weaver.

⁶⁰ Ngainga Women Society is a traditional village institution over 50 years old involved mostly in religious activities. At the time of setting-up of the Weaving Centre, Women's Society was provided the loan.

In August 1991 the first training lasting 6 months was conducted for 12 weavers. And the second training lasting 4 months was conducted after a large gap in August 2004 for 6 weavers. Both the trainings were of short durations, which could not help the trained weavers produce good quality products. Hence, what was produced was not sold or else it was sold at a much lower price than the prevailing market rate. Due to this the Weaving shed became defunct and there was no interest or urge to revive it. The Weaving Centre was being used as the Women's Society office.

In early-2005 when the Project decided to support the weavers, the Women's Society was still under a debt of Rs.50,000 from the loan that was provided in 1991 by the state government.

PRESENT SCENARIO

Income and productivity

From the study of Ngainga village weavers it is learnt that income has increased due to project support. The income increase ranges from 50% to 75%. In one case that of Ms.R.S. Spencer income increased by 183%. She shifted from paddy cultivation to weaving after project intervention. This is what she said when asked about how her life has changed due to her participation in weaving promoted by UDCRMS.

"In the year 2004, my husband and I were engaged in paddy field. We harvested 40 tins of paddy, which is Rs. 2800 in terms of monetary value at the village level. Our annual income was Rs. 3000 inclusive of sale of some vegetables planted in the paddy field. During the year 2005, the PONRADW SHG Federation revived the Weaving Centre through IFAD project. I was one of the luckiest women to be amongst the Weaver group. From July to December 2005, I earned Rs. 8500. Comparing to previous year my annual income changed by three times. Apart from my own income, my husband is still engaged in small Horticultural farm, which will be additional income for us.

Weaving has helped me in many other ways. Paddy farming involves very hard work compared to weaving. My health condition has improved and also my involvement in social activities. Considering all the above points, I am very confident and proud to say that my life is changing and will still change for better in the days to come."

The productivity of weavers has increased more than twice. They are able to produce more in the same time, which is essential to service bulk demand. For further details please refer to Annexure IX.

Price

Most weavers are able to sell their produce at higher prices because of improvement in quality and project's effort in linking them higher-priced markets outside Ukhurul. Weavers feel if they are experts with the shuttle loom then the prices will not come down even if production increases. Some were of the opinion that prices will come down with shuttle loom because there is a reduction in the quality of the item produced on this loom as compared to the traditional loom. This is a time of

transition for the weavers and as they become skilled in the use of shuttle loom they may not face this problem in the future⁶¹.

During the Focus Group Discussion, the weavers mentioned, ***“If we are properly trained with the shuttle loom and become experts, then irrespective of using the shuttle loom or the traditional loom, we will be able to sell the shawls at the standard prevalent market rate”.***

All weavers were glad that the Project intervened and helped them with further training.

Market Linkage

All respondents said that they are now selling their products to international markets through the project. The market linkage has been expanded beyond the village and the Ukhrul town market by the project, especially in terms of connecting the weavers with the international market. Regional markets at the Imphal level are also being tapped. Weavers have also initiated efforts on their own to find new markets.

Sustainability

Confidence of the weavers has increased and they want to produce more than they have been doing in the past. This is important for the sustainability of weaving in this area.

Weavers have been linked to new markets by the project. They have also experienced the benefits of better technology in the shuttle loom. The improvement

Weaving: Changing The Mindset Of People

Women of Tangkhul Naga society have been practicing weaving since time immemorial and are an inherent part of their culture. Slowly over time it has become one of the main source of cash income for the family. However, the sale of the products is confined within the village and neighbouring villages.

After the support of the project through better repair of looms, training too weavers, building market linkage beyond village and outside country, people (weavers and their families) now realize the potential of weaving to increase their family income. They can visualize producing in a large-scale quantity by using their skills and resources to sell to outsiders as a business and not just for domestic use.

The federation, on its own initiative, is trying to make market linkages. They have already talked to the local shop keeper Mary in Wino Bazaar of Ukhrul market to sell the products of the federation through her shop. Federation has also made linkage with Department of Industrial Corporation, Ukhrul for maintenance of their machines.

It is notable that some members of the federation have started forming smaller groups of 4 to 5 members, with the objective of purchasing weaving machine through regular savings. The federation body had also passed a resolution that each and every household will purchase a weaving machine to meet the demand of the market.

As per the meeting on 13/1/2006 Resolution: No.1.

“It is unanimously agreed that all the women of this village shall try to have shuttle loom and try to procure and produce as many shawls as possible and also shall be the master trainer for the whole Ukhrul District. We shall also abide by all the rules and regulation for the maintenance.”

in skills has made them

more competitive. All this makes the weavers see a future in weaving and they are geared ready to work whole-heartedly

The PONRADW SHG Federation weavers have adopted a resolution to provide shuttle looms to 150 Households (out of 240 Households) in the near future. This is a great leap in empowerment and intensification of work with regards to weaving. The idea was generated by the Project and the initiative has taken place due to empowerment and confidence

SHG FEDERATION

Self-help group or SHG in short is a saving group mainly formed by womenfolk consisting of 15-20 members in a group under the facilitation of the IFAD project. Project has promoted formation of village level federation when there are more than one groups or units in a village. This is done to facilitate better credit linkages with banks and non-bank financial institutions. The federation also helps

- 1) Formation of Zonal federations by acting as the intermediate body between SHGs and Zonal Federations.
- 2) To better monitor and administer directly or indirectly project activities by field staff.

The overall responsibility of the federation is to look after the units to bring oneness and uniformity among themselves. The executive body of the federation consists of one elected member from each of the member units.

In the year 1991 a work shed along with 15 loom machines was installed by the co-operative society Government of Manipur. Due to negligence over a long period village weavers could not benefit from this initiative. In the year 2005 the project (UDCRMS) decided to promote weaving. It supported the PONRADW SHG federation by imparting training, repairing the existing machines to bring them in working condition and providing yarns. Through this the project has been able to revive the weaving activity and the shed is being utilised properly at present.

building. With or without Project intervention, the members are already saving so that they can upgrade gradually and thereby not depend too much on the Project. The weavers are now thinking for themselves and planning for the future. There is a change in mindset and this change is leading the weavers to be on their own and work towards a better future for them and their future generation.

The main reason why the project could make a huge impact in this activity is because of the prevalence of the SHG groups in the village; ultimately the formation of the SHG Federation.

WHAT LED TO CHANGE

In the traditional village institutions, women's participation was completely absent. Project promotes SHG formation as a way of empowering women through improving their role in decision making at the village and the household level. This strategy begins with a participatory process of social mobilization to form SHGs. The platform of SHGs is then used to help women in planning for their development with the available resources. Once the community is successfully mobilized and their awareness and capacity to save, loan and manage cash is improved, training and exposure is provided for different income generation activities as per their needs. Project also promotes formation of federation at the village level when there is more

than one group in the village. Village level federations are further federated at the zonal level⁶².

In the year 2003 SHGs of Ngainga village federated into PONRADW SHG Federation. This became the ready platform to provide the needed support to weaving.

Revival of the workshed: in early 2005 the project started with reviving the defunct work shed after the Federation members agreed that kind of support from the project would be useful. The PONRADW SHG Federation and UDCRMS signed a Deed of Agreement to take this forward. The looms were repaired to bring them into working condition. Following this training was imparted to the 18 weavers. The training focused on product design and pattern making, since the weavers were already adept with the basics of shuttle loom weaving.

Loans had become available for weaving after the formation of SHGs. With training and new technology available, women members were able to utilize their loans better. The Project also managed to link the weavers to the international market. RANGOTRI⁶³, an export house based in Jaipur placed orders for shawls for his clients in New York and Hong Kong. So far the PONRADW SHG Federation has woven 83 shawls of various designs and patterns according to the client's demand. The income generated through this activity is Rs. 46,400⁶⁴.

The Project is continuously making efforts to introduce the weavers to domestic and international markets as well as agencies, which could help in design and quality control⁶⁵.

Very recently, in an attempt to provide more regular and comprehensive support to project villages, a team of self Employed Business Agents (SEBA) has been created to undertake all marketing activities.

CHALLENGES AND SUGGESTIONS FOR THE FUTURE

Market linkages: While the project has supported the weavers in this aspect till now, more has to be done for better promotion and large-scale advertisement. Continuous support is needed. The community should be linked with SEWA, NIFT, State Handicraft & Handloom industries, and various agencies so that the weavers can find channels of support even after the project comes to an end in two years time.

⁶² UDCRMS area has been divided into five zones for the purpose of SHG federations.

⁶³ RANGOTRI supplied the cotton yarns (vegetable dyed cotton yarns).

⁶⁴ Since this was their first exposure to the international market, 13 shawls of the weavers were rejected due to improper finish and incorrect design. It is the normal process of learning to adjust to different markets.

⁶⁵ Tying up with SEWA Trade Facilitation Centre (Gujarat) for product design and quality control. Another client Mr. Ike Sinha (Delhi) is interested in Scottish design scarves; samples have been sent and the order will be processed shortly.

Market development: There are no experts amongst the project staff to help in quality control and product design. This is a slow process, which has to be constantly monitored and strict supervision is of the utmost importance. The project is making efforts to engage experts in quality design and product differentiation. It is an on-going process.

Repair of looms: Machine breakdown and repair work from time to time is an issue, which the weavers are not sure how to handle, since they are not familiar with the technical aspects. To address this issue, the PONRADW SHG Federation have included two men in the group who will handle repairs and maintenance of the looms.

Marketing aspects: The order for weaving is not continuous hence the weavers have certain doubts and apprehensions about future growth and sustainability. They are caught between dividing their time for weaving and other household activities etc. The modern marketing and business concept is new to the community. Though the project has conducted workshop and training programmes from time to time, but this is not a sound and effective tool. Exposure trips are needed either in the region or even in the national capitals. More capacity building and facilitation is needed for the SEBA members.

Sustainability: Training of trainers (ToT) will help the Federation gain more income and further sustain themselves. PONRADW SHG Federation wearers will train the project SHG members from other project villages⁶⁶

WOODCRAFT

BACKGROUND

Woodcraft is an activity that has been in existence since the early 1950s. It originated from the northern side of Ukhrul District and was introduced in Kumram village by one Mr. Ramthar. Thus woodcraft was popularized in the village. The common products are vases, bowls, spoons & forks, plates, wall hangings etc.

The process adopted by the craftsmen is as follows: -

- The widely used wood is Camary and sometimes like for spoons and forks, Sandalwood is used.
- Camary is usually collected from June-January. There is no wood collection during the rainy or windy seasons.
- After wood/raw material collection, it is directly etched and carved according to the design ordered. At times the wood may have to be dried for a certain period.
- Once the structure is carved, it is applied with touchwood or some varnish oil so as to enhance the natural colour of the wood.

There are times when cracks can occur; this is due to pre mature trees, windy season or over exposure to heat.

STATUS BEFORE PROJECT INTERVENTION

The villagers, especially the elders have been involved in woodcraft from time immemorial. The designs and patterns have significance with respect to history of

⁶⁶ The training for other project SHG members will commence from 16th March 2006 onwards

the Tangkhuls and their culture. Only traditional tools and equipments were used since the craftsmen were not aware of modern tools and techniques and machines which maybe helpful to woodcraft. Woodcraft was not a priority activity; it was more of a leisure work and the craftsmen worked as and when there was demand. The reason being that the amount of time spent in making woodcraft items and the income earned was not matching.

A Woodcraft Society, consisting of 12 craftsmen, was registered with the Government of Manipur in 1992.

PRESENT SCENARIO

The main intervention of the project is in terms of providing Income Generating Activities (IGA)⁶⁷ loan to the NaRM-Gs. Rs. 45, 000/- was the money sanctioned for the purpose of Woodcraft. This has given the craftsmen access to a greater loan amount and hence they have managed to intensify their activity as compared to the pre-project intervention.

The youth participation is high with regards to woodcraft. They look at woodcraft as a means of income and livelihood. Also they are more focused in life and do not venture into hazardous activities or social evils.

Income and productivity

Income has increased because production has increased (For further details please refer to Annexure IX)

Constant demand

There is always a constant demand for woodcraft items hence it is an ongoing activity.

WHAT LED TO CHANGE

The major change that took place after Project intervention is the accessibility to loan through IGA. This has allowed the craftsmen to upgrade their productivity and earn extra income.

The project inculcates all members of a family in their activities. This is where the youth come into the picture. Due to project intervention, they realize the need of working alongside their parents and elders and are actively involved in project activities. It is a positive point because this signifies that the tradition of woodcraft will not die and will be carried forward by the future generation.

CHALLENGES AND SUGGESTIONS FOR THE FUTURE

Modern tools and machines

So far the craftsmen have been using traditional tools and equipments. This poses a big challenge and threat because the current woodcraft items are not upto the mark and there is a demand-supply gap. New and modern tools and equipments are needed so as to compete in the market.

⁶⁷ IGA is a revolving fund circulated amongst the NARM-G members.

Trainings

All woodcraft works have always been undertaken using traditional knowledge and skill. This is not very feasible in the present scenario. Skill building is required and the project is looking for ways and means to address this issue.

Market development activities

Woodcraft items are always in demand all over the region and beyond. Poor transportation and communication facilities hamper the market linkages. This leads to increase in price of the products, making them less competitive in the market. Hence their products do not garner a market share. Support will be needed to address or overcome these difficulties.

Sustainability

Replantation of trees was not looked into. As of now the raw material is available but what will happen down the years. The Youth Society has made a resolution to keep some reserved forests and undertake tree plantation as a community, so that market development can take place. This will also address the NRM issue. In terms of market development activities the project has not made much headway. But nevertheless the systematic documentation provided insights on what to showcase and how to go about finding a suitable market that will not be too expensive to explore and yet provide a substantial profit in the long run.

APICULTURE

BACKGROUND

In the Ukhrul region people have traditionally harvested honey from the wild or through domestication of wild bees. Farmers use alder tree available abundantly in the region to construct bee boxes. Honey can be harvested through out the year though April, May and October, November give the maximum because of large blossoms. Cheery tree, mustard, passion fruit and bottlebrush are the common trees for good harvest of honey. These plants occur both in the wild and in home gardens. Most of the honey harvested is consumed locally or sold in village markets. Some small quantities are also sold in the Ukhrul town.

People practicing beekeeping in the traditional manner are aware of its advantages. Some of them are listed below: -

- Pollination is the most important benefit derived from apiculture. E. Tusom owes its abundant fruit production (mangoes, oranges, lemon, papaya and others) through apiculture. The Project has invested substantially in promoting an agro-horti farm (Rs. 2, 68,000/-) and encouraging the households to take up apiculture.
- Honey itself is a good medicinal product. It helps cure gastric, boils, cold, cough etc. It is also used as a supplementary to the normal diet.
- Apiculture does not need physical involvement in terms of labour and time constantly. Bee keepers can spend only 2 days in a month and still get sufficient income.

Beekeeping Practices

Honey hunting from the jungle is part of culture for the hill people in many parts of the region. Hill people enjoy the sweetness of honey and appreciate its medicinal value. Over time as demand for honey increased, honey hunters also started earning money by selling honey. There are always some people in hill villages on the region who are interested in bee rearing.

In the year 2003, after promoting horticulture crops in the Project villages, it was decided to encourage beekeeping as an activity to help pollination in the horticulture farms and generate extra income for poor families as well. Training and sensitization were conducted to help community members in managing bees¹ and not simply rearing them as they used to do traditionally. Some modern bee boxes were also provided along with training to produce these.

Earlier beekeeper could hardly harvest honey once in a year from the traditional bee box. With the new boxes and the training they are able to harvest three to four times more, making beekeeping a good source of income.

Beekeeping is requires skill and not everybody can handle bees and harvest honey and other by-products.

STATUS BEFORE PROJECT INTERVENTION

Only 19 out of 47 Households were practicing apiculture earlier. The basic reason for undertaking bee keeping was to collect honey mostly for domestic use and some for sale in the market. Some people took it up as a recreational activity. There was no formal training or skill development activity; all practices were traditional and brought down through the generations.

PRESENT SCENARIO

The Project decided to promote apiculture after promotion of horticultural farms among the communities it is covering. This was done both to help better pollination and hence better production of fruits as well as generating extra cash income for the practicing families.

Currently, the respondents conveyed, there has been an increase in income from 33% to 44%⁶⁸. Number of families practicing beekeeping has increased leading to an increase in bee boxes by about three times. Increasing price of honey - from 8-10% to about 50% - with increasing demand means greater cash income for beekeepers.

Income and production has increased without having to spend any significant extra time on this activity; time spent earlier was also 2 days and now after project intervention it still remains at 2 days. Apiculture has helped families in providing extra income so that children's education is paid for on a continuous basis.

The villagers have come to appreciate the benefits of beekeeping. The Indweki NaRM-G in East Tusom has passed a resolution that each and every household will have at least one bee box.

⁶⁸ For further details please refer to Annexure IX.

WHAT led to CHANGE

The project mobilised the community to form NaRM-Gs so that they can take care of their own natural resources in a sustainable manner. Once the NaRM-Gs were formed and became active project made loan provision for income generating activities. Some practicing beekeepers used these loans to expand their activities.

To promote Apiculture on a larger scale, the Project provided the following support:

- Provision of bee boxes
- Training programmes, for honey extraction, construction of bee boxes, foraging (collecting nectar from the forest), uses of honey and honey comb, making byproducts such as wax, candles etc.
- Flower plantation (season to season).

CHALLENGES AND SUGGESTIONS FOR THE FUTURE

Production

Even though the project provided training on use of readymade comb sheets, these are not available locally not even at the Ukhrul town. Use of this can double the honey production as bees spend a lot of time building the honey comb.

Market linkages

As of now the community is not interested in market linkages since their current production is not able to meet the current market demand. They would like to increase production first and then seek bigger markets.

Coming to expanding their markets beyond the regional level, they were briefed about FPO license. This is needed for any food item. The community is happy with the current markets they have tapped so far (inter-village, Phungyar, Ukhrul, Imphal) which doesn't require such certification.

CONCLUSION

The systematic documentation has enabled self evaluation of the three activities--- Weaving, Woodcraft and Apiculture in a comprehensive way. The needs and demands of the beneficiaries have been well discussed and analysed and market development activities for the above-mentioned three will be based on the suggestions given by the beneficiaries etc. What is surprising to note is that the villagers on their own initiative have already thought about market development activities for quite sometime. The only constraint they faced most of the time is financial. The Project has given a certain amount, backed up by training programmes etc. but more intervention is needed. Also other related agencies could possibly give more inputs and knowledge so that the activities will sustain for a long time and maybe Cooperatives or Small Scale Industries can emerge. The whole exercise has been a learning experience and as Project team members, we too are confident now of being able to carry out similar exercises on other project activities and sectors. Documentation can be in any way and every way. But systematic documentation will give us a clearer picture about the past and present scenario and what can be done for improvement and upgradation of skills and knowledge wherever necessary.

ANNEXURE I:**Village Questionnaire**

Name of village:

Date:

Name of Interviewee:

1. Do you know about this IFAD project?
2. How do you know about it?
3. Have you received any assistance from the project? What kind of assistance?
4. How has this assistance changed your life?
5. Comparative table

Particulars	Before	Now	Factors of change
Annual Income			
Production			
Production per day			
Number of days per week/month spent in weaving, apiculture and woodcraft			
Sales			
Market linkages			
Price			
Price range			

6. Did you receive any Training? If yes, When? What type?
7. Are you using the skills that you have learnt? Do you have any problem in using it?
8. What are your future plans?
9. What is the present source of raw material as of now? If imported, would you like to have access to your own raw material?
10. Are the implements used for Weaving/Woodcraft/Apiculture traditional (manual) or mechanised? What would you prefer?
11. With regards to woodcraft are you not concerned about the rampant deforestation taking place as of now? What are you doing from your side to curb the situation?
12. Is Apiculture able to address the maintenance of the traditional forest? How?
13. What are the benefits of a shuttle loom?
14. What is the costing mechanism for your products i.e. how is pricing done?

ANNEXURE V - Break Up Of Team Work

Team	Janessaline M. Pyngrope	Standhope A. Shatsang	Ningdhar Muinao
Village			
Ngainga	• M. Ngazek, Village Elder	• RS Shimthar CO NaRM-G	• M. Soreirin Weaver

	<ul style="list-style-type: none"> • M. Mayonmi SEBA member • RS Phungmichon weaver • RS Somiwon Weaver 	<ul style="list-style-type: none"> • K. Ningthingla Weaver • RS Spencer Weaver • RS Ningamla SHG member, Non beneficiary • Minute Book & Cash Book of SHG Federation 	<ul style="list-style-type: none"> • RS Khoreila SHG member
East Tusom	<ul style="list-style-type: none"> • MC Rockson Headman • NS Vincent, Non Beneficiary • VS Khangam Local Pastor 	<ul style="list-style-type: none"> • M. Solomon Bee Keeper • NS Jonah Bee Keeper • NS Pissy, Bee Keeper 	<ul style="list-style-type: none"> • NS Leishisan Bee Keeper • NS Tammi, Bee Keeper • NS Saul Ex- CO NaRM-G
Kumram	<ul style="list-style-type: none"> • V Keishing, CO NaRM-G • K. Ninglum Woodcraftman • R. Jonathan Pastor 	<ul style="list-style-type: none"> • Jaspal Shaiza Woodcraftman • Issac Ningsheng Headman 	<ul style="list-style-type: none"> • Robin Woodcraftman

Cost Benefit Analysis For Weaving

2 Shawls

Raw Material	1 Kg	Rs. 250/-
Labour Required	10 days	Rs. 500/-
Machine	1 Shuttle Loom	Rs. 6000/-
Maintenance of Machine	Per year	Rs. 600/-

Costing for 2 Shawls:

Particulars	Amount (Rs.)	Amount (Rs.)	Remarks
Yarn	250.00	250.00	(Best quality of Yarn available at Ukhrul Market)
Labour	500.00	500.00	(As per Project calculation Labour per day is priced at Rs.50/-)
Machine*	17.00	60.00	
Maintenance	25.00	25.00	(It is assumed that Rs. 600 per annum is needed for maintenance)
Cost of 2 shawls	792.00	835.00	

Selling Price Rs. 1000/- (The price can range from Rs.500 per piece to Rs.800.)

Profit from the above calculation: Rs.208 which is 26%

Note

* The most expensive machine, Burmese Shuttle Loom, costs Rs.6000 and could last for about 15 to 20 years. Machine cost for two weeks has been calculated in two ways---one by simply dividing the machine cost over 15 years, and another, by calculating interest cost assuming that the owner borrows from the SHG at 2% per month.

COST BENEFIT ANALYSIS FOR APICULTURE

Particulars	Amount (Rs.)	Amount (Rs.)	Remarks
Cost of 10 Bee Boxes*	430.00	710.00	
Labour	1200.00	1200.00	As per Project calculation Labour per day is priced at Rs.50. Labour invested in a year is 24 days
Cost of Rearing 10 Bee Boxes	1630.00	1910.00	
Total sale assuming 5 bottles of honey are produced per box in a year#	6500		The price can range from Rs.110 per bottle to Rs.135 which is prevailing price at village

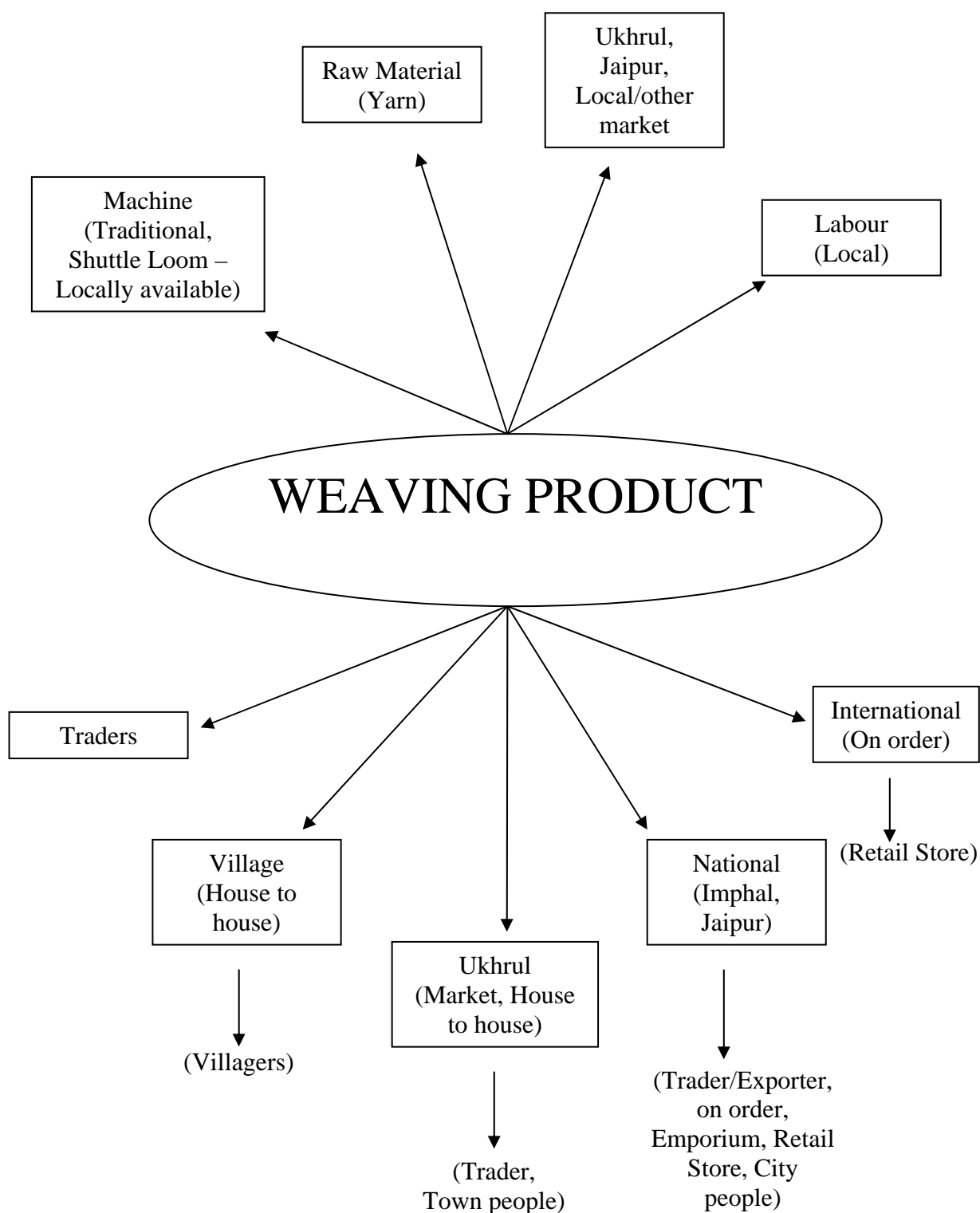
Profit from the above calculation: 1) Rs.4870 which is 299% 2) Rs.4590 which is 240%

Notes

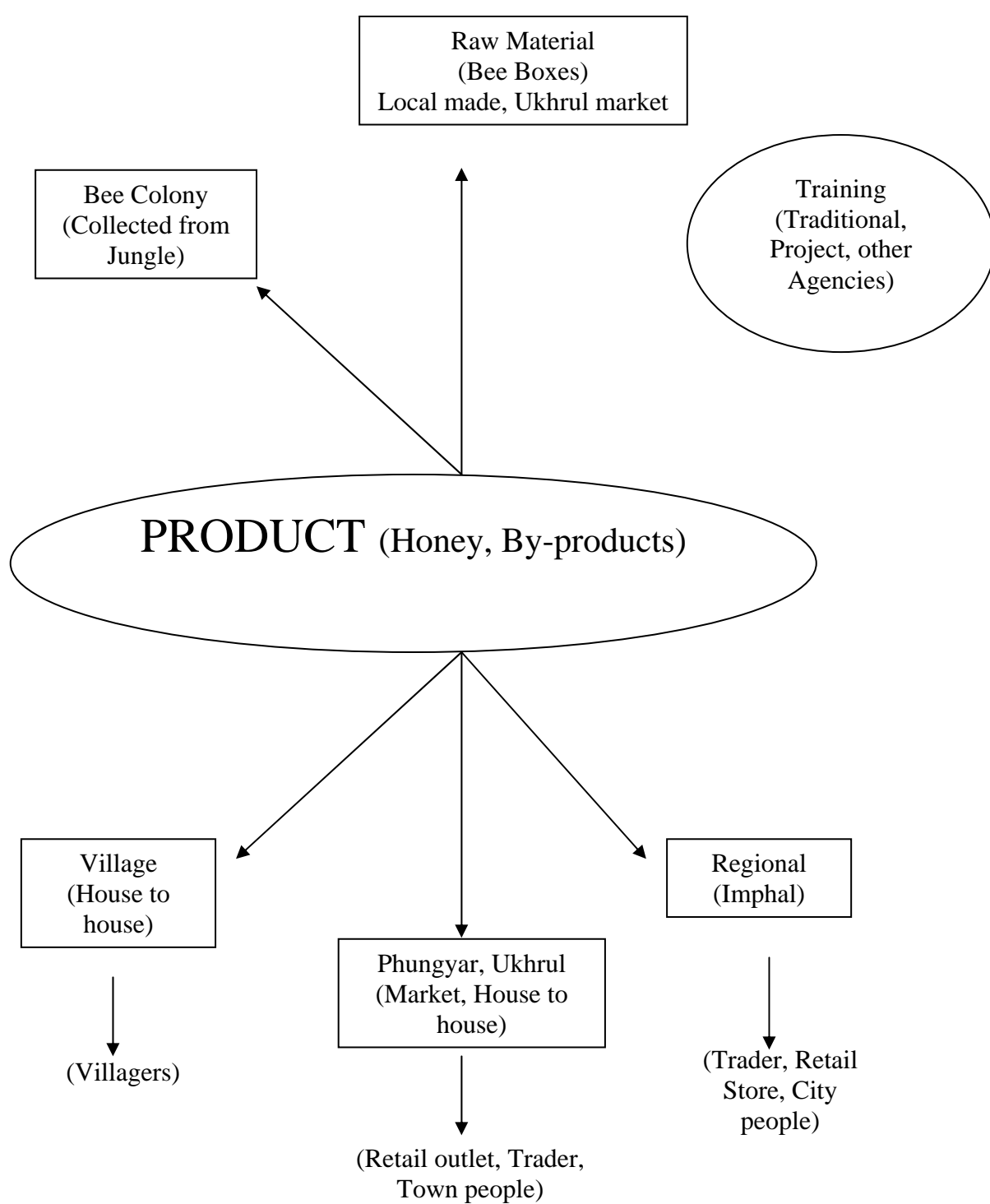
* The villagers are using two varieties of Bee Boxes. Traditional Box which is made at village level and the average cost is about Rs.300 per box. Standard Bee Box which is available in the market and costs about Rs.500. Both varieties of boxes can last about 7 to 10 years. Cost of Bee Box for one year has been calculated by simply dividing the cost of Bee Box over 7 years.

This calculation doesn't include benefit from increase in fruit production due to improved pollination and sale of beekeeping byproducts.

Market Chain Diagram for Weaving



Market Chain Diagram For Apiculture



Comparative Income Table

WEAVING		Before Project Intervention	After Project Intervention
	Annual Income	16,500	29,300
	Production Per Week/Month	1-2 shawls	2-3 shawls

WOODCRAFT		Before Project Intervention	After Project Intervention
	Annual Income	13,500	14,300
	Production Per Week/Month	15	20

APICULTURE		Before Project Intervention	After Project Intervention
	Annual Income	20,000	32,260
	Production Per Week/Month	2-3 bottles, 2 lts	4-5 bottles, 150 lts

Note: These figures are based on the responses of those beneficiaries that were interviewed.

Impact of Self Help Group on Women among the Tangkhuls in Ukhrul District, Manipur

Yirmeila V. Zimik⁶⁹

L. Vima Vashum⁷⁰

Lucas Zimik⁷¹

R. Wormihor Lolly⁷²

Mary Beth Sanate⁷³

1. INTRODUCTION

1.1 Background of the project

International Fund for Agricultural Development (IFAD), a specialized UN agency established in 1977 to combat hunger and poverty in developing countries, supports a number of poverty alleviation initiative in the Asian Region. North East Region Community Resources Management Project (NERCRMP) is one among such initiatives in India. The Project is operational in three states and six districts viz. Karbi Anglong and North Cachar Hills in Assam, Senapati and Ukhrul in Manipur and West Garo Hills and West Khasi Hills in Meghalaya. The project was declared effective from February 1999.

The implementation mechanism of the project is through its Project/Programme Support Unit (PSU) at Regional Society in Shillong and District Support Team (DST) at the District Society at the District HQ of respective district. The project has the participation of 50 NGOs as partner organizations. At the community level, the project activities are implemented and delivered through the Project-initiated community based institutions, viz. the Natural Resource Management Groups (NaRMGs) with representation of men and women drawn from each household and the Self Help Groups (SHGs), predominantly of women.

The present study was conducted in Ukhrul District of Manipur, where the project is implemented through the Ukhrul District Community Resource Management Society (UDCRMS) since 1999, covering 103 villages with 7768 Households forming 146 NaRMGs and 617 SHGs.

1.2 Ukhrul District at a Glance

Ukhrul district is one of the hill districts of Manipur state, bounded by Myanmar in the East, Chandel district in the South, Senapati district in the West and Nagaland in the North. Located between 24 degrees North, 25 degrees South and 41 minutes latitude and between 94 degrees 47 minutes longitude, covers an area of 4,544 square kilometers. The 1,40,946 approximate population of the

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district is mainly made up of the Tangkhul tribe, with the Kuki tribe and the Maring tribe in some pockets.

The community has a well-defined traditional institution headed by village chief who is known as the Headman (Awunga) and the ministry of councils who are the clan representatives (Hanga). Women are generally excluded from the village council. They do not have much say in family or community even though they contribute to the economy. Illiteracy and lack of financial power makes women more vulnerable. Moreover, the existence of only one bank in the district compels the project as well as the community to take up micro credit activities. The Social setup, such as the existence of the Tangkhul Shanao Long, TSL (Tangkhul Women Council) in every village, was found conducive for initiating social mobilization. Taking the above highlighted problems as a challenge and as an opportunity, NERCRMP decided to make this District a model on SHG movement. With the initiation of NERCRMP, the TSL mobilized the formation of SHGs in almost all the villages of Ukhrul district in the year 2000-2001. The streamlining of the SHGs activities for upscaling was initiated by UDCRMS in the year 2003. The main purpose of forming SHGs across the district is **‘to open a women’s Non Banking Financial Institute (NBFI) in the district head quarter through Self Help Group’⁷⁴**.

Credit was regarded as man’s domain. The patriarchal system promotes ownership of property by man alone and does not recognized women as credit worthy because she does not have property to mortgage. Hence, womenfolk did not have access to the informal credit system. Access to formal credit had never been an opportunity for the isolated womenfolk of the villages where its knowledge had only been introduced recently.

1.3 Rationale

The existence of SHG has brought many changes in the lives of the womenfolk in the Ukhrul district of Manipur. But this learning could not be shared with others, both within and outside the district, due to lack of proper documentation. Hence this documentation study was undertaken.

1.4 Objectives

The core objectives of the documentation exercise were to:

- Study the impacts of Self Help Group on individual households/communities
- Identify various categories of activities through Self Help Group.
- Study the credit and repayment scenario and performance
- Assess absorbing capacity of the groups
- Identify new challenges

2. STUDY COMPONENTS

The documentation team started off with an orientation programme for a systematized documentation, where the tools to be used, identification of indicators, strategy, methodology, etc. were discussed and decided upon. It was decided that the team would visit four villages and spend four days and three nights in the villages for the study.

⁷⁴ Women’s Banking Institution in Ukhrul, an assessment study, for NERCMS, Shillong (9-14 September 2002): Mahila Abhivruddhi Society (APMAS), Andhra Pradesh, e-mail: cbox@apmas.org

As per the topic of the study, it was decided that the tools to be used would include-

- Focus Group Discussion
- Individual Interaction/Personal Interviews
- Personal observations of team members
- Secondary Data (from the DST and the Villages)
- Photography

In the selected 4 villages, women access credit only through SHGs, so the team agreed to carry out the study based on SHGs; Formation of SHGs, their activities, utilization of funds, change in income sources and pattern, change in savings, skill development, awareness, etc. were identified as the key indicators for the study. Based on these, a questionnaire was prepared (Annex III) for the personal interviews of the SHG members.

To capture the impact of micro credit, the situation before, the present status and the process involved were studied by conducting Focus Group Discussions (FGDs) among all the SHGs members in each village, interviewing individuals and noting down observations of each team members along with photography. Respondents of the personal interviews were pre-decided and consist of an average of two members from the SHGs, one from the poorest of the poor and another from the better off; Leaders of the SHG Federations; Prominent members of the community like the Headman, Pastor or the NaRM-G Community Organizer (CO); Bank Manager of the only bank in the District, UBI, Ukhul.

Secondary data were collected from the UDCRMS records and Status report cumulative till February 2006 and records of the SHGs.

3. FINDINGS

3.1 Changes

The project intervention on the workings of the SHGs had brought many changes in the overall livelihood of the rural womenfolk. Womenfolk are now more confident, united, and efficient in household management, co-operative and have developed marketing ideas. In Kuingai village, the village federation has plans to organize market day in the village, where the neighboring villages can also participate. The people of this village expressed their difficulty in marketing of the vegetables produced in the village due to lack of proper communication system. The village is 81 Kms from the district HQ. Regular meetings conducted in members's house on rotation, compels them to clean the house and maintain personal hygiene, ultimately forming a habit. It is expected of every member to lead and pray in the meetings, thus fear of public speaking is addressed and leadership qualities are learned besides being more involved in spirituality. Womenfolk also pointed the fact that their learned and forgotten writing skills had been revived through SHGs. Now their handwritings have also improved and even

Mathotwon A. Shatsang, Ngarummi SHG, New Tusom Village.

After the death of her husband she was left with four young children to look after. At first she was reluctant to join SHG since she felt that she would not be able to contribute the monthly saving of Rs.10/- She joined the SHG after much persuasion borrowed money from her neighbor for the first saving contribution. She took a loan of Rs. 1850/- and using this as a capital, she was able to start poultry business at Jessami. Her annual net profit from this business was Rs. 3220/-. With this income, she was able to send her children to school in town. Now her children are studying in the X and XII standards. She is determined to see her children graduate and teach in the village school(s). She plans to achieve this by expanding her business in the coming financial year.

the old (above sixty years old) can pronounce the words 'Self Help Group', 'Savings' etc. Constant presence of the partner NGOs in the field and their facilitation have helped the community to move along the path of development. The younger generations have formed themselves into SHGs and have started saving on their own, reflecting the feasibility of the next generation.

Change in Income

Sources of income for women before the project intervention were mainly limited to selling of seasonal vegetables, labour, weaving etc. that earned them a meager sum of around INR 50 to 200 a month, which hardly meet their needs. Hence women depended heavily on their husbands for any expenditure in the house. Now after forming the SHGs, the womenfolk have taken up many Income Generating Activities (IGAs) (Table No. 1), both non-farm (livestock rearing, handicrafts, etc.) and on-farm activities (fruit growing, vegetable gardening, etc.). At present, a monthly income ranging from INR 500 to 5000 is not a surprise.

Savings and Credit

The project policy encourages the contribution of a fixed amount as group saving by every member once or twice a month. The saving rate among the groups was found to range from INR 5 to 20 in a month. With the revolving fund, the income generated from group activities and monthly interests of inter loaning, the 20 SHGs of the four villages visited now have a corpus fund of INR 9,30,654 (A).

Mrs. Somila, 75 years old, is the oldest member of the Rinya SHG, N. Tusom village. She had attended meetings and had been involved in all the SHG activities regularly for the past five years, contributing a monthly saving of Rs. 10/- . Motivated by the group savings, she has a saving of Rs. 250 on her own (February 06). She took a loan Rs. 1000 from her group and bought a pig. She plans to sell the pig after 6 months and expect to earn Rs. 4800/- with a net profit of Rs. 3000/-. She is confident enough to handle this Rs. 3000/- and more in the future.

The group savings had motivated the members to have their own individual savings. While only a few had the habit of savings before, many (30 %) have now started saving individually in money 'boxes' or 'bags'. This greatly contributes to the micro credit of the SHGs by giving out as loan. Ngathingchon Zimik from Lanmaya SHG of Tusom CV reasons *'I would have only Rs 10 /- with me, but in our group of 15 members, it makes Rs 150 /-, an amount that could be use for doing something concrete as compared to my Rs 10 /-'*. As such, the percentages of people who have savings have gone up from a low 2 % to a complete 100 %.

Table No. 1: Activities of the SHG and amount of credit uptil February 2006

Sl.No.	Activities	No. of loanee	Amount loaned (Rs)	No. loanee (%)	Repayment percentage (%)
01	Petty Business	188	3,58,950	37%	100
02	Weaving	133	2,10,600	26%	100
03	Poultry	84	82,800	16%	100
04	Piggery	83	2,08,000	16%	100

05	Education	20	31,300	04%	100
06	Health	05	5,050	0.9%	100
07	Fishery	01	1,000	0.1%	100
	Total	514	8,97,700	100%	100

Source: UDCRMS, 2006

From the above table, it is evident that the different activities taken up by the SHGs are all credit worthy as shown by the repayment percentage (100%). Petty business is observed to be the activity with the highest potential as credit.

Womenfolk happily describe the inter-loaning of the SHG fund as a blessing from heaven. They are still not allowed the privilege of the informal credit system, but now can avail loan from the group in times of need besides using the loan for IGAs. An interesting observation is the effect of the interest rates of the SHGs loan on the Church based credit system, where the rate was slashed down from 5% to 2 % after they were left with no borrowers since the SHG loan can easily be availed at a low interest rate of 2 %. Many incidents of the SHG loan saving them in times of need were related by almost 50 % of the respondents.

Table No. 2: Revolving Fund Status of SHG

Sl. No.	Name of SHG	Village	Total Saving Amount (Rs)	Grant received from UDCRMS/ IFAD	Interest received	Total Amount of Group Fund
01	Ngalalung	Challou	48,000	20,000	6344	74,344
02	Kalamkhu	Challou	42,000	20,000	8224	70,224
03	Reisancho nya	Kuingai	12,000	10,000	3406	25,406
04	Ringthotmi	Kuingai	18,000	20,000	2250	40,250
05	Ringkapha khuirakhami	Kuingai	12,000	20,000	3060	35,060
06	R.K.V.	Kuingai	15,000	20,000	2903	37,903
07	Teresa	New Tusom	32,000	20,000	2300	54,300
08	Yarsem	New Tusom	18,000	10,000	3885	31,885
09	Sosomi	New Tusom	17,000	15,000	3496	35,496
10	Rinchui	New Tusom	35,000	20,000	2000	57,000
11	Rinthar	New Tusom	35,000	10,000	3246	48,246
12	Alice	New Tusom	36,000	20,000	2359	58,359
13	Rinya	New Tusom	32,000	20,000	2302	54,302
14	Reisang	New Tusom	36,000	20,000	2417	58,417

15	Ngarummi	New Tusom	31,000	20,000	2471	53,471
16	Yarngachon	New Tusom	26,000	20,000	2172	48,172
17	Mayasang	Tusom C.V.	21,000	20,000	2150	43,150
18	Lanmaya	Tusom C.V.	4,000	10,000	793	14,793
19	Lingkami	Tusom C.V.	28,000	20,000	2457	50,457
20	Mathotlui	Tusom C.V.	17,000	20,000	2419	39,419
	Total:		5,15000	3,55,000	60654	9,30,654

Source: UDCRMS, 2006

Absorbing Capacity as Credit

The absorbing capacity of the community as credit was observed to have a high potential. An insight of the amount managed by the group, their future plan of action and the performance of loan repayment (Table No.2), shows that more facilitation is required on it. Personal interaction information indicates high potential of individual credit absorption capacity. When asked about their credit requirement, some quote as high as INR1 lakh, while others were satisfied with INR 5000. On enquiry of whether they could borrow and repay their requirements, they responded that they could since they now have learned from the project interventions how to budget requirements and make plans. They are confident that they could repay loans they may avail since they now know of the various ways of utilizing money and generating income as taught by the project staffs and as learned from experience gain in the process of being involved in the project promoted activities. This is substantiated by the fact that members have borrowed amounts ranging from INR 1000 to 3000 and there has been not even a single case of defaulters.

Impact at household/community level

❖ Consumption pattern:

Marked changes can be seen in the consumption pattern of the womenfolk. Most of them have increased their household properties from the income generated from IGAs. Some had even purchased luxury items like television set, music systems, etc.

Orphaned when still young, now married a member of an SHG called Lanmaya from Tusom C.V. Z. Shanreiwon said "SHG has helped me out in all aspects of life. Now I can wear clothes like the others and I also have utensils other housewives have. I am planning to get a tin sheet roof very soon.

❖ Health status:

Overall health status has improved through the formation of SHGs. Before they could not even consult a doctor when there are health problems in the family due to lack of fund. Thus delayed treatments often lead to further deterioration of the health conditions. Now when there is need for money for any health check ups, the members have easy access to loan from

Ngathingmi Shatsang of Kalamkhu SHG, Challou village was completely broke when she was diagnosed of appendicitis and advised for immediate operation. She requested her group for a loan to which the group not only readily gave her the loan, but also did not take the interest. Thus saves her and also the trouble of sourcing money for the operation.

the groups.

❖ **Decision Making:**

Menfolk were the sole decision makers both at the household and at the community levels. Now since the womenfolk are more educated on financial management and other social activities, their opinions are given weightage. Husbands now consult their wives on most of the cases regarding the household management and children's education.

Knowledge about Linkages with other Financial Institutes:

The SHGs of the four villages have no linkages with other financial institutions. The womenfolk had minimal knowledge about linkages before the project intervened. But now almost 80 % of them have basic information.

Activities other than micro credit:

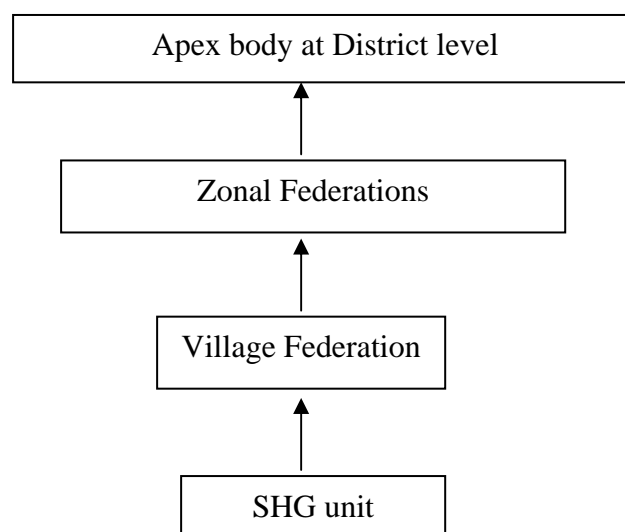
The intervention of the Project in these four villages had brought tremendous impact in the lives of womenfolk as in the cases mentioned above. Most of the activities of the SHGs are related to micro credit in that they are mainly for generation of income. The group members help out the weak, old, sick and orphans by fetching firewood, giving prayer support, contributing rice, giving financial assistance or providing educational materials like text books, stationeries, etc. and even support school admissions. At the community level, SHGs are taking up sanitation programmes and cleanliness drives.

3.2 Process

Formation of Self Help Group

The TSL were mainly involved in the formation of SHG across the district. Some women were selected from different area of the district and they were exposed and trained at MYRADA. After the completion of training they went back to their respective area and they started formation of SHG by identifying the poorest of the poor among the community which have similar social, financial background based on the affinity and homogeneity of the members.

Proposed Structure



The Village Federation has been formed in 2004 and Zonal Federation in 2005 by the SHG units. At present the village federations are monitoring all the groups within the village and facilitate new groups. The Zonal Federations are monitoring and facilitating through the village federations covering 15-30 villages.

Revolving Fund

Groups are given Rs.5000-10000 as per the grades. The 20 SHGs from the four villages studied have received INR 3,55,000 (table No. 2) from the project as revolving fund till February 2006. This revolving fund is loaned out to the members of the group at an interest of 2% per month, which is utilized for a number of activities. Sometimes the group also gives loan to non-members at a higher interest of 5 %.

Secretary of the Rinchui SHG from New Tusom A.S. Ayao initially start up a small pan shop. Taking a loan of Rs. 4500 INR from her SHG and borrowed 10,000 INR from her husband. She saved 10 % of her daily income from the shop in a moneybox for repaying the loan she took from the SHG. Through the profit made from the shop, she had brought an inverter worth Rs. 10,000 for her husband's video parlor. Though her husband still takes care of their son's education, she is also contributing Rs. 1000 INR every month.

Capacity Building

Maintenance of Cashbook, Mother-book, Ledger, Loan document, Savings and Attendance registers, Monitoring records, etc. are some of the skills the SHG members have acquired. Out of the total SHG member respondents, 42% have received trainings on Bookkeeping and Accountancy and other micro credit related trainings. The project conduct a number of trainings/orientation work shops for the members of the SHGs as well as the NaRMGs at the DST office or in collaboration with the line departments, or send them to other organizations that give the required trainings. Trained members would in turn teach and disseminate their knowledge to the fellow community members. None of the members report having gone for any exposure trips.

3.3. Opinion of Others on SHG activities:

Although almost everybody in the village are educated, womenfolk know more about accounting than the men folk in the village after their acquired skills from the SHGs.

- Womenfolk are more goal oriented. Before they were only involved in looking after the children at home.
- Many had expressed that the time taken up by the frequent meetings of the SHGs hampers household activities.
- Children's education has improved since most of the families now have better financial position from the earnings from wives through the SHGs.
- The villages being an agrarian community, week days are spend for their agricultural activities, which mostly leaves only the Sundays and evenings of weekdays for conducting the meetings. This had resulted in less enthusiasm and involvement of the womenfolk in the church activities.
- Competitions amongst the SHGs to increase their corpus had led to decreased sense of compassion, sharing of experiences and learnings, etc.

4. Emerging Issues and New Challenges

4.1 Linkages with other Financial Institutes

So far, there are no direct as well as indirect linkages of the SHGs with any financial institutes. During the field visits, many of the group expressed their requirement for access to credit. But since the district has only one bank, the United Bank of India, Ukhul, which has a limited capacity for promotion of Micro Credit as opined in an interview by the Bank Manager of UBI, Ukhul, upgrading their activities as well as future plans for institutionalization and hence sustainability is going to take time.

4.2 Policy and Insurance

Since up-scaling the activities of most of the SHG IGAs is dependent on the increase of the corpus fund, are involved in piggery or poultry, which can be, easily infected with diseases, this can affect the regularity of loan repayment. Very few of the SHGs have policies for covering accidents. The absence of policies in these regards among the groups needs to be addressed.

4.3 Constraints in Future plans of SHGs

Identifying and prioritizing needs within and outside the groups have helped the SHGs to come up with future plans. But the poor economy of the society cannot support the required financial input. Moreover, difficulty in accessing credit, as narrated in the study are the main constraints faced by the SHGs at the present. The SHGs of the four villages visited have visualized various enterprises and plans, some of which are given below-

- Setting up of enterprises like weaving – Rinkami SHG, Tusom CV
- Setting up of embroidery and handicraft center – Yangsangmi SHG Federation, Tusom CV village
- Running a boarding/hostel – Rindhar SHG, New Tusom village
- Establishing community health center – Ngakuimi SHG Federation, New Tusom village
- Procuring rice mills in the villages – Ringthotmi SHG, Kuingai village
- Road Construction for improve communication and transportation – Ngakuimi SHG Federation, Kuingai Village
- Purchase of vehicle for transportation – Ngakuimi SHG Federation, Kuingai Village
- Promotion of micro finance institution – Ngakuimi SHG Federation, New Tusom Village

High level of confidence can be observed through interactions. However, majority of the participants in the discussion have shared their opinions that they need the initiation and technical guidance from UDCRMS/IFAD.

5. Conclusion:

The womenfolk now have their own savings, coming a long way from depending entirely on their husbands even for buying a kilogram of table salt.

Over a span of just three to four years, the project⁷⁵ had effectively intervened into the working of the SHGs with notable achievements in terms of micro credit management. As evident from the observations and the informations obtained from the field visit, SHGs of the four villages do serve as a forum for addressing micro credit needs, establish the habit of thrift and enhance savings and ensures effective fund rotation.

6. Acknowledgement

The team is very grateful to the communities of Challou, Kuingai, New Tusom and Tusom CV villages, especially the Self Help Groups, Headmen, Pastors and the NaRMG Community Organizers. Their co-operation, hospitality and patience will always be remembered. We also would like to thank ENRAP for the financial assistance.

⁷⁵ With the co-ordination among the Regional Society, the District Support Team and the partner NGOs.

Questionnaire:

1. **Name of Respondent:**
 2. **Name of SHG:**
 3. **Name of Village:**
 4. **SHGs**
Formation: How, When, Who, for what purpose?
 5. **Skill Development**
 - ❖ Trainings
 - ❖ Exposure
 6. **Revolving fund:**
 - ❖ Received so far
 - ❖ How are they utilizing* and for what activities
 7. **Income:**
 - ❖ Source of income Before and after (annual)
 - ❖ Change of income pattern: Before, Now and How.
 8. **Saving**
 - a. Saving capacity before, now & process?
 - b. Has the revolving fund from the project motivate people to save more.
 9. **Credit:**
 - ❖ Source of credit before, project intervention, now?
 - ❖ Accessibility of credit - before and now
 - ❖ How much they require (loan size)
 - ❖ How much can they absorb as credit (Group level)
 - ❖ How much they have availed (Inter loaning)
 - ❖ Repayment (amount repaid, schedule for repayment, no. of defaulters, etc. to be cross checked with secondary data)
 - ❖ Utilization*
 10. What are the other activities taken up by SHGs other than credit management?
 11. **Linkages with other Financial Institution**
 - ❖ Knowledge of formal credit system
 12. **Impact on household/Community level**
 - ❖ Consumption pattern: Now, before.
 - ❖ Health status: Now & before.
 - ❖ Decision making: Now & before.
 13. **Constrain and new challenges in micro credit.**
- * Utilization:**
- ❖ Non farm activities
 - ❖ Farm activities
 - ❖ Others

E. Method of analysis: Assessment of responses based on questionnaire

ANNEXURE II**Profile of villages visited**

Name of Village	No. of Household	No. of NaRMG	No. of SHG	Population
Challou	46	1	2	302
Kuingai	73	1	4	408
New Tusom	171	1	10	893
Tusom CV	82	1	4	441
Total	372	4	20	2416

ANNEXURE III:**SHGs PROFILE OF CHALLOU, Kuingai, NEW TUSOM & TUSOM C.V.****UNDER CLUSTER (I)**

Sl.No	Name of SHG	Village	Date of Inception	Members strength	Total Saving Amount (Rs)	Credit Access	Grant received from UDCRMS/IFAD	Total Amount of Group Fund
01	Ngalalung	Challou	07.01.2001	23	48,000	Nil	20,000	74,344
02	Kalamkhu	Challou	07.01.2001	21	42,000	Nil	20,000	70,224
03	Reisancho nya	Kuingai	07.01.2001	17	12,000	Nil	10,000	25,406
04	Ringthotmi	Kuingai	07.01.2001	15	18,000	Nil	20,000	40,250
05	Ringkapha-khuirakham i	Kuingai	07.01.2001	18	12,000	Nil	20,000	35,060
06	R.K.V.	Kuingai	30.01.2002	14	15,000	Nil	20,000	37,903
07	Teresa	New Tusom	02.11.2000	15	32,000	Nil	20,000	54,300
08	Yarsem	New Tusom	12.09.2003	17	18,000	Nil	10,000	31,885
09	Sosomi	New Tusom	05.09.2003	17	17,000	Nil	15,000	35,496
10	Rinchui	New Tusom	13.07.2001	16	35,000	Nil	20,000	57,000
11	Rinthar	New Tusom	05.11.2000	16	35,000	Nil	10,000	48,246
12	Alice	New Tusom	05.11.2000	17	36,000	Nil	20,000	58,359
13	Rinya	New Tusom	05.11.2000	15	32,000	Nil	20,000	54,302
14	Reisang	New Tusom	05.11.2000	15	36,000	Nil	20,000	58,417
15	Ngarummi	New Tusom	05.11.2000	15	31,000	Nil	20,000	53,471
16	Yarngachon	New Tusom	05.11.2000	16	26,000	Nil	20,000	48,172
17	Mayasang	Tusom	20.07.2003	20	21,000	Nil	20,000	43,150

		C.V.						
18	Lanmaya	Tusom C.V.	12.09.2004	15	4,000	Nil	10,000	14,793
19	Lingkami	Tusom C.V.	01.12.2000	15	28,000	Nil	20,000	50,457
20	Mathotlui	Tusom C.V.	23.07.2003	19	17,000	Nil	20,000	39,419
				336	5,1500 0		3,55,000	9,30,65 4

Source: UDCRMS, 2006

TRANSFORMING SHIFTING CULTIVATION FOR SUSTAINABLE LAND-USE AND LIVELIHOODS: A Study from Ukhrul District of Manipur

Vincent Darlong⁷⁶
Amba Jamir⁷⁷
Jollyson Ningshen⁷⁸
Selim Keishing⁷⁹
Tychicus Vashum⁸⁰

VOICES OF THE PEOPLE

"We had a good harvest in the past but now harvest has become poorer every year. This may be due to short jhum cycle and climatic change. However, we are lucky that the Project has come in time when we were all looking for alternatives and other opportunities. This must be blessing from above." - Rockson, Headman, Tusom Village.

"Since productivity in jhum cultivation has reduced we don't have food security in the village. So the youngsters have to look for other off-farm activities other than jhum cultivation. Banana cultivation is bringing new hope to all of us." - M.C. Vachungla, a member of NaRMG of Tusom Village.

"With the harvest of banana, the livelihood of the village will be improved."
- Noomi, a NaRMG member of Nungou Ato.

"We hope that banana will give us good return and compensate our hard labour invested in banana farming" - Rebecca, SHG member of Nungou Ato.

"50% of jhum is reduced because of banana farming. However, we are concerned about the disease of banana which is reported from some of the gardens in my village. We need help in this regard" - Shangam, Headman of Nungou Ato.

"If the project would have come during my young age, I could have done much more. Now I am old but I encourage the youth to take up both jhum and banana cultivation"
- Philawon, a member of NaRMG of Nungou Aze.

"The project makes us so busy that we hardly have time for gossiping"

⁷⁶ NRM & Extension Coordinator, NERCORMP-IFAD, Shillong

⁷⁷ Director, The Missing Link-Society for Environment & Communication, Guwahati, Assam

⁷⁸ Community Coordinator, UDCRMS, Ukhrul, Manipur

⁷⁹ Project Technical Officer, UDCRMS, Ukhrul, Manipur

⁸⁰ Project Manager, UCDRM, Ukhrul, Manipur

- R.K. Peter of East Tusom.

“This is the only project that ask us to work for our livelihood and at the paid us for what we have done. Who will not plant banana if seedlings are given free of cost?”

- C.T. Reisang, NaRMG member of East Tusom.

1. INTRODUCTION

“We are very excited about this banana plantation. We hope we can have enough food to eat and money to send our children to school by selling banana. Now we no longer have to depend only on jhum (shifting agriculture)” remarked an elderly lady shifting cultivator from Nungou Aze, a small hamlet of 27 households inhabited by the Tangkhul (Naga) tribe in Ukhrul District of Manipur in North East India (NE India). *Jhum* is the local word for shifting cultivation or swidden agriculture, which involve slash, burn and shifting pf agricultural fields. A significantly large percentage of population living in the hilly terrains and mountainous areas of the Eastern Himalayan regions continue to be marginalized with the twin challenges of environmental security and food security through the practice of shifting cultivation. The practice of shifting cultivation is now severely constrained with shortening of cultivation cycle, increasing population, reduced availability of land and land degradation, not only in Ukhrul District but also generally throughout the North Eastern Region (NER) of India.

Poor delivery mechanisms of both government and other service agents, challenges of socio-political unrest in the forms of insurgency and ethnic aspirations, and isolated geographical locations coupled with the absence of reliable sustainable developmental models for upland areas are just some of the major challenges. With this background, the North Eastern Region Community Resource Management Project for Upland Areas (NERCORMP) was initiated in 1999. The overall objective of the Project is to improve the livelihood of vulnerable groups in a sustainable manner through improved management of their resource base in a way that contributes to protecting and restoring the environment.

NERCORMP is a joint initiative of the Government of India (GoI) and the International Fund for Agricultural Development (IFAD). The North Eastern Council (NEC) and the Ministry of Development of North Eastern Region (DoNER) represent the Government of India in the Project set-up. The Project is operational in Karbi Anglong and North Cachar Hills in Assam, Senapati and Ukhrul in Manipur, and West Garo Hills and West Khasi Hills in Meghalaya. The Project was effective from February 1999 has been extended by 2 more years.

While there are eight specific sets of goals to achieve the overall objective of the project, the present case study focuses on the one, which is “to increase incomes through the development of more sustainable farming systems”. This is to assist farmers in the gradual conversion of unsustainable farming systems into more sustainable systems through:

1. Increasing the productivity of short fallow cycle jhum plots through modifying the crop mix towards more productive and profitable crops, and introducing crops and agronomic practices that contribute to soil conservation;
2. Promoting permanent plantation crops in fallow jhum fields,

3. Expand settled cultivated land through constructing perennial irrigation facilities and rehabilitating poor performing irrigation schemes in order to increase food production;
4. Build on the natural advantages of the area through greater emphasis on forestry and agro forestry as sources of livelihood as well as environmental protection.

1.1 The project implementation process

The implementation mechanism of the NERCORMP Project is through its Project Support Unit (PSU) at Regional Society in Shillong and District Support Team (DST) of the District Societies located at the District HQ of project districts. The Project has the participation of 50 NGOs as partner organisations. At the community level, the project activities are implemented and delivered through the Project-initiated community based institutions, viz. the Natural Resource Management Groups (NaRMG) with equal representation of men and women drawn from each household and the Self Help Groups (SHG), predominantly of women.

2. SYSTEMATIZATION, OBJECTIVES OF STUDY & PROCESS

2.1 Systematization

Systematization is a methodology, which facilitate the on-going description, analysis and documentation of the processes and results of a development project in a participatory manner.

2.2 Objectives of Systematized Documentation

The key objective of this systematization documentation exercise in Ukhrul district therefore was to:

- 1) Explore the achievements of the project interventions in transforming shifting cultivation in Ukhrul District
- 2) To share experiences and lessons learnt with the larger audience of development agents and policy makers; and
- 3) To enrich the project planning and implementation strategies.

2.3 Team Formation and Orientation Process

In all there were 4 study teams and each of these teams which represent a mix of PSU, DST, partner NGO and a Facilitator (*Annexure E*) were constituted in advance to facilitate discussion and planning. The teams assembled at Ukhrul – the district headquarter – for a detailed one and half day orientation programme on ‘Systematization of Documentation’. During this period, each study team not only worked understand the meaning, practices and processes of systematization but also had to come up with detailed plan with methodology, tools and strategies to be adopted for the field documentation. The teams were also required to fine tune or modify their topics for the study.

3. THE STUDY AREA – DESCRIPTION AND NAMES OF VILLAGES

The Development Support Team (DST) of the Ukhul District Community Resource Management Society (UDCRMS) keeping in mind the specific needs of the systematization process and other logistical issues selected four case study villages (*Annexure C*) in the district. The villages are:

East Tusom

Also known as South Tusom, the village is located 71 km from Ukhul. The project intervention began in 2002. The village has 55 households with a population of 373 (189 males and 184 females). 43 persons are literate. All households are shifting cultivators.

Nungou Aze

49 km away from Ukhul, the village has 27 households, all of whom are shifting cultivators. The project intervention began in 2003. The jhum cycle is 12 years. Food security, lack of water sources and limitation of productive land are the major challenges of the area

UDCRMS fact sheet

- The UDCRMS project covers 103 villages in Ukhul district of Manipur
- In all, 7768 households benefit from the project activities
- The project has so far formed 146 NaRMGs
- There are 631 SHGs under the project
- 9 partner NGOs assist in the implementation and delivery of the Project.

Nungou Ato

With a household of 54 and population of 313, the village is located at 44 km from Ukhul. Jhum cycle is 8-9 years. Major issues and concerns of the village are limited land for jhum cultivation, lack of water for irrigation, lack of agricultural knowledge for perennial crop production, access to credit and food security. The project intervened in this village from 2003.

Changa

A small village with 33 household, located at about 42 km from Ukhul. Jhum cycle is only 5 years. Major challenges of the village are limited jhum land, lack of water for irrigation, lack of community forest, shortage of food and lack of connectivity between the village and their terrace fields. The project intervention in this village was from 2003.

4. FOCUS OF THE STUDY

The focus of the documentation was to have an in-depth description of the extent of jhum modifications or transformation adopted by the communities and to also analyse the degree of success or failure of the project interventions. In terms of seeking data and descriptive information, the study and documentation team looked at the extent and process of community mobilization, capacity building and other processes applied by the implementing agencies. The documenters also specifically studied and analyzed project interventions regarding jhum transformations that would ensure unsustainable traditional agricultural practices into more sustainable systems through:

- 1) Increasing the productivity of short fallow cycle jhum plots through modifying the crop mix towards more productive and profitable crops, and introducing crops and agronomic practices which contribute the soil conservation; and
- 2) Promoting permanent plantation crops in fallow jhum fields.

Other specific issues to draw lessons and experiences were:

- What has been the gain or loss/outcome of *jhum* modifications/transformation of shifting cultivation in these case study villages?
- What is the trend in agro-biodiversity?
- What is the status of food security of the communities after jhum modifications or transformation of shifting cultivation?
- Did the jhum modifications improve the promotion of 'unsustainable farming practices' into more 'sustainable system'?

5. STRATEGY AND ANALYSIS – PROCESS, TOOLS AND METHODOLOGIES

5.1 Field Strategy and Process

Often a mix of PRA and appreciative enquiry were applied for information gathering. Field visits to see and understand the kinds of activities undertaken by the communities were part of the study process or methodology followed in each village, which were also photo documented for record of the study team. The comparative profiles of the each of the study-villages before the project interventions and as they are today (as on March 2006) may be seen at Annexure C.

The team strategically spent a night in 3 of the 4 villages visited so as to optimize maximum interaction with all stakeholders within the village community. The first interaction was a general public meeting with all the villagers to inform them of the purpose of the visit, introduction of team members, explain systematization and to prepare them for the task at hand. Besides the orientation and introduction to Systematization, the team also gave time to villagers to freely share their concerns, feedbacks and experiences. Although concerns raised by the villagers often were on needs and problems, it was purposely allowed as an 'ice-breaker activity' to allow the villagers to open up and to also understand the extent of benefit-percolations, as well as, their understanding of the project itself.

After the general public meetings, the respondents were either grouped into smaller focus groups for Focus Group Discussions (*Annexure D*) or simply allowed to return to their homes after which the documentation team would follow up. The field strategy and field investigation guide and questionnaires in a format form for data collection adopted by the present team may be seen at *Annexure A and B*.

5.1.1 Tools and Methodologies

Keeping in mind the participatory nature of the Systematization methodology, the team put together a series of participatory field data collections tools. The tools were:

- Focus Group Discussions (FGD)
- Story Telling

- Sustainable Livelihood Analysis
- Interviews – Semi structured and Structured
- Transect walks
- Photo-documentation
- Timeline analysis
- Observation
- Secondary data analysis

5.2 Data Analysis

Keeping up with the spirit of participatory methodology, the study team adopted a series of tools and strategies to carefully filter and analyse the data collected from the field. The team therefore carefully sought peer review of the data collected and also sought their views, opinions and analysis on the information gathered from within their community. As a strategy, the team would often get into huddles during meals and evenings to discuss the progress and applicability of the strategy prepared, including whether the data sheet and questions prepared worked or not.

On-going discussions and analysis of field information and data collected was what the team applied in the field. Once we returned to Ukhul, the team immediately convened a meeting and discussed each others findings and observations, and these were questioned or commented upon by team members for further analysis. The team also continued to review and refer to all available secondary data for in-depth analysis before finally getting down to our descriptive documentation of the field visit.

6. DESCRIPTIVE NARRATIVE OR FINDINGS

6.1 Policy and Socio-economic environment

Despite the existence of numerous government departments and other agencies to support and work with farmers and rural communities, there is a lack of a strong policy framework to support and coordinate or facilitate such activities. This is particularly so when it comes to working with or supporting traditional shifting cultivation communities. Such policy gaps isolate farmers that live in a subsistence level with little or no livelihood options.

The ultimate impact of such situations is ultimately borne by the fragile natural resources upon which these traditional shifting cultivation communities depend. There therefore need to be comprehensive policy framework that supports the development of genuine partnerships between communities, NGOs and government agencies to facilitate overall development of communities at large.

6.2 Project and Project Team's Perspectives

6.2.1 Strategy and activities: responding to local needs

Although the communities were experiencing problems relating to shifting cultivation (jhum) in terms of low productivity, simple jhum modification concept just by itself did seem a very attractive proposal to the poor unless it significantly linked to livelihood activities. The communities, including the land owners, often displayed mixed reactions with the idea of transforming shifting cultivation or jhum modification as the issues of immediate concerns were food security and income, besides changing patterns of land access. The Project, particularly the DST of the District, adopted strategies that built upon existing skills and systems of the communities for

identifying and upscaling activities of jhum modifications (explained in detail at para 7).

With this background the project strategy offered farmers livelihood improvement activities as an efficient incentive to mobilize the community to adapt jhum modification programmes in the villages. This process started with an education and awareness campaign on the project concept and philosophy for the farmers along with the formation of the NaRMGs and SHGs. The NaRMGs identified the focused activities to be taken up as part of the jhum modification activities, which were reflected in the community resource management plan (CRMP). Jhum land for the purpose were identified and demarcated in consultation with the traditional land owners following the local customary practices. Social agreements were reached between the traditional land owners and the village communities on the use of such land as part of jhum modification activities.

6.2.3 Description of jhum modification interventions

It may be mentioned here from the Project perspectives that jhum modification interventions were targeted at both the cropping phase and the fallow phase of jhum or shifting cultivation. These approaches included any or combinations of the following activities:

- Conversion of jhum land into terraces;
- Promotion of cash crops, perennial horticultural crops, 'high value low volume' crops (medicinal & aromatic plants) in the jhum fields;
- Conversion of jhum fields into community forests/community reserves, particularly those with very good tree covers and other valuable NTFPs;
- Promotion of crop intensification (by increasing the cropping phase from generally one year of crop cultivation to two years or more by crop modifications / cover crop introduction).
- Promotion of traditional jhum crops/niche crops/vegetables (other than paddy) in jhum for higher cash income.
- Intensification of traditional cash crops in the jhum (eg soya bean) for higher income.
- Promotion / introduction of economic trees in the jhum / tree farming;
- Promotion of agro-forestry, such as large cardamom with existing trees in the fallow areas.

6.3 Community Perspectives

6.3.1 Traditional perspective vis-à-vis shifting cultivation

In the past, people were practicing jhumming as their main source of livelihood. In those days population were considerably small and their lifestyle were also very simple as a result of it their daily needs or expenditures were less. As such food security was the sole concerned of the people in those days. Hence, people had strong emotional attachment with this system of shifting cultivation. Throughout the different stages of shifting cultivation certain rituals were always associated with solemnity.

However, in the present context, there is a dramatic change of thought and perception among the shifting cultivators regarding shifting cultivation. As the population increased and modern life style embraced (such as need for sending the children to school), the perception on jhum is also changing. Couple with this, the

climatic condition also seems to be mysterious than ever which remains full of uncertainty for continuing such practices of cultivation. Moreover, jhum cycle is also reducing to such an extent that the fertility of soil has been considerably depleted with very low productivity of crops. Regeneration of natural vegetation in the forest has also been retarded. Faced with these situations, the communities, which traditionally attach the practice of jhum as their age-old cultural milieu, are ready to adopt new changes of land use such as jhum modifications as intervened by the NERCORMP project.

6.3.2 Unique land ownership and management system

Each of the study villages interacted during the present study does have unique land ownership and management system, though each village is more or less self-governed as mini republic. Although the traditional land ownership is vested with few individuals but managed communally for its practical usage of shifting cultivation (i.e. communities having access rights to do jhum as per traditional/ customary practices), with the changing perceptions on shifting cultivation, both the land owners and the communities are now ready to adopt transformation of their traditional jhum land into any other productive land uses.

6.3.3 The livelihood status and opportunities

With the changing perceptions of the communities and also availability of diversified livelihood opportunities, the community's expectations and aspirations have dramatically increased over the past years. This has also facilitated the communities for ready acceptance of jhum modification or transformation process as they see higher gains of economy or financial capital through such interventions. By this process, the communities have indeed benefited, both intended and unintended, in all aspects of livelihood assets including social, physical, financial, human and natural. They are now more confident of adopting new practices that could ensure higher returns.

6.3.4 The project initiation process –aspirations, acceptability and challenges

The Project communicated efficiently its objectives and strategies. Through its participatory mode, the project has offered the communities the appropriate opportunity to improve and strengthen their sources of livelihood while at the same time retaining their traditional land holding practices. The demand driven opportunities of availing loans through the revolving fund and grants was almost a dream scheme for them who appeared to have never received government grants in the past. Initially the community found it almost difficult to believe the participatory approach adopted by the project was a new introduction. The project also revived and validated the community based management practices, which were already part of the customary practices through institution of NaRMGs. The communities who were visited during this study documentation were observed having pride to share the books and records of SHGs and NaRMG of their respective villages, which indicates their sense of ownership over the project and the village level institutions facilitated by it.

6.3.5 The transition period – hopes and fears

Currently the communities who have adopted the jhum modifications are undergoing a period of transition, which appears to be mixed with of hope and anxiety. This is the period when they have reduced their areas under shifting cultivation to be able to take up banana plantation. While reduction in jhum areas means less food crop production, at the same time they are yet to enjoy the real fruits of their labour. They

are anxious because they are confronted with new challenges of pest and diseases of their banana plantation, over which they have so much hope and aspirations. They are also anxious in terms of the price they are likely to get due to transport bottlenecks and mass availability of banana in the area. It is important that at this critical juncture when the success of jhum modification is about to be showing signs of success, the project should be able to respond with contingency plan to sustain the hope and aspirations of the communities on project interventions.

7. BUILDING UPON TRADITIONAL KNOWLEDGE – THE UDCRMS PROJECT STRATEGY

7.1 Project Background

Against the background of failed development initiatives and disillusionment in the District, the role of the UDCRMS project was to demonstrate a new approach of development, which focuses on interventions that are technically appropriate, culturally sensitive and institutionally effective. This required developing a genuine partnership between the communities and the project with active support of the government and other agencies so as to develop and implement interventions that are demand driven and based upon the indigenous knowledge systems of the communities.

The subsistence village economy was characterized by the practice of extensive traditional farming system of shifting cultivation which was becoming both ecologically and economically unsustainable. This was due to a number of accumulated factors and reasons, including population increase. One of the most immediate and glaring problem was the shortening of jhum cycle which directly impacted on declining soil fertility, continued encroachment on forest resources and progressive land degradation. The communities had more or less, recognized that shifting cultivation – as they practiced - was no longer sustainable and were in dire need of alternative development options to improve their livelihoods and land-use systems.

7.2 The Project Strategy

The first element of the project's strategy was the introduction of participatory planning processes and prioritization of activities in the formulation of a Community Resource Management Plan (CRMP) that reflected upon increased productivity and sustainable use of available resources. The project then applied a series of capacity enhancement trainings and exposure programmes to facilitate implementation of the project interventions through partner NGOs and local institutions.

Although the project has a number of activities, for the purpose of 'Jhum Modification' interventions, emphasis was given to rationalization of the land use system with specific crop modification inputs and support.

Agroforestry and perennial crops development activities that reduced their dependency on jhum and sustain livelihoods were the main emphasis.

UDCRMS Approaches:

- Respond to communities' perceptions of needs and priorities;
- Involve communities in decision making and planning;
- Make communities responsible for management of their development programmes;
- Ensure communities generate a greater sense of ownership over development interventions;
- Build upon the traditional values of community participation; and
- Utilize the strengths of traditional village institutions and knowledge systems.

7.3 The Implementation Process

1. DST informs the communities about the project – its concept, objective, approach and philosophy.
2. After community is convinced and willing to work with the project, DST enters into a social agreement with the community and rapport building activities are initiated.
3. PRA initiated by DST and partner NGO with the support of government line department and active participation of the community. PRA is conducted to create awareness about their resource base, their strength, weaknesses and opportunities and also to needs, hopes and aspirations.
4. Project initiation workshop and demonstration trainings with support from the line departments are organized.
5. Financial inputs given as core seed capital especially for procurement of suckers/seeds etc.
6. Community decides on land area to be planted and undertake activities with active support from project team.
7. Project constantly monitors project progress

8. THE ANALYSIS (LESSONS LEARNED)

8.1 Unique land ownership and management system

The challenge of working in such traditional communities is not only their lack of development or isolated geographical locations but also the inherent complexities where almost every village has a different land ownership and management system. A case in this regard is the 4 villages that the team visited where each village had a land ownership and management system.

Table I: Land ownership and Management system.

Name of Village	Jhum land owned by?	Who does the selection of jhum plot?	System of land distribution or allotment?	Terrace cultivation	Others
East Tusom	3 families	Village Authority and community	Allotted by Village Authority	After consent from landowner, family may practice but not transfer to anyone outside clan.	No tax or token tribute given to land owners
Nungou Aze	3 brothers of a single family	Village Authority and community	Lottery system but land owners get to choose their plot before hand	After consent from landowner, family may practice and own so long as they utilize land. No taxation.	Every 15 years 2 tins of paddy are given to land owner
Nungou Ato	6 families	Decision made individually. Now the community decides.	Same as Nungou Aze village	Same as Nungou Aze village	Every year 2 tins of paddy are given to land owner
Changa	1 family (Village Headman)	Individuals decide on their own	Land owner has to grant permission	Land owner has to grant permission	No tax or token tribute given to land owner

8.2 Intensification of shifting cultivation & cropping modifications

The introduction of simple but well analyzed field interventions that build upon the traditional knowledge and farming practices was not only well accepted by the communities but they immediately build upon it with their own innovations. The simple introduction of banana as a focus crop item for shifting cultivators has led to a series of impacts which may be highlighted as:

1. Land use under shifting cultivation in all the four villages has drastically reduced by about 40-50%. This is because communities could no longer keep up with declining crop productivity in jhum fields and once a short gestation cash crop like banana was introduced; all farmers immediately took to it.
2. Intensification of shifting cultivation is now seen as farmers, particularly women, have started planting and growing traditional jhum crops like soya bean, rice bean and others as cash crops leading to commoditization of crops.
3. Since the farmers have realized the value of communization of crops, the cropping patterns within shifting cultivations has drastically altered leading to crop modification within the traditional system. Such modifications are now greatly benefiting the once poor jhum farmers as they discover alternative means of income, land-use system and improved livelihood.

8.3 Farmers to Entrepreneurs

Over the three years of project interventions, the outlook and perception of many farmers have changed as they not only adapt new jhum modification techniques but also learn new marketing skills and knowledge. What the farmers once grew only for domestic consumption in small quantities is quickly turning into commodity crops. Farmers are also diversifying their activities by taking up both farm and non-farm activities and today in almost all the 4 villages visited by the study team, farmers also rear honey-bees, grow bananas and also take interest in marketing activities.

TIMON AND HIS BANANA FARMS

Mr. A. M Timon, aged 39 years of Nungou Ato village was a traditional shifting cultivator with little or no income. Realizing that shifting cultivation would not fulfill his aspirations, he decided to start a small banana plantation. He therefore, in 1999 planted around 250 banana suckers on an experimental basis and managed the farm with the little knowledge that he had from his elders. When the UDCRMS project came to his village in 2003, he took advantage of the opportunity and obtained 600 suckers from the project. He also actively participated in the technical trainings and updated his skills. Mr. Timon now has two permanent farm sites and in the first two years sold bananas worth INR. 20,000 (USD 460). Of late he sold bananas worth INR. 30,000 (USD 700) and he is now confident that banana sale this year (2006) will fetch him at least INR. 45,000 (USD 1050)

Such turn of events also go to show that with little input and support, communities can go till the last mile.

8.4 Collective over individual concerns

The introduction of social institutions like the NaRMGs in each community has had many positive impacts in the project. Many of these impacts are not necessarily planned but nonetheless, they have immensely contributed to social cohesion and success of the project. In the past, individuals hardly shared problems or plans in public thinking that such issues were private matters but now after the initiation of NaRMGs and SHGs people are openly discussing all kind of issues related to livelihood, land-use or simply sharing their experiences and this has completely opened up their worldview with regard to their aspirations as a collective community.

If, for example, marketing was considered as an individual family's activity, it is now looked upon as something that the community could collectively do. They are now planning and undertaking activities jointly or at least with concern for each others actions and in the process, planning, accountability and coordination within the community has improved.

8.5 Community Mobilization and Institution Building

In any activity with regard to natural resources, particularly when the resources are owned by individuals and managed by communities, the participation of all stakeholders and the institutions therein is imperative. The project not only invested time and resources in participatory community mobilization but also initiated institutions based on existing traditional systems. These two important interventions became the most effective mechanism for social change had thus affected far reaching consequences in the livelihood of rural farmers. According to Mr. N.S. Jonah, age 70 of Tusom village, the very existence of the NaRMG as an institution has greatly facilitated many decisions and activities within the village. He goes on to say that, *"It was easier to convince the land owner to set aside land for banana plantation through the NaRMG meeting. If there was no NaRMG, the Village Authority or community representatives might have done it but it would have been more difficult"*.

8.6 Enhanced Social Capital

In all Tanghkul Naga villages are numerous social and traditional institutions like Village Council, Church, Women Society and Youth Organisations. All these institutions were in existence even before the advent of the project but they all functioned in their own niche and interest. With the institution of NaRMGs, as another institution in the villages, the different organizations and institutions within the villages now get to meet under one roof and share and learn from each other. During such meetings they get to learn about each other's concerns, issues and strengths and often built up upon it. This has greatly added to better coordination and collective action in the community and thereby added great value to their social capital.

8.6 Women Empowerment

According to prevailing practices in the villages women have no rights over property and often are at disadvantageous positions when it comes to accessing credit or participating in public meetings. This has to do with customary traditions in a completely male dominated Naga society. Today the women in these project villages are actively participating in the public meetings and taking lead roles in developing village plan or other developmental programmes. Moreover, the women are also much more secured in term of economic conditions as they access to credit through SHGs for Income Generating Activities. Women have not progressed by way of participating in meetings or through their SHG activities but they have also taken the lead in both on-farm and off-farm based entrepreneurial activities by growing and marketing products for sale. Such activities have

"If it were not for SHGs to which I am a member, I might not have had the courage or confidence to undertake what I am doing today. It has also facilitated poor women like us to collectively place our concerns in larger meetings." - Mrs Luimaola, age 60 of Nungou Aze village

8.7 Transforming shifting cultivation vis-à-vis cash crops & food security

With sustained jhum modification interventions in the villages, much positive impacts in terms of reduction in jhumland area under shifting cultivation were very evident.

This is because the communities have now set aside certain jhum blocks for intensive horticultural activities for increased economic benefit and better livelihood options. The introduction of marketing concepts and knowledge has also triggered farmers to further intensify and modify cropping patterns in their jhum plots which they still continue to cultivate, though at a smaller scale. Based on discussions and analysis of the situation, a new area of concern that has emerged is with regard to how far farmers can transform their jhumlands into permanent systems of land use at the risk of reduced food crops and risk to food security. How far can farmers grow cash crops for distant markets at the risk of reduced agro-biodiversity or even their traditional food base?

8.9 Shift in work culture

Although the role of women in shifting cultivation continues to be much more than men, the difference in terms of percentage spend has drastically reduced after the inception of the project. Earlier after major physical jhum activities, the men would mostly engage their time in fishing, hunting or other leisurely activities. However the project during its trainings and other meetings had consciously ensured that there was general awareness about dignity and sharing of labour. The men therefore, now contribute not only to farm and forest activities but also help their women folk in household chores and other activities.

8.8 Value for money

The lessons got from the field study are numerous but one thing that clearly stood out was the issue of minimum inputs and maximum gains got from the project interventions. This is a lesson derived not just from the study team's own analysis but from that of villagers themselves and the basis of it could be traced down to the specific planning and capacity building inputs the project initiated with communities.

Small Grants Big Gains

The tiny hill top village of East Tusom located 78 Kms from the district Head Quarter town of Ukhul is home to about 50 odd households. The village is rich in natural resources and the villagers practice traditional shifting cultivation as was practiced by their forefathers. All of them farmed at a subsistence level with little or no surplus but this has drastically changed after the inception of the Ukhul District Community-based Resource Management (UDCRM) Project. According to Mr. M.C Rockson, Headman, *"Our village has long been ignored with little or no developmental activities or support from any agency both at the governmental and non-governmental levels. Before the project, we were at wits-end as to how we could sustainably carve a livelihood out of their rich natural resources or traditional knowledge."*

The arrival of the UDCRM project therefore, injected new vigor and value by building upon the villagers' knowledge introducing new concepts, technical knowledge and much needed support for on-farm income generation activities. The farmers have now evolved from being simple shifting cultivators to entrepreneurs - who farm banana and pineapple as cash crops, rear honeybees for honey - and the women now participate in Self Help Groups (SHGs) that save and loan money and even initiated other non-farm income generating activities. The moral of this story is simple. All that took to transform such subsistence farmers to expert churners of the rural economy were activities that build upon their traditional knowledge, mobilized all sections of the community and ensured that there was maximum participation, transparency and equity in terms of planning and project implementation.

9. EMERGING ISSUES IN TRANSFORMING SHIFTING CULTIVATION

9.1 Sustaining jhum transformation efforts

Having witnessed the process of transforming shifting cultivation and the ground situations prevailing in all the project study-villages, the key question is whether the efforts made by the project in term of trainings and financial assistance alone could

sustain the new system without a back up support? If not, what else can be done so that jhum transformation efforts could be sustained? Present interventions for jhum transformation have been through up- scaling of banana cultivation, which is essentially promotion of mono cropping. With substantial jhum areas already under such mono cropping in all these villages and associated risks of diseases already evidenced, it is important that confidence of the communities on the modification efforts are sustained by addressing the problems of diseases on priority basis.

With increasing production of banana in the cluster area, it is also possible that the expected price of the crop is not always ensured, which in turn might discourage the communities on its further expansion. Therefore, it is important that the market network is strengthened so that there is not only quick disposal of the produce but also expected remunerative price is ensured. It would also be important for the project to provide package of practices of banana cultivation along with various banana plantation/crop models as agro-horti and/or agro-forestry so that the communities have menu of choices. Rather than promoting only mono cropping of banana, it may be to the advantage of the communities if other agro-horti crop models such as banana with traditional cash crop (soya bean, etc.) are also demonstrated as alternative option.

9.2 Cash cropping versus agro-biodiversity

The present practice of jhum modification through intensification of banana cultivation has indicated reduction in jhum areas under cultivation at any given time. While this may be one of the practical ways of bringing about desired modification, yet the project needs to be sensitive towards the need for continuous preservation of local agro-biodiversity which collectively and essentially forms the local food base resources and potential for food crop security. It means that as a strategy, the project must judge the trade-off on the extent of jhum areas that can be transformed into mono cropping land use. Alternatively, the project must continue to encourage traditional jhum crop intensification by way of crop-mix manipulation for optimum return from such cultivation. Interventions may also be required for enrichment of fallows through introduction of nitrogen fixing trees such as alder, which is variable in plenty in the hills areas of the region.

9.3 Improvising crop modification to sustain local food base

One of the key emerging issues would be the need for improvising crop modifications as part of jhum modification to sustain local food base. With mono cropping (such as banana) already showing evidences of diseases are subject to risks and uncertainty, it is important for the project to understand the values of crop modifications of existing traditional varieties to sustain the local food base.

It is evidenced that there do exist knowledge pools on traditional practices of improvising crop modification or crop-mix manipulations across the communities. The project should take immediate step in documenting these various existing knowledge or good practices, which can be replicated as models in jhum modification.

9.4 Intensification of shifting cultivation or jhum

Similar to crop modification is the need for addressing intensification of shifting cultivation for improved food crop production. Intensification of jhum addresses the need for interventions both at cropping phase and fallow stages of jhum. At cropping

phase, the attempt should be to increase the cropping phase from traditional one year to more than one year by crop-mix manipulation. Usual practice is promotion of tuber crops and cover crops in the second year (after rice and maize cultivation in the first year), followed by only cover crop (such as soya bean) in the third year. Such practice is often considered to have economized the optimum land use without compromising its productivity, while at the same time ensuring longer fallow period.

Another option of jhum intensification is interventions at the fallow stage by introducing nitrogen fixing species, which will improve the productivity and effectiveness of the fallow land when such land is again slash and burn for cultivation. Such fallow areas become more productive in shorter fallow period to help in sufficient food crops production. Other option of jhum modifications through jhum intensification is introduction of economic tree species in fallow areas. It is important for the project to address these emerging issues which hitherto are not considered as part of jhum modification strategies.

9.5 Lack of clarity on the long term consequences of current interventions

While jhum modifications are gaining momentum such as by intensification of banana cultivation in the project villages that the present study has covered, there is however lack of clarity on the possible long-term consequences of such interventions in these areas. Therefore, there is the need for involvement of research organizations or academic institutions that might help the project and the communities in understanding the possible long-term ecological consequences of such interventions. Perhaps simple participatory or community monitoring tools and evaluation indicators can be prepared by the project to enable the communities to monitor the process of change through these interventions.

9.6 Need for collaborative linkages with formal and non-formal knowledge systems

There is no evidence of collaborative linkages between on-going research and development in the formal educational institutions and the farmers in the villages. With intensification of jhum modifications, introduction of mono cropping and associated risks, there is the need for appropriate blending of on-going researches in formal education institutions with the experiences and anxieties of the farmers' knowledge and needs in the fields. The farmers also need to have access to the formal knowledge systems whereby they can quickly and efficiently address their requirements. The project should act as a platform to provide such opportunities, if not facilitate so that there is marriage between formal and non-formal knowledge systems.

9.7 Institutionalizing jhum transformation interventions

Jhum transformation interventions create a new challenge and responsibility for the village institutions. Until and unless the village institutions are effectively integrated all the interventions may not sustained to the desired level and goal. Keeping this in mind, careful and systematic approaches should be adopted based on social values, capabilities and belief of the people. If the process of jhum modification takes place outside the purview of the village institutions, it is quite obvious that there will be neither impact nor sustainability.

9.8 Addressing for food deficit due to jhum transformation

It has also been seen that there is a drastic reduction in jhumming after the project intervention, which is as much as 50% reduction in all the villages of the present

study. Many families are now concentrating in jhum transformation process like intensification of banana plantation and other cash crops in fallow jhum. As a result, jhum areas as well as activities in the new jhum sites have gone down considerably over the last 2-3 years. Simultaneously, rice (which is the staple food of the people) production has substantially reduced. Meanwhile, the gestation period of banana being at least 18 months, it is imperative that the food deficit of the communities during this intervening period require proper back up support through appropriate contingency plan.

9.9 Addressing policy framework

In the present context, there is no specific or uniform kind of policy framework for jhum management in the community, nor there proper policy guidelines for jhum modifications or transformation of shifting cultivation. And those that exist are all project-induced which is yet to be time tested. In the mean time, the government or the line departments too lack appropriate vision and seriousness in looking into this matter in spite of all the resources available at their disposal. Hence, policy framework needs to be developed with certain uniformities by having a concerted effort from all angles.

10. CONCLUDING REMARKS

After observing all the activities prevailing in the project villages, one can tell beyond the shadow of a doubt that a great deal of achievements has been accomplished by the project over the last six years. At the same time, the villagers particularly the marginalized farmers and women folk are being empowered or strengthen to undertake their own activities. Villagers are also becoming more and more cohesive and a new ray of hope can finally, be seen in the life of the people. On the other hand, there remain a number of gray areas and areas that need further attention through collective efforts from all angles. It may be too early to assess and ascertain the overall impacts of the project interventions but the lessons learnt shall contribute to ongoing and future development planning.

The present systematisation of documentation on jhum modification has shown that the project concept and activities have largely been accepted and adopted by the communities in all the study villages. However, in a natural resource rich area like the NER of India, a project aiming to combat rural hunger and poverty requires to adopt a strategy that caters the development needs of the communities, as well as ensures conservation of local natural resources. The NERCORMP while addressing the poorest and the vulnerable communities has successfully attempted project activities in a sustainable manner by building upon traditional knowledge. During the course of present interactions with the communities and also as observed by the team in the field, it is seen that the project interventions in jhum modifications have been well appreciated and put into actions by the communities.

While the present intervention is a limited 'test case', successful and sustainable interventions on a long-term basis require package of technological menus for the communities so that they can diversify their jhum modification actions and choices according to their own natural skills and absorbing capacity. However, effective delivery of these technological packages requires further field skills and trainings both for the project implementing team (DST & Partner NGOs) and also the communities.

After observing all the activities prevailing in the project villages, one can tell beyond the shadow of a doubt that a great deal of achievements has been accomplished by the project over the past years of project interventions. At the same time, the villagers particularly the marginalized farmers and women folk are being empowered or strengthen to a certain extent to charter their own livelihoods based on their local and traditional natural resource base. On the other hand, villagers too are rediscovering the strength of cohesive actions for addressing and improving their livelihoods through sustainable land-use, particularly areas under shifting cultivation. Emerging rays of hope that could be witnessed across the communities are the testimony of the project benefits, though it may be too early to assess and ascertain the overall impacts of the project interventions at this stage.

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Field Strategy

- Clarifying the objectives to the community and not raising their expectations
- Having a flexible approach
- Avoiding roadside biases
- Using checklist of issues to be probed and taking notes
- Sequencing participatory methods and cross checking results
- Reporting field results to the community
- Reflecting on lessons learnt and embracing errors

Observations

- Bird's eye view
- Worm's eye view

Exploratory probing & Topical probing

8 helpers

- Why
- What
- Which/who
- How
- How much
- What
- Where
- When
- Dialogue
- Story telling
- Interviews (structured and semi structured)
- Group discussions
- Brainstorming
- Narrative (individual/group)
- Problem Action Analysis
- Mapping

STRATEGIC FIELD INVESTIGATION GUIDE

Thematic storyline	Issues/Areas for investigation	Tools that may be applied (Suggestive)	Analytical tools (Suggestive)
Historical Context	<ul style="list-style-type: none"> • Traditional land management system • Social & cultural relevance to issues of shifting cultivation • Productivity and food security • Poverty and livelihood • Policy scenario and government interventions • Demographic changes and impacts/pressure on resources • Traditional farming practices – faith, belief and agronomic practices 	<ul style="list-style-type: none"> • Secondary data analysis • Interviews/Narratives (individuals and groups) • Timeline analysis 	<ul style="list-style-type: none"> • Advantage and Disadvantage chart • Field based peer analysis

	<p>governance, management and protection of such forests.</p> <ul style="list-style-type: none"> • What are the mutual gains from such arrangements? • Issue of NTFP harvesting? • Perennial crops? What, why, how and what happened? • Has it replaced Jhum in any way? How many families? How much land? • What are the immediate impacts of such an activity in terms of livelihood? • <u>How has such activities influenced land use and ownership?</u> • Has it created conflicts within the community? 		
Institutional arrangements and dynamics	<ul style="list-style-type: none"> • Different roles • Access to and support systems • Banks, government line agencies 	<ul style="list-style-type: none"> • Narratives • Venn 	<ul style="list-style-type: none"> • Narratives
Results and Impacts	<ul style="list-style-type: none"> • Changes (+ve) <ul style="list-style-type: none"> ○ Land use ○ Livelihood ○ Lifestyle & comfort level ○ Work culture ○ Educational aspirations and improved avenues ○ Crop productivity • (-ve) <ul style="list-style-type: none"> ○ Work pressure ○ Time management ○ Conflicts ○ Cases of increased inequity in the community ○ Social capital expenditure • Impact on non-project villages 	<ul style="list-style-type: none"> • Narratives • Venn • SLA <ul style="list-style-type: none"> ○ Physical ○ Social ○ Natural ○ Financial ○ Human Resource 	<ul style="list-style-type: none"> • Narratives
Monitoring, Evaluation and Documentation Capacity building Exit Strategy	<ul style="list-style-type: none"> • Success indicators according to community • Recording systems • Monitoring and evaluation mechanisms • Experience sharing exercises • Capacity building <ul style="list-style-type: none"> • Suggestions • Issues 	<ul style="list-style-type: none"> • Narratives • Interviews • Secondary data analysis 	<ul style="list-style-type: none"> •

QUESTIONNAIRES FOR VILLAGE PROFILE STUDY

Sl no	Particulars	Before 2002/2003	2006 March	Remarks/ Specific Interventions by project / process
1	No of households			
2	No of households considered rich			
3	No of households considered poor			
4	No of households considered very poor			
5	Total land area under village (ha)			
6	Human settlement area (with homestead garden) (ha)			
7	Traditional Village Forest Reserve (ha)			
8	Traditional total land reserved for jhum (ha)			
9	Jhum cycle (in years)			
10	No of household practicing jhum			
11	Percentage of time spent by women in jhum cultivation			
12	Percentage of time spent by men in jhum cultivation			
13	Average jhum cultivation area per household (in ha)			
14	Forest fire			
14a	Forest area burnt due to jhum burning every year (in ha)			
14b	Accidental/intentional forest fire from other sources (area in ha)			
15	Jhum control programme in the village by the government (no of household receiving fund & amount)			
15a	Agriculture Department			
15b	Horticulture Department			
15c	Soil Conservation			
15d	Forest Department			
16	JHUM MODIFICATIONS			
	CROP MODIFICATION			
16 a	No of household practicing one year cropping			
16 b	No of household practicing more than one year cropping (2/3/4 yrs)			
16 c	Total No of Crop varieties grown in Jhum			
16 d	Total paddy varieties grown in Jhum (Name the paddy varieties)			
16 e	Total vegetables varieties grown in Jhum (Name the vegetable varieties)			
16 f	Total cash crops varieties grown in Jhum (Name the cash crop varieties)			
	FALLOW MODIFICATIONS			
16 g	Community forest reserves (in ha)			
16 h	Orchard (in ha)			
16 i	Mixed orchard (in ha)			

16 j	Banana cultivation (in ha)			
16 k	Pineapple cultivation (in ha)			
16 l	Passion fruit cultivation (in ha)			
16 m	Homestead garden (in ha)			
16 n	Terrace fields (in ha)			
17	Paddy yield / household / yr from jhum (in kg)			
18	Paddy yield from Terrace/ Household / yr (in kg)			
19	Income from jhum / per household / yr			
20	Food & commodity inflow			
21	Food & commodity outflow			
22	Major edible plants varieties from forest for consumption			
23	Major edible plants varieties from forest for sale			
24	Training organized for villagers			
25	Drinking water supply in the village			
26	Drinking water supply management system			
27	No of household using irrigation			
28	Irrigation Committee constituted			
29	Fire wood source / distance			
	<i>(Name fire wood species in the village)</i>			
30	Fodder source/distance			
31	Collection/availability of medicinal plants			
32	Issues discussed in VDC/VA meetings			
33	Issues discussed in NaRMG meetings			
34	Networking for conservation			
35	Conservation plan & programmes			
36	Climatic changes			
37	Timber trade (Supreme Court Ruling)			
38	Income/extractions from Community forest (timber/NTFPs)/household/year			
38a	Timber			
38b	Bamboo			
38c	Cane			
38d	Honey			
38e	Fire wood			
38f	Edible vegetables			
39	Influence of the church on jhum & livelihoods			
40	Influence of NGO on jhum & livelihoods			
41	Influence of political leaders on jhum & livelihoods			
42	Influence of radio, media, TV on jhum & livelihoods			

PROFILES OF THE STUDY VILLAGES

SI no	Particulars	E. Tosum		Nungou Aze		Nungou Ato		Changa	
		Before 2002	2006 March	Before 2003	2006 March	Before 2003	2006 March	Before 2003	2006 March
1	No of households	55	55	27	24	54	54	35	36
2	No of households considered rich	20	10	-	-	10	37	-	5
3	No of households considered poor	15	20	-	2	37	-	-	21
4	No of households considered very poor	20	12	27	23	7	7	-	9
5	Total land area under village (ha)	1500	1500	300	300	1000	1000	100	100
6	Human settlement area (with homestead garden) (ha)	5	7	3	3	3	9	4	4
7	Traditional Village Forest Reserve (ha)	31	46	5	5	10	35	14	14
8	Traditional total land reserved for jhum (ha)	1100	950	200	200	600	600	60	60
9	Jhum cycle (in years)	11	9	15	12	12	9	5	5
10	No of household practicing jhum	46	46	27	24	54	44	35	25
11	Percentage of time spent by women in jhum cultivation	75	60	70	60	80	65	70	60
12	Percentage of time spent by men in jhum cultivation	25	20	30	25	30	27	30	40
13	Average jhum cultivation area per household (in ha)	2.5	1.5	3	1	3.5	1	2 ha	1 ha
14	Forest fire								
14a	Forest area burnt due to jhum burning every year (in ha)	10	5	4	3	4	4	-	-
14b	Accidental/intentional forest fires from other sources (in ha)	-	-	-	-	16	16	-	-
15	Jhum control programme in the village by the government (no of household receiving fund & amount)								
15a	Agriculture Department	-	-	-	-	-	-		
15b	Horticulture Department	-	-	-	-	-	-		
15c	Soil Conservation	-	-	-	-	-	-		

15d	Forest Department	-	-	-	-	-	-	Agro forestry (3 ha)	
16	JHUM MODIFICATIONS								
	Crop Modification								
16 a	No of household practicing one year cropping	48	50	27	24	54	44	36	36
16 b	No of households practicing more than one year cropping (2/3/4 yrs)	-	-	-	-	-	-	-	-
16 c	Total No of Crop varieties grown in jhum	20	20	20	20	30	30	20	20
16 d	Total paddy varieties grown in jhum	15	15	4	6	15	15	6	6
	(Name the paddy varieties)								
16 e	Total vegetables varieties grown in jhum	20	20	16	16	30	30	15	15
	(Name the vegetable varieties)							Brinjal, cucumber, beans, colocassia, ladys-finger, chilly, onion,	
16 f	Total cash crops varieties grown in jhum	3	3	4	4	3	3	3	3
	(Name the cash crop varieties)	Yam, Ginger, King Chilly	Banan a	Maize, chilly, rice bean, soya Maize, chilly, rice bean, soya		Chilly, rice bean, soya bean Chilly, rice bean, soya bean		Maize, bean	Banan a, maize, soya bean
	FALLOW MODIFICATIONS								
16 g	Community forest reserves (in ha)	-	-	3	3	30	30	3	3
16 h	Orchard (in ha)	-	-			-	1		
16 i	Mixed orchard (in ha)	1	1			-	-		
16 j	Banana cultivation (in ha)	3	30	-	12	-	36	0.25	15
16 k	Pineapple cultivation (in ha)	0.25	2	-	-		-	-	-
16 l	Passion fruit cultivation (in ha)	-	-	-	-	-	-	-	-
16 m	Homestead garden (in ha)	1	3	-	1	-	1	1	1
16 n	Terrace fields (in ha)	-	0.25	1 ha	2	20	30	10	10
17	Paddy yield / household / yr from jhum (in kg)	222 tins	140 tins	150 tins	80 tins	50 tins	88 tins	130 tins	70 tins
18	Paddy yield from Terrace/	-	20 tins	60 tins	60 tins	150 tins	150 tins	140 tins	100 tins

	Household / yr (in kg)								
19	Income from jhum / per household / yr	12,500	9000	8,000	5,000	-	1000	7,500	4,000
20	Food & commodity inflow	Rice, potato, sugar, onion	Rice, potato, sugar, tomato onion, garlic	Sugar, salt, oil, soap	Salt, potato, oil, soap	Salt, sugar, tea, soap	Rice, salt, sugar, tea	Negligible	Ration, dal, salt (more purchase power)
21	Food & commodity outflow	Rice, maize, soya bean, king chilly	Ginger banana , chilly pine- apple, broom, charcoal	Maize, soya bean, rice bean	Maize, lemon, orange, pine- apple, soya bean, rice bean, chilly	Chicken, rice bean, soya bean	Chicken rice bean, soya bean, tree bean, banana	Rice, maize, soya bean, potato	Banana, soya bean, rice bean, cabbage, potato
22	Major edible plants varieties from forest for consumption	30	30	20	20	30	30	10	10
23	Major edible plants varieties from forest for sale	3	3	-	-	-	3	-	4
24	Training organized for villagers	-	10	-	10	-	5	1	6
25	Drinking water supply in the village	Yes	Yes	Traditional pond	Water supply	Traditional pond	Water supply	Yes	Yes
26	Drinking water supply management system	Village Authority & Govt	Village Authority Govt & NaRMG	Village Authority	Village Authority & NaRMG	Village Authority	Village Authority & NaRMG	Village Authority	Village Authority & NaRMG
27	No of household using irrigation	-	1	-	-	4	4	-	
28	Irrigation Committee constituted	-	-	-	-	-	-	-	-
29	Fire wood source / distance	1-2 km	1-2 km	1 km	1 km	1 km	2 km	>1 km	2 km
	(Name fire wood species in the village)	5 species	5 species	6 species	6 species	5 species	5 species	3 species	3 species
30	Fodder source / distance	-	-	-	-	-	-	2 km	2 km
31	Collection/ availability of medicinal plants	20	20	10	10	10	10	10	10
32	Issues discussed in VDC / VA meetings	Jhum, customary laws	Jhum, customary laws, development	Development, conflict, Jhum	-	Jhum, development scheme	Jhum, development scheme	Customary law, forest,	Reduction in meetings in

			ment			e, firewood, fire line, conflict	e, firewood, fireline, conflict	Jhum	these areas
33	Issues discussed in NaRMG meetings	-	Action plan, Labour, contribution	-	Protection of trees, conflicts, jhum, banana	-	Cleaning , plantation expansionaction plan	-	Water supply, road
34	Networking for conservation	-	-	-	-	-	-	-	-
35	Conservation plan & programmes	-	Expansion program	-	-	-	Yes but not resolved by VA	-	Tree plantation
36	Climatic changes	-	-	-	-	-	-	-	Wormer
37	Timber trade (Supreme Court Ruling)	Local consumption / control by local village authority		-	-	-	-	-	-
38	Income / extractions from Community forest (timber / NTFPs) / household / year								
	Timber	-	-	-	20,000	-	-	-	-
	Bamboo	-	-	-	-	-	-	-	
	Cane	-	-	-	-	-	-	-	-
	Honey	Meagre	Higher	2,000	5,000			-	-
	Fire wood	-	Rs 1000	-	20,000	10,000	-	High	Nil (prohibited)
	Edible vegetables	-	2000	-	Low	Nil	200	-	-
39	Influence of the church on jhum & livelihoods	Negligible	Negligible	-	-	-	-	-	-
40	Influence of NGO on jhum & livelihoods	-	High	-	High	-	High	-	NGO, IFAD
41	Influence of political leaders on jhum & livelihoods	-	-	-	-	-	-	-	-
42	Influence of radio, media, TV on jhum & livelihoods	-	-	-	-	-	-	-	-

PARTICIPATORY 3 DIMENSIONAL MODEL in LAND USE MANAGEMENT: The Ukhrul District Experience

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INTRODUCTION

Management of the natural resources has to be addressed within the process of development, not as an after thought because the gap between environment degradation and policy shift is widening daily.

The North Eastern Region Community Resource Management Project for Upland Areas (NERCORMP) is a joint initiative of the Government of India (GoI) and the International Fund for Agricultural Development (IFAD). The North Eastern Council (NEC) and the Ministry of Development of North Eastern Region (DoNER) represent the Government of India in the Project set-up. The United Nations Office for Project Services (UNOPS) located in Bangkok is the Cooperating Institution for project supervision in implementation.

The Project is operating in two districts each in the states of Assam, Manipur and Meghalaya, namely Karbi Anglong and North Cachar Hills in Assam, Senapati and Ukhrul in Manipur, and West Garo Hills and West Khasi Hills in Meghalaya.

The overall objective of the Project is *to improve the livelihood of vulnerable groups in a sustainable manner through improved management of their resource base in a way that contributes to protecting and restoring the environment*. The Project attempts to achieve this overall objective through a set of eight specific objectives, one of which is ***“to make people more aware of the need to preserve and regenerate natural resources, particularly forests and biodiversity”***.

The Natural Resource Management Sector of the NERCORMP, aims to take a strategic approach in agricultural intensification, diversification and system integration within the available production system.

In Ukhrul District of Manipur, inspite of providing several trainings and workshops on resource management, certain issues like - indiscriminate felling and burning of

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trees and forest, free cattle grazing, erratic jhum practices without fire line protection and insecurity of land holding system - still prevail among the communities. It was realized then, effective land use planning needs to be carried out involving active participation of the community, village councils and line departments at village or micro water shed levels. Thus, Ukhrul District Community Resource Management Society (UDCRMS) introduced the Participatory 3 Dimensional Model to address the above concerns. P3DMs were constructed in the villages of Ngainga, Hundung Godah, Soraphung, Talui and Shirui Kashong range/ cluster.

In order to capture the experience of the Ukhrul district, ENRAP together with NERCORMP came together to conduct a systematization process of documentation of the P3DM as implemented by UDCRMS. This report then outlines the outcome of the systematization exercise conducted on 28th February 'til the 6th of March, 2006.

OBJECTIVES

The general objective of this systematization process of documentation is to answer a basic question on how P3DM is used in land use management in villages where P3DM are installed.

Specifically it wants to seek answers on the following questions:

1. How has P3DM helped improved land use management in terms of planning, implementation and monitoring & evaluation?
2. What changes came about due to P3DM?
3. How has P3DM brought about community cohesion/ consensus building?
4. How do the villages use the P3DM after post construction?

METHODOLOGY

5.1. The Team

The Systematization Documentation Team (SDT) was composed of 4 persons. **Yolando C. Arban**, M&E Officer of the Northern Mindanao Community Initiatives and Resource Management Project (NMCIREMP) of the Philippines facilitated the SDT's work. Other members included **Adrian Marbaniang**, M&E Officer of North Eastern Region Community Resource Management Project for Upland Areas (NERCORMP), **Thingreiphi NG**, Natural Resource Management Organizer of Ukhrul District Community Resource Management Society (UDCRMS) and **Chinaorar Horam**, Community Coordinator of the Society for Development Alternative in Tribal Areas (SDATA).

5.2. Tools and Strategy

Considering the time limitation and the areas to be covered, the team came up with a matrix of tools and strategies for data gathering (Annex 1). From a broad topic of NRM and P3DM initially identified by the UDCRMS for systematization process of documentation, the SDT narrowed down to look into the Ukhrul District's experience

in using P3DM in land use management. Three key questions were raised which guided the SDT in identifying the indicators, the data to be gathered, the tools for gathering and the sources of data (Annex 1).

There were two sources of data/information: primary and secondary. The primary data/information were collected from members and officers of the Natural Resource Management Group (NaRM-G), Self-Help Groups (SHG), village authorities, and from the village folks which the SDT encountered. The tools used in gathering primary data/information included focus group discussions, key informant interviews, story telling, transect walk and site verification. For the secondary data, the SDT reviewed the minutes and resolutions of NaRM-Gs and Village Authorities of the village covered by the systematization process of documentation. The SDT also referred to UCDRMS documents and reports. To guide the SDT in the discussions and interviews, a Focus Group Discussion (FGD) guide and Key Informant Interview guide were formulated (Annexes 1 and 2).

Simple analysis was done on comparing the data before and after project intervention. It also used triangulation method by counterchecking data/information gathered from one source with other sources.

5.3. Areas Covered

Due to time constraint for area visit, the team decided to cover two of the four villages with P3DM. The basis for selection, that one should be an advance village while the other should be a weak village as identified by the UCDRMS. Ngainga was chosen as the organizationally advanced village while Hundung Godah as the organizationally weak village.

NGAINGA VILLAGE

This Village is located in the western part of Ukhrul district which is approximately 18 kms away from the district headquarter. The village has three P- NaRM-Gs under V-NaRM-G and 5 SHGs under a village federation. The total area of the village is 2348.17 Hac. The highest altitude is 1991 metre a mean sea level and lowest altitude is 1125 metre a mean sea level. Presently 160 households reside in this village. People of this village mostly depends on agriculture, forest produces and weaving. The Project came to this village in January 2000 and the P3DM was constructed from 1st -5th Nov 2004.

HUNDUNG GODAH VILLAGE

Located in the southern part of Ukhrul District, 65 km away from the district headquarters is the Hundung Godah village. This village consists of 52 households, out of which 45 households are in the NaRM-G. The total area of the village is 2205 sq hac. The lowest and highest altitude is 520 metre and 1560 metre a mean sea level,. The primary mode of cultivation in this village is shifting cultivation. The main source of income in this village are from honey, poultry wild vegetables and wild animals. The project entered the village in 2001 and form one NaRM-G and three SHGs. P3DM was introduced in February 2005.

There were a total of 55 participants in the focus group discussion and 14 participants in the key informant interviews.

Table 1: Number of Participants in the FGD by Village

Representation	Village		Total
	Ngainga	Hundung Godah	
NaRM-G	10	12	22
Village Authority	6	2	8
Self Help Group	5	7	12

Church	4	1	5
Youth	3	0	3
Lead Farmer	5	0	5
Total	33	22	55

Table 2: Number of Key Informants Interviewed by Village

Representation	Village		Total
	Ngainga	Hundung Godah	
NaRM-G Committee	3	2	5
Village Authority	2	2	4
Self Help Group, Chairperson	2	1	3
Church	1	0	1
Youth	1	0	1
Total	9	5	14

P3DM APPLIED

5.5. Mobilizing the Community: Overcoming Apprehensions

The NaRM-Gs were informed that UDCRMS was going to assist in constructing a P3DM. In the beginning the communities were apprehensive in constructing the P3DM. Due to the strong insurgency problem faced in the region they felt that if the army came to learn that such a model existed they would confiscate the model.

The project over came the problems of constructing a P3DM by focusing on issues relating to NRM and how the P3DM would assist the communities towards better land use planning and management. In H. Godah village communities were interested in the P3DM as it would help them understand and identify the forest area, terraceable area, location of rivers and streams and water source. In H. Godah village, they readily accepted the P3DM as the project was more aware as on how to deal with the community from its past experience in Ngainga.

5.6. Getting the Work Done

The project staff of NERCORMP were trained by the Philippine Association for Intercultural Development (PAFID) from the Philippines on P3DM. The training was conducted in Satsagre village in West Garo Hills district in Meghalaya under NERCORMP. The training programme was for twelve days where the two staff of UDCRMS participated. The training was split into two. One was on the theoretical and the other was on the practical uses.



The UDCRMS first carried out a - week training programme on P3DM to the partner NGOs. Through the NGOs, villages were identified for the construction of the P3DM. From the selected village the elders were invited to visit the Development Support Team Office at Ukhrul to discuss further issues on how to develop the P3DM. During this time they were asked to demarcate their village

boundary on a topo sheet map which is thereafter blown up to ten times. The box below shows the process of constructing the P3DM.:

In the construction of the P3DM, the blown up map was laminated and carbon pasting was done with the community in order to mark the contour lines unto the rubber sheet. Each contour line was traced into separate rubber sheets starting from the lowest to the highest altitude. Once the lines had been traced the next step was to cut along the contour line of the sheets. The cut sheets were then pasted and nailed over a table starting from the lowest to the highest altitude. Once the pasting is complete the rubber sheets were sand papered and a paste (mixture of lime and fevicol glue in the ration of 2:1) was applied over the surface of the model.

Once the model was dry, it was painted white and thereafter the communities started marking the village boundary with a string or yan. Then other land uses were marked using different colours. Then they found out the total area of the village and the areas of the different land uses from the model. The scale used to find out the area was on the basis of 2 sq. cm = 1 hectare.

During the whole process there was active participation from who were drawn from the NaRM-G, SHG, Village Council, church and the youth.

FINDINGS and ANALYSIS

Overall, the P3DM as applied in the villages of Ngainga and Hundung Godah has brought to these communities a deeper understanding of their village geography, improved village communication and planning capacity, improved land use management, stronger community cohesion and access to basic services from line departments. The benefits derived from the P3DM by the villages outweigh the cost and effort put into the construction of the model. However, its use is not fully maximized. The P3DM in each community has become static.

5.7. *Changes in the Villages*

The following section discusses the changes in the communities before and after the project as narrated by the respondents and confirmed by the team while going over the village records.

5.1.1 *Deeper understanding of the Village Geography*

In every community there is often inter village marriages and it was discovered by the team that there were several women from other villages who had been residing in these villages for the last fifteen to twenty years. These women were not aware about the village geographical area. It was only after the P3DM, these very same women have come to learn the spatial information of the village. With the bright and attractive colours of the P3DM, it has attracted children in the village who from time to time inquire from the village elders the use of the model. Today they are able to identify areas around the village and have come to learn the names of the creeks, rivers, forests, water shed areas, owners of jhum plots, the altitude and areas of household settlement.

Those involved in the construction of the P3DM immediately discovered the village boundary, realized where the forest was located, the sources of water, location of rivers and areas to set up terrace construction. At a glance they can now see the entire village. Before the village leaders knew their land but were not able to identify the exact location of the rivers, forest and boundary and names. The P3DM has helped the communities to know the altitudes of every slope, hills and mountains and this has helped them in aligning the roads and even locating the water sources.

5.1.2. Improved Village Communication and Planning Capacity

Before the projects intervention, communication generally comes from the village authority which was represented by clans. In this scenario information hardly went to the common man. With the introduction of NaRM-Gs with representation of both husband and wife from each household, information is now available practically to all village members. In all villages, village council authorities are also members of NaRM-Gs.

The P3DM has become a reference for interaction among the village council, NaRM-G members and SHG members. A particular SHG group in H. Godah requested the village council for a plot of land for their banana plantation. The village council sought the help of the P3DM to identify a suitable area for the SHG's banana farm.

The P3DM has also brought the village authorities and the NaRM-G to a better understanding towards better resource management. Whenever the NaRM-G's made certain policies like control of cattle grazing the village council's were most accommodating. With a clear visualization of the land through the P3DM the community today know where exactly to construct terraces, roads, areas for settlement, conservation of forest/ watershed/ water source, demarcation of village boundary, fire line and jhum plots.

5.1.3. Improved Land Use Management

Basically the P3DM has improved the communities capacity in natural resource use in terms of jhum and terrace cultivation, conservation of forest and water shed, plantation of bamboo reserves and kitchen gardens. New policies to protect and conserve their natural resource weer also formulated.

5.1.3.1 Natural Resource Use

The table below shows the situation of the natural resources use in the villahes of Ngainga and H. Godah before and after the projects intervention:

Table – 3: Natural Resource Use Before and After the Project

Natural Resource Use	Before		Present	
	Ngainga	Hundung Godah	Ngainga	Hundung Godah
Jhum	Random cultivation, one time plantation	15 jhum plots, one hactors per household	121.58 hectors, prolonged cultivation upto three years with	Reduced plots, 1 plot assigned for banana cultivation,

			the support of bio compost	1 plot reserved for forest conservation
Terrace Cultivation	Mono crop plantation	12 households	Mixed cropping	12 households and plan to increase
Forest reserve	131.80 hectors	1 jhum plot	142.92 hectors, introduced thatch reserve	2 jhum plots
Water conservation /Water shed reserve	Cultivation around the area, unable to distribute water to all households, Awareness level was low	Cultivation around the area	No cultivation in the area, distribution of water supply to all households Awareness level is high	Planted wild banana around the catchment areas
Bamboo reserve	Unorganized bamboo plantation	Plantation around households	142.92 hectors of Ngatha bamboo reserve	Planted around 1 hector in compact area
Kitchen garden	Existed around households and practiced single cropping	Cultivation in small area	Practice multi cropping and maintain medicinal herbs in their kitchen gardens	Increased the area of vegetable production, surplus is sold in the local market and maintain medicinal herbs in their kitchen gardens

- a. *Jhum Modification* – Previously slash and burn cultivation was done randomly in both villages. Households shifted from one jhum plot to the other on a yearly basis. During the teams visit, it was discovered as confirmed by the villagers that they have modified jhum practices as a result of their awareness on natural resource uses. Some of the modifications are as follows:
- Prolonged cultivation in a single jhum plot for at least upto 3 years. This practice is being complimented by bio composting to retain soil fertility.
 - New crops like banana, potato and cabbage have been introduced.
- b. *Terrace Cultivation* – The importance of terrace has made villagers more conscious to start planning for construction of terrace areas with the help of the P3DM. However villagers especially in H. Godah were not able to pursue their plan because irrigation is not available. In order to convert the targeted areas for terrace, they would have to construct 6 kms of minor irrigation. In the case of Ngainga, where water is readily available, they have expanded their terraces and have started mixed and winter cropping in the given area.
- c. *Forest reserve* – After constructing the P3DM the community realized that their forest is diminishing and that there is a need to protect, conserve and restore some areas for forest. Around 20,000 trees both local and introduced species have been planted with the support from the forest department and local contributions in Godah village. In Ngainga the elders and the young were engaged in planting trees covering approximately eleven hectors.

While on transit walk in Ngainga, the team came across a group of old women who were on their way to collect wild vegetable plants. The team was told that the group was collecting wild vegetable as it would be consumed

during the Tangkhul Baptist Churches Association conference. This is an indication that the forest is producing more than enough wild edible plants.

- d. *Water conservation /Water shed reserve* – In Ngainga, the team had a good bath and was able to use clean low cost latrines. This was made possible through a proper distribution of water supply to all households. Awareness level on water conservation has drastically increased and today the communities have started to conserve the catchment areas by not cultivating around it. In Godah the communities planted wild banana trees around the water source.

The pastor of Ngainga, Mr. Ramthing, was proud to say that for the first time the village is able to host the Tangkhul Baptist Churches Association conference for a period of three days of which around 3000 delegates from Ukhul district are expected to attend. Mr. Ramthing was very confident that their conference shall be successful because water is available in the village.

- e. *Bamboo reserve* – Bamboo has always been an important species for the tribal communities as it is mainly used for household use. In H. Godah, the community has planted over a hector of bamboo which will assist the community to reconstruct houses in the new resettlement area.

In Ngainga, the people see more and more the importance of bamboos not only for household use but for also community functions like construction of the stage, tents and church ceiling. They also use bamboo for handicraft like baskets, mats, handle of dao (knife) and bamboo shoots as food. They have also cultivated different bamboo species widely used by the villagers. Understanding the importance of bamboo, the people of Ngainga have passed a resolution prohibiting the sale of bamboo to and extraction by outsiders.

- f. *Kitchen gardens* – Each of the villages visited, there is a variety of vegetables served during meals which have been produced from the kitchen gardens. To some extent certain households sell their garden produce in the local market. In Ngainga, the SHG members organized a market day where they tried to sell their produce. The undertaking happened only once because there were no buyers from with the village. However the SHG Federation has discussed this issue and are hopeful that they will be able to organize a market day in the district headquarter at Ukhul.

Prior to the projects intervention kitchen gardens were small, unorganized and practiced single cropping. Presently, each household has increased the area of their gardens and are practicing multi cropping like onions, cabbage, potatoes, peas, mustard leaf, coriander leaf and garlic. Vegetable are made available all year round.

5.1.3.2 Policies and Mechanisms for Enforcement

For the indigenous communities, forest is the key to their survival. For generations the forests have provided them with food, water and medicine. It is not surprising that policies to protect the forest did exist before the project. Among the policies the team discovered the following:

Table- 4: Policies on Natural Resource Use Before and After the Project

BEFORE		PRESENT	
Ngainga village	Hundung Godah village	Ngainga village	Hundung Godah village
Restriction to: <ul style="list-style-type: none"> • Cutting of timber by outsiders • Control setting of forest fires • Land committee to deal with inter village boundary disputes & other cases relating to the land. 	<ul style="list-style-type: none"> • Reserved forest • Control of forest fires • Wild life sanctuary 	<ul style="list-style-type: none"> • Planted 5 tree saplings on forestry day by each NaRM-G member. • Have resolved to plant trees along the road side. • Carry out jhum cultivation in compact areas • Raised a nursery of local tree species • Water supply management committee • Forest management committee • Conservation of water source • Policy on jhum management • Control of cattle grazing • Banned the use of poly bags, chemical fertilizers, pesticides and weedicides. • Road committee 	<ul style="list-style-type: none"> • Control of timber logging • Extension of reserved forest • Fish and wild life sanctuary • Water source conservation • Regulation on hunting • Conservation of trees along the water ways • Banned the use of pesticides, chemical fertilizer, weedicides. • Raising of nurseries of both local and other species • Kitchen gardens in all households.

In order to enforce these policies both the villages have instituted mechanisms like:

- Failing to abide by the rules and regulation by the NaRM-Gs, fines starting from Rs 500 to 20,000/- have been imposed varying from village to village, issues and extent of damage.
- The neighboring villages who are also not under the project are informed about the rules and regulations. (For example: To conserve the rivers that passes through many villages, the NaRM-Gs address these issues at a cluster level.)
- All policies of the NaRM-Gs are first shared with the village councils for further suggestions and approval and then they are finalized.

Case Story – 1

In Ngainga, the village authority exacted a fine of RS 18,000 to 5 youths from a neighboring village for setting fire on their forest. The village was involved in strictly adhering to their natural resource protection policy.

These 5 young men on their way home from Ukhrul were having fun by setting fire on the forest of Ngainga. A small boy who was nearby tending to his cattle, informed them that setting of fire is not allowed in the village and the offenders will be heavily fined. But, these adventurous young men did not pay attention to the small boy and set the forest on fire. The act destroyed a big portion of the whole pine forest of Ngainga.

The boy reported the incident to the youth club. When this club learned the story from the boy, they decided to exact a heavy fine of RS 20,000 to the offenders for burning the forest and for not listening to the boy's advice. They were taken aback by the act for these 5 young men who knowingly burned the forest.

Negotiations were made between the parents of the offenders and the youth club. However, the parents could not raise the fine imposed, so the youth club brought this issue to the village council. Since this already reached the village council level, the village council of the neighboring village was called for a resolution meeting. Again, the parents requested for a lower fine. The village council agreed that the fine shall be reduced to RS 18,000.

With that incident, Ngainga has never experienced forest fire again.

5.1.4 Stronger Community Cohesion

The P3DM in Ngainga village, aside from raising awareness about their local geography, has also brought about the community together to know how to protect and preserve their area. In the past, most of the decisions were confined to a few individuals in the village council as it was mostly represented by clans. However today through the NaRM-G all households are made aware and are involved in the decisions that are being brought about.

In the case of H. Godah, the P3DM has helped and assisted the community in locating the areas for resettlement of each household with enough space for a kitchen garden, low cost latrine, sheds for domestic animals and poultry. Thus, their dream of settling in one area is in the process of being fulfilled.

Case Story - 2

“If there is no unity and peace, there is no development” begins Mr. L. Leishisan, the local community organizer of the Hundung Godah Village. ***“I spent my 66 years in this village and it is my dream that we settle in one area”***.

Mr. L. Leishisan donated 12 acres of his banana farm for the new settlement. The presence of two settlements prompted him to give a portion of his treasure. According to him, for 26 years there was a sort of “tug-of-war” between the two areas in the village. The village head literally transferred his house from one area to another to attend to his people. With this, the village head together with the village folks decided to resettle in a common area.

The P3D model helped illustrate their dream. Through it, they came to realize the best areas to resettle which are close to the main road and where supply of water is abundant. Everybody agreed to the new area of settlement.

Now, 22 households have resettled in the new area. The other 30 households shall rebuild their houses before the close of 2008. ***“I know, we need money to transfer our houses, but we will beat all odds”***, L. Leishisan concludes.

5.1.5 Linkage Building: Access to some Basic Services and Natural Resource Management

The project has brought about the creation of village level committees such as road and forest committees. Through the project’s facilitation, these committees have been linked to the Government Line departments such as the Forest Department (FD), Public Works Department, Public Health Engineering Department (PHED) and also to the Member of Parliament (MP) fund.

In Ngainga, the committee has been able to access seedlings from the FD, road alignment assistance from the PWD and for technical support from PHED towards water supply.

In H. Godah they were able to access seedlings from the FD and assistance for road construction from the MP funds.

In both the villages they have used their knowledge which has been generated from the P3DM towards road alignment.

5.2 Sustaining P3DM

The P3D model in both villages has been static. The data attached to it since its construction has not been updated. Though the P3DM has brought about changes in their perspective of land use management and has helped the villagers in initiating activities to protect and preserve their natural resources, they have not regularly updated and enriched information on their P3DMs. Furthermore, it was also observed that there was no long term land use perspective plan where progress can be monitored and evaluated on a regular basis. The project has not explored the potentials of the P3DM in long term land use management.

Based on the interaction of the team with the villagers, it was visible that the P3DM can guide the communities towards strategic land use. The villagers have taken a strong sense of ownership of the P3DM. Other project villages have requested the project to construct a P3DM. It was learnt that there are also non project villages who have requested the project to provide training and help them construct a P3DM in their villages. Cost towards the construction of the model would be borne by them.

Unless the project takes a longer perspective on the use of P3DM in land use management and continually equip themselves with the required technical capability to handle P3DM, additional construction of P3DM shall not be fully optimized. In addition, it is important for the project to construct a P3DM at the cluster or ecosystem level.

The challenge now is how to make this P3DM a dynamic approach in land use management that has to be nurtured so that it can continually contribute to the development of the villages.

LESSONS LEARNED

Through the systematization process of documentation the team realized the following:

- The P3DM is an effective participatory method in land use management. It should be taken as a dynamic approach that has to be regularly updated for effective and efficient use.
- For effective implementation of the project, project structures like the NaRM-G and SHG have to be incorporated into the village traditional institution.
- Enforcement of policies on natural resource use cannot be put into effect without people's participation.
- Management of natural resources should go beyond village boundaries. It should take a cluster or ecosystem approach regarding outlooks, plans, policies and enforcement.
- Development of natural resources should have the active participation of the government line departments.

Other lessons learnt on systematization process of documentation is the introduction of a matrix which provided a frame work for the team as on what data to gather, how to gather and where to gather in a systematic way. Through the matrix, it has helped the team to be more focused. If done systematically, documentation of field experiences can be completed within a short time frame.

CHALLENGES AND OPTIONS

7.1. Towards a Dynamic Use of the P3D Model

It is suggested that the Project together with the concerned villages work on the following:

- a. Strategically – To come up with a perspective land use plan on a long term basis. From this plan, development can be monitored or evaluated on an annual basis. There are two options on conducting participatory monitoring and evaluation to identify changes in the spatial data /information. It can be through the
 - Use of **transparent plastic sheet**; or
 - Use of **high resolution digital photography** combined with **on screen digitizing** (Participatory Geographical Information System or PGIS).

Whichever option the Project shall adopt, the staff and the communities should be trained.

- b. Operationally – The use of the P3DMs can be maximized in both villages. One, it can be used as a learning tool for understanding the local geography and resource use. This can be incorporated in the local school curriculum where the elders who were involved in the construction of the P3DM can act as the resource persons. Second, the P3DM can be used to continually raise the awareness of the community on natural resource management, keeping track on natural resource issues like land holding. Third, is to make a standard operating procedure that visitors shall be oriented to the P3DM before moving to the area.

7.2. Towards Improving some Project Strategies on Natural Resource Use

There are some issues raised by the two villages that need project attention. The villagers are in search for additional technical knowledge and skills on bio-organic fertilizer production and the appropriate application to the type of soil in their jhum plots or kitchen gardens. They also need assistance in better ways to market their surplus from the kitchen gardens and products from jhum plots.

While, there is an increased awareness on increasing construction of terraces, the villagers see the need of minor irrigation. The project has to find solutions using indigenous knowledge and skills and locally



available resources to address this concern. Probably, the use of bamboos as pipes can be considered in the constructing of minor irrigation.

8. CONCLUSION

The P3DM is a user friendly participatory approach in land use management. In the villages visited, P3DM has brought about changes in the villagers' life in terms of having a deeper understanding of their village geography, an improved village communication and planning capacity, an improved land use management, a stronger community cohesion and better access to basic services from line departments. However, the use of the P3DM has become static. Because of a lack of long term perspective land use plan using the P3DM, the use of the P3DM has been sporadic and on a pragmatic basis. Participatory monitoring and evaluation using the P3DM has been absent in both villages.

The P3DM is strongly owned by the villagers and it can guide them towards strategic land use. Unless the project takes a longer perspective on the use of P3DM in land use management and to continually equip the project staff and communities with the required technical capability to handle P3DM, the existing and additional construction of P3DM shall not be fully optimized. The challenge for the Project is to take P3DM as a dynamic approach in land use management that can be used by the communities even after the Project life.

ANNEXURE I

P3DM Matrix of Tools and Strategies for Data Gathering

Experience/ Achievement	Area to be Covered	Indicators	Data to be Gathered	Tools	Sources
103 covered by the UDCRMS					
Villages covered by the Project 1. Ngainga- 2004 2. H. Godah- 2005 3. Soraphung- 2005 4. Shirui Kashong Range- 2005 5. Talui- 2006	<i>How has P3DM helped improved land use management in terms of planning, implementation and monitoring & evaluation.</i>	Community Resource Management plan and budget	Process of structuring of P3DM.	Story telling	From NaRM- G, SHG & Village council members.
			Level of community participation in planning & implementation of CRM	Review of secondary data	From NaRM- G records (Attendance and labor record), Project monitoring/ audit reports
		Community Resource Management projects implemented and sustained	Number of Community Resource Management projects implemented & sustained	Focus group discussion	From NaRM- G, SHG & Village council members.
			Factors that sustained	Focus group discussion	From NaRM- G, SHG & Village council members.
			Problems faced and how they overcame them	Focus group discussion	From NaRM- G, SHG & Village council members.
			Level of satisfaction of the community of their Community Resource Management plan and projects implemented	Story telling	Key informants
	What changes came about due to P3DM on:	Reduction in jhum practices	• Number of jhum areas reduced	Key informant interview Focus	From NaRM- G, SHG & Village council

	1. Jhum modifications		<ul style="list-style-type: none"> • Number of new terraces developed • Number of households practicing jhum 	<p>group discussion</p> <p>Transect walk/ site verification</p>	members.
	2. Forest conservation (Catchment reserve water shed management, conservation of water source,)	<p>Area reserved for forest, water source, bamboo forests</p> <p>Policies at the village level</p>	<ul style="list-style-type: none"> • Number of hectares conserved towards forest conservation. • Types/ number of policies enforced, mechanism to enforce policies at village level and cluster level 	<p>Focus group discussion</p> <p>Review of secondary data records</p>	<p>Information from village/NaRM-G /cluster records.</p> <p>Types / number of</p>
	3. Settlement area.	Households resettled (Including area for kitchen garden)	<ul style="list-style-type: none"> • Number of households resettled. • Agreed area for resettlement • Problems encountered resettlement and how they overcame them 	<ul style="list-style-type: none"> • Review of secondary data records • Focus group discussions • Site verification 	
	How has P3DM bring about community cohesion/ consensus building	<ul style="list-style-type: none"> • Agreements on road construction, laying of water pipe lines. • Sharing of resources for community use 	<ul style="list-style-type: none"> • Number and types of agreements on resource sharing & infrastructure construction • Problems encountered in resource sharing • Over come problems 	<ul style="list-style-type: none"> • Review of secondary data records • Focus group discussions • Story telling 	<p>Village records</p> <p>From NaRM-G, SHG & Village council members.</p> <p>Form key informants</p>

	How do the villages use the P3DM after post construction?	Post construction activities	<ul style="list-style-type: none"> • Number and type of activities conducted through P3DM • Villagers involved and type of involvement 	<ul style="list-style-type: none"> • Focus group discussions 	From NaRM-G, SHG & Village council members.
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ANNEXURE II

FGD Guide

Village _____

Date Conducted _____

Questions	Data to be Gathered	Before Project Intervention	After Project Intervention	Remarks
1. Can you briefly describe to us your village?				
- Total households	# of households			
- Households covered by the Project	# of households benefiting the Project			
2. When did you start and complete the P3DM?	Year			
3. Who were involved in the process of making P3DM? What was their involvement?	Type of people involved, and their involvement			
4. What was the situation of the following:				
- jhum area	# of hectares			
- terraces	# of terraces			
- forest reserve	# of hectares			
- watershed reserve	# of hectares			
- watersource conservation	Community efforts towards watersource conservation			
- bamboo reserve	# of hectares			
- household settlement	# of HHs resettled			
- kitchen garden	# of HHs having kitchen garden			
- policies	# /type of policies developed: village, cluster			
	# /type of policies enforced: village, cluster			
	mechanism for enforcement: village, cluster			
5. Was there land use planning?	Affirmation			
6. How has P3DM improved your	Examples			

land use planning?				
7. As a result of P3DM, what activities did you undertake or you are now undertaking?	Examples			
8. Are these activities sustained? If yes, why? If no, why not?	Factors that sustained or not			
9. What problems did you encounter in implementing these activities?	Examples			
10. How did you overcome these problems?	Examples			
11. What have you benefited from the P3DM?	On community cohesion, Other benefits			
12. Are you still using your 3D Model? If yes, in what way? If not, why? Can it still be used? For what?	Present usage/ Reasons for not using' Future use			

Observations:

Key Informant Interview Guide

Village _____ Date Conducted _____

Guide Question	Response
<p>1. Can you describe to us the overall natural resource management in your village before and after the introduction of P3DM/Project? in terms:</p> <ul style="list-style-type: none"> - jhum modification - forest reserve - watershed reserve - water source conservation - bamboo reserve - resettlement - kitchen garden - wildlife/fish sanctuaries 	
<p>2. Can you describe to us how P3DM helped build community cohesion? Community agreements on natural resource management?</p>	
<p>3. Can you tell us benefits of the P3DM? How can you continue using P3DM?</p>	

COMMUNITY BASED BIODIVERSITY AND FOREST CONSERVATION IN NERCORMP-IFAD: ACHIEVEMENTS, CHALLENGES AND LESSONS LEARNED

V.T. Darlong and K. Moses Chalai

NERCORMP-IFAD
Shillong

VOICES OF THE PEOPLE

"We have declared a reserve forest of 4 sq km. We call it Gobinet Songgitcham because it is an ancestral ground over a 100 year old. Now we also have elephants, python, peacock pheasant, hornbill, monkey, tigers and many types of birds coming to our reserves. Since it is an ancestral ground we will not despoil it. It is sacred to us and the climate is much cooler. We may cut few trees after 120 years when the soil and trees are fully matured. We have already enforced a fine of Rs. 500/- to a defaulter". Renjing Marak, Nokma of Skagre village, West Garo Hills.

"In the past, forest means good place to do jhum. Now we protect forests for our own survival. Without forest we have problem for firewood, bamboo and small trees for house construction, and vegetables to cook. We now realize that without forests we do not even have good water to drink". Nokma of Sasatgre, West Garo Hills.

"We had a good harvest in the past but now harvest has become poorer every year. This may be due to short jhum cycle and climatic change. However, we are lucky that the Project has come in time when we were all looking for alternatives and other opportunities. This must be blessing from above." - Rockson, Headman, Tusom Village, Ukhurul.

"Since productivity in jhum cultivation has reduced we don't have food security in the village. So the youngsters have to look for other off-farm activities other than jhum cultivation. Banana cultivation is bringing new hope to all of us." - M.C. Vachungla, a member of NaRMG of Tusom Village, Ukhurul.

"If the project would have come during my young age, I could have done much more. Now I am old but I encourage the youth to take up both jhum and banana cultivation"
- Philawon, a member of NaRMG of Nungou Aze.

"The project makes us so busy that we hardly have time for gossiping. The project is showing us how to protect our forests and biodiversity and it is also telling us why we should protect our forests" - R.K. Peter of East Tusom, Ukhurul.

“This is the only project that ask us to work for our livelihood and at the same time paid us for what we have done. Who will not plant banana if seedlings are given free of cost?”

- C.T. Reisang, NaRMG member of East Tusom, Ukhrlul.

1. INTRODUCTION

The North Eastern Region Community Resource Management Project for Upland Areas (NERCORMP) is a joint developmental initiative in North East India of the North Eastern Council (NEC) under the Ministry of DoNER and Internal Fund for Agricultural Development (IFAD). The broad objective of NERCORMP is *“To improve the livelihoods of vulnerable groups in a sustainable manner through improved management of their resource base in a way that contributes to preservation and restoration of the environment”*. The project was declared effective w.e.f. February 1999 and shall be closed in March 2008.

The project operates in 6 districts of 3 states in North East India, viz. Karbi Anglong and N.C. Hills districts in Assam; Senapati and Ukhrlul districts in Manipur; and West Garo Hills and West Khasi Hills districts in Meghalaya. Among its many well-defined objectives, one of the important objectives of the project is *“To promote biodiversity preservation and conservation”*. This objective has been fairly well achieved through promotion of social mobilization, awareness education and serious dialogue with the traditional village institutions through the project-induced community institutions, viz. the Natural Resource Management Groups (NaRMGs). There has also been increasing effective linkages with the line departments particularly with the forest departments in order to achieve the objective of biodiversity conservation and community forestry management in project villages.

2. BIODIVERSITY CONSERVATION INITIATIVES IN NERCORMP-IFAD

One of the key activities of NERCORMP under the Natural Resource Management is promotion of Community Based Biodiversity Conservation. Many of the pristine forest patches, degraded forest areas located in critical water catchment areas, jhum fallow re-growths with rich bamboo, thatch, broom and other NTPF resources, etc. have been brought under community based biodiversity conservation or community forest areas. Up to March 2007, different districts of NERCORMP have been able achieve as much as **1835.89** sq km of forest areas under community biodiversity conservation (Table 1).

Table 1. Community biodiversity conservation in NERCORMP-IFAD

State	Districts	Biodiversity conservation / community forest protected area (in sq km)
Meghalaya	West Garo Hills	600.00
	West Khasi Hills	253.00
Manipur	Senapati	330.53
	Ukhrlul	436.00

Assam	Karbi Anglong	139.81
	N.C. Hills	76.55
	Total	1835.89

It is interesting to note the range of biodiversity and forest reserves created by the communities in different project districts of NERCORMP. Some of these reserves indicate the kinds of benefits the communities derive from such conservation areas. Other reserves have been managed primarily for local ecological services (eg. Village Catchment Reserves). It is also interesting to observe that some of the districts have more varieties or categories of conservation areas than others, indicating perhaps wider range of awareness and/or successful community mobilization. It may also be mentioned that many of these reserves are purely for community benefits of the resources irrespective of the land ownership as in West Khasi Hills where forests traditionally owned by individuals, clans, communities, etc. are now brought under the management control or regimes of the NaRMGs for ensuring forest/biodiversity resource development, protection and equitable distribution of benefits.

Other interesting community biodiversity conservation areas include wildlife reserves as in West Garo Hills, which are further classified as Python Reserves, Bird Sanctuary, Pitcher Plant Sanctuary, Elephant Corridor Reserves, Riverine Fish Pool Reserves, etc. In other district, such as in Senapati district of Manipur, the communities have Community Germplasm Reserves strictly for the purpose of collection of seeds only.

District-wise various categories or classifications of community biodiversity conservation areas are as follows:

Districts	Categories of biodiversity conservation initiatives
West Garo Hills	<ul style="list-style-type: none"> • Village Forest Reserves • Water Catchment Reserves • Village Bamboo Reserves • Village Broom Grass & Thatch Reserves • Social Forestry • Elephant Reserves • Fresh Water Fish Pool Reserves • Wildlife Reserves (eg. Python Reserve, Bird Sanctuary, Pitcher Plant Sanctuary, Elephant Corridor Reserves, etc.)
West Khasi Hills	<ul style="list-style-type: none"> • Village Forest Reserves
Senapati	<ul style="list-style-type: none"> • Village Community Reserved Forest • Community Fuel and Timber Reserves • Sacred Groves • Community Germplasm Forest Reserves
Ukhrul	<ul style="list-style-type: none"> • Village Reserved Forest • Water Catchment Reserves • Wildlife Reserves

	<ul style="list-style-type: none"> • Bamboo Reserves • Green Belt Reserves
Karbi Anglong	<ul style="list-style-type: none"> • Community Forests • Water Catchment Reserves • NTFP Reserves • Bamboo Reserves • Broom Reserves • Streamline Protection Reserves • Sacred Groves
N.C. Hills	<ul style="list-style-type: none"> • Community Mixed Forest Reserves • Community Bamboo Reserves • Community Water Catchment Reserves

3. PROCESS OF COMMUNITY MOBILIZATION FOR BIODIVERSITY AND FOREST CONSERVATION INITIATIVES

Process of community mobilization taken up by NERCORMP-IFAD to initiate community-based forest conservation can be summarized as follows. These initiatives could be either for demarcation of new community conserved areas or restoration / revitalization of existing ones.

- Social agreement with village authorities / village councils / traditional village institutions / indigenous community institutions.
- Sensitization of the communities about the project with the help of partner NGOs and Development Support Team at the district.
- Formation of Natural Resource Management Group (NaRMG) in each village, drawn from every household, usually husband and wife or adult male and female; committee for management of NaRMG formed, often most of the key members of the traditional institutions are members of NaRMG committees, along with inclusion of women in the committees.
- Women are formed into Self Help Groups (SHGs); each group having 15-20 members.
- Sensitization, nurturing and trainings of NaRMGs including members of traditional village institution on various aspects of natural resource management and PRA; alongside they are also trained on organization and financial management, livelihoods activities, business management, marketing, etc.
- Sensitization, awareness and education programmes are also carried out for the SHGs members on issues and problems of availability of drinking water, firewood, wild edible plants, etc. and their connections with conservation of local forests, and thereby impacting on livelihoods; trainings also include on various income generating activities (IGA) opportunities.
- PRA carried out along with NaRMGs and members of traditional village institutions; resource mapping carried out particularly on land use patterns, shifting cultivation/jhum areas, forest areas, important water sources such as springs used for drinking water, existing orchards, etc.
- Comprehensive forest management trainings organized generally in collaboration with local forest department / authorities.

- In some villages, participatory land use planning done using Participatory 3-Dimensional Model (P3DM).
- NaRMGs and traditional village institutions begin to demarcate areas that can be transformed into community forest conservation areas; in some cases, initiatives are taken to rejuvenate and properly demarcate existing community or village reserved forests.

4. PROCESS OF BIODIVERSITY AND FOREST MANAGEMENT BY THE COMMUNITIES

This process can be briefly summarized as follows:

- The NaRMGs together with traditional institutions managed the village reserve forests and water catchments areas.
- They frame rules and regulations for forest management; typical rules and regulations are preventive, prohibitive, punitive, facilitative and regulatory in nature; among many communities this was simple codification of customary practices on forest and natural resource management.
- NaRMGs with support from traditional village institution implement the rules and regulations. In some cases, sub-committees or sub-groups formed exclusively to look after the conservation, protection and management of community / village reserved forests.
- The NaRMGs conduct meeting every month to discuss on various aspects of project interventions and activities being taken up by the members, including conservation and management of village reserved forests.
- The project have funded for raising of bamboo nursery, broom plantation, wild arum plantation in the jhum and fallow land to meet the demand or requirements of forest produce so that the villagers create less pressure in village protected forests. [The project adopts participatory bottom-up planning approachers].
- The project has also extensively promoted home gardens for growing of seasonal vegetables and development of agroforestry in order to create less pressure on their community conserved forests.
- In some district, notably in N.C. Hills, the project has been successful in linking the communities with existing JFM programmes of the government that has strengthened the process of community forest conservation and management systems.

5. SUCCESS INDICATORS AND IMPACTS OF COMMUNITY BIODIVERSITY AND FOREST CONSERVATION

A number of indicators of success of community biodiversity conservation and impacts of such efforts by the communities are emerging in many project villages / communities. Some of these indicators area:

- Community biodiversity conservation activities and/or development of community forestry are becoming a sort of 'movement' in many project villages. Even communities outside the project villages are also beginning to appreciate such efforts and are being influenced to create such conservation areas.

- There is visible enhanced water retention and discharge with significant improvement in water availability, both for drinking and irrigation purposes.
- Improved quality of green coverage thereby ensuring returns of many a native wildlife, including birds and fish in the rivers.
- Reported reduction in the incidence of man-animal conflicts in some pockets of Garo Hills where elephant corridors have been created along with elephant reserves.
- Easy access and better/more availability of construction materials, firewood, NTFPs, wild edible plants, etc. for the communities.
- Higher household incomes from forest resources by way of sales of NTFPs such as bamboo, thatch, broom, mushroom, honey, etc.
- Reduction on conflicts over natural resources.
- Reduction in drudgery of women in collection of firewood, drinking water and wild edible plants.
- Increased income of the households / communities from sale of wild edible plants in the local weekly markets.
- Increased awareness and higher appreciation of both the tangible and intangible benefits of biodiversity conservation and forest reserves by the communities.
- Increasing areas of forest cover under community biodiversity conservation or community forestry.

6. CHALLENGES AND OPPORTUNITIES IN COMMUNITY BIODIVERSITY AND FOREST CONSERVATION IN NERCORMP

The experience of NERCORMP is that the community biodiversity conservation initiatives continue to be confronted with various challenges and opportunities to upkeep in achieving its objectives in this frontier of natural resource management.

6.1 Need for continuous process of community mobilization

Upscaling of conservation efforts and also sustainable management of community biodiversity or forest resources require a continuous process of social mobilization for awareness, education, motivation and conviction. Some of these continuous mobilization processes include:

- PRA exercise carried out particularly resource mapping land capability.
- Studies of traditional institution particularly land use pattern, land use system together with continuous interactions and dialogue with the traditional village institutions / authorities.
- NRM sensitization for the NaRMGs and SHGs at the cluster level.
- Comprehensive forest management and/or biodiversity conservation trainings organized by the Project in collaboration with state forest department, local NGOs, education institutions, etc., usually at the cluster level.
- Community education and decision making processes on NRM through participatory land use planning using 3-D model.

- Farmer to farmer exchange / community exchange programmes / exposure tours within the district or outside.

6.2 Management of biodiversity conservation areas / community forest areas through framing of Participatory Rules and Regulations

Sustainable management and protection of biodiversity conservation areas and community forest reserve areas continue to be an area of serious challenge for the communities. These challenges are being addressed through various means by the communities, which include:

- Framing of rules and regulations, and also enforcement of the rules by the NaRMGs in consultation with the village authorities.
- Focusing biodiversity conservation and forest management issues in every monthly meetings of the NaRMGs and also their federations.
- Conducting special Half-yearly meeting of the NaRMGs, as in N.C. Hills to deliberate on various developmental activities taken up by the groups, including detailed deliberations on protected area management.
- Identification of key forest-user groups or forest-dependent groups within the NaRMG members and sharing of the responsibilities of protection of forests by these group members.
- Prohibition and strict enforcement of rules and regulations for non-forestry activities like jhumming, illegal felling of trees, etc. in the biodiversity conservation / community reserved forest areas.
- Building linkages with forest department for technical support and financial assistance in the plantation, protection, aided natural regeneration and management of community forests.
- In some districts, notably in N.C. Hills, the project has funded in raising of bamboo nursery, broom plantation, wild arum plantation, etc. in jhum areas and homestead gardens in order to enhance the availability of these resources outside the protected areas and thereby reduce pressure in the conservation areas.
- Strengthening the existing village institutions in the management of protected areas by registering as Joint Forest Management Committees (JFMC) under the forest department (in N.C. Hills).
- Registering the community forests under the District Council Forest Acts / Rules and Regulations (in Garo Hills).

Important Functions & Duties of JFMCs:

- To ensure protection of forest/plantation through the member of the committee
- To prevent forest offences in the forest area
- To assist in Preparation of microplan; Choice of species to be planted; Suggest physical and financial target; To propose entry point activities; Awareness programme and usufructs sharing mechanism; etc.



“If there is no unity and peace, there is no development” begins Mr. L. Leishisan, the local community organizer of the Hundung Godah Village. ***“I spent my 66 years in this village and it is my dream that we settle in one area”***.

Mr. L. Leishisan donated 12 acres of his banana farm for the new settlement. The presence of two settlements prompted him to give a portion of his treasure. According to him, for 26 years there was a sort of “tug-of-war” between the two areas in the village. The village head literally transferred his house from one area to another to attend to his people. With this, the village head together with the village folks decided to resettle in a common area.

The P3D model helped illustrate their dream. Through it, they came to realize the best areas to resettle which are close to the main road and where supply of water is abundant. Everybody agreed to the new area of settlement.

Now, 22 households have resettled in the new area. The other 30 households shall rebuild their houses before the close of 2008. ***“I know, we need money to transfer our houses, but we will beat all odds”***, L. Leishisan concludes.

In Ngainga, the village authority exacted a fine of RS 18,000 to 5 youths from a neighboring village for setting fire on their forest. The village was involved in strictly adhering to their natural resource protection policy.

These 5 young men on their way home from Ukhrul were having fun by setting fire on the forest of Ngainga. A small boy who was nearby tending to his cattle, informed them that setting of fire is not allowed in the village and the offenders will be heavily fined. But, these adventurous young men did not pay attention to the small boy and set the forest on fire. The act destroyed a big portion of the whole pine forest of Ngainga.

The boy reported the incident to the youth club. When this club learned the story from the boy, they decided to exact a heavy fine of RS 20,000 to the offenders for burning the forest and for not listening to the boy's advice. They were taken aback by the act for these 5 young men who knowingly burned the forest.

Negotiations were made between the parents of the offenders and the youth club. However, the parents could not raise the fine imposed, so the youth club brought this issue to the village council. Since this already reached the village council level, the village council of the neighboring village was called for a resolution meeting. Again, the parents requested for a lower fine. The village council agreed that the fine shall be reduced to RS 18,000.

With that incident, Ngainga has never experienced forest fire again.

In the construction of the P3DM, the blown up map was laminated and carbon pasting was done with the community in order to mark the contour lines unto the rubber sheet. Each contour line was traced into separate rubber sheets starting from the lowest to the highest altitude. Once the lines had been traced the next step was to cut along the contour line of the sheets. The cut sheets were then pasted and nailed over a table starting from the lowest to the highest altitude. Once the pasting is complete the rubber sheets were sand papered and a paste (mixture of lime and fevicol glue in the ration of 2:1) was applied over the surface of the model.

Once the model was dry, it was painted white and thereafter the communities started marking the village boundary with a string or yan. Then other land uses were marked using different colours. Then they found out the total area of the village and the areas of the different land uses from the model. The scale used to find out the area was on the basis of 2 sq. cm = 1 hectare. During the whole process there was active participation from who were drawn from the NaRM-G, SHG, Village Council, church and the youth.

6.3 Key Features of Community Forestry Management and Community Biodiversity Conservation Rules and Regulations

For effective and sustainable community forest and community biodiversity management, various NaRMGs with the active involvement of traditional institutions, have formed important rules and regulations. Some of the key common features of these rules and regulations are as follows:

- No villagers will jhum in the conservation/protected areas.
- Extraction/harvesting/cutting of any plant/tree in the protected areas, catchments areas, etc. is prohibited. Persons violating these rules will be fined with Rs. 500 – 1000 (or more). If unable to pay the amount, any one of his domestic animals (pig or buffalo or cattle) will be confiscated by the communities.
- Proper fire lines during burning and slashing of jhum will be mandatory for every household. Any one causing deliberate forest fire will be fined Rs. 1000 and above.
- Protection of biodiversity conservation areas or community forest areas from illegal fire or accidental fire will be the duties and responsibilities of every member or household of the village.
- Plantation of economic timbers and plants in fallow land and homestead gardens by every household of the communities.
- Protection and conservation of flora and fauna within the village boundary, particularly in the demarcated village reserved forests; any person violating rule and regulation will be fined heavily (Rs. 1000 and above) and any one violating repeatedly will be expelled from the village.
- Protection and conservation of abandoned jhum land for at least 10 years for regeneration (adopted by villagers in N.C. Hills).
- NTFP particularly wild vegetables and medicinal plants can be collected without disturbing any other vegetation.
- Cutting of timber for construction of house is allowed only from un-protected areas with the permission of the NaRMG members and the tradition institution.
- Firewood should be collected from outside the conservation/protected areas. Only naturally dead wood or plants or trees may be permitted to be collected as firewood from protected areas with the supervision of appropriate authorities in the village.
- Periodic review meeting will be held to discuss about the forest management and biodiversity conservation activities.
- No one from outside the village/community will be permitted to enter into the village protected or reserved forest.
- For proper management of the common properties, a Forest Protection Committee may be formed in the village with the Gaobura (village headman) as President.

6.4 Access and benefits sharing vis-à-vis benefits of biodiversity conservation and community forestry as experienced by the communities

NRM sensitization programmes for the communities include the issues of equitable access rights and benefit sharing mechanism by all the members / stakeholders of the communities, particularly those who are the poorest and marginalized within the

communities. The communities are also made aware of the direct or tangible benefits and indirect/intangible benefits from such conservation practices.

Direct or tangible benefits recognized by the communities as part of the awareness education include:

- Collection of NTFP (like bamboo, broom, bamboo shoot, mushroom, wild edibles fruit and vegetables) for consumption and selling in the local market for additional income.
- Collection of firewood and small timber (for house post and other agricultural implements).
- Collection of honey, fodder, etc.
- Availability of water throughout the year for agricultural and drinking purpose.
- Additional income generation from forest resources.
- Employment / livelihood generation.
- Sources of raw materials for handicrafts (bamboo), woodcrafts (wood/timber), etc.

The importance of conservation is also deliberated and understood by the communities for its indirect or intangible benefits, such as:

- Increase in water retention capacity of the land and hence better plant growth.
- Prevention of soil erosion thereby increased soil fertility.
- Increase vegetative covered in barren/degraded land.
- Change in local climatic condition.
- Forests close to paddy fields / terraced fields act as nutrient sinks, and also harbour beneficial insects / pollinators for the crops.

Additional benefits as perceived and experienced by the communities in project villages due to biodiversity conservation and promotion of community reserved forests include:

- Greater awareness of the need and benefit of biodiversity conservation with increasing efforts to promote such conservation practices.
- The communities have realized the importance of agro-forestry or agro silvi-culture practices, which can enhance both their livelihood requirements and also daily needs from forests.
- There is now greater efforts and awareness for adoption of soil and water conservation practices in their traditional cultivation area.
- There is general change of mindset to shift towards permanent/settled cultivation as shifting cultivation is no longer remunerative and dependable.
- There is also greater appreciation for adoption of improved agriculture practices instead of subsistence agriculture; communities are exploring for maximum and most effective land use practices.
- Improvement of economic condition and greater food security situation by taking up various land base activities and off farm activities.
- Overall improvement of local environment, land and water condition.

- There is improved social cohesiveness among the communities to address the issues of local environment, livelihood activities and economic conditions of the people in general.
- Besides providing them better livelihood it also bring among the villagers greater peace, unity and harmony.

6.5 Increased cooperation between project and non-project villages in biodiversity conservation

In some cases, like in Chinabat cluster (surrounding the Rombagre village) in West Garo Hills, 18 villages of both project villages and non-project villages came together for biodiversity conservation. Such project initiatives are extremely useful seeking increased cooperation between project and non-project villages to protect and improve their local biodiversity resources. Similarly in Senapati district of Manipur, the people of Upper Ngatan have greatly influenced their neighbouring non-project villages to conserve and protect their community and catchments forests for their own benefits. In N.C. Hills District of Assam, the NaRMGs and SHGs of N. Kubing and N. Leikul have greatly influenced their neighbouring non-project villages to follow NERCORMP-IFAD model of natural resource management particularly community forest conservation in their own areas.

6.6 Biodiversity conservation and women

One of the special efforts of the project has been to see that the concerns of the women are duly addressed in any biodiversity conservation initiative. Local ecosystem-specific wild vegetables, grains, animal, fish as well as other biological products and resources have contributed to local food and nutritional needs. Woman in their traditional roles have been especially mindful and concern about the contribution of biodiversity to the food and nutritional security of their households. They were also equally concerned on the dwindling availability of firewood within their immediate surroundings.

Prior to the project intervention, there has been observable general lack of women participation in natural resource management. While the project was concerned about this low participation of women in forestry management in particular, the project has also been able to identify the following constraints.

- Social values, attitudes and strategies still being traditional, woman concentrated more on domestic activities like children's health, education and income generating activities which are not land based.
- Illiteracy, cultural backwardness and low economic status of woman makes them unable to work their ways out of poverty and come up the social and economic ladder.
- Women's general aptitude though oriented towards the need for having better and sustainable biodiversity conservation, yet lack of space for women's voice and expression within the communities have been a general constrain in most communities.
- Male domination in forestry sector and biodiversity conservation has kept away the women in effective participation.

To overcome the lack of woman participation and to ensure effective woman participation, the project have involved woman in all the forestry and biodiversity awareness training programmes. Forestry based livelihood and the need to protect and conserved natural resources have been discussed in their SHG meeting and the following steps have been taken by the project:

- 50% of woman participation in any forestry development training to enable woman to interact with men on equal term and also increase their awareness on biodiversity and forestry related issues and deliberations.
- At least 50% of the members of NaRMGs and JFMCs general body are woman; most NaRMG meetings frequently discuss on issues relating to biodiversity and forest conservation.
- Women are represented, at least 33%, in the executive committees of NaRMGs and JFMCs.
- Women also determine the kinds of species to be planted in their homestead gardens and jhum areas.

6.7 Perspective plans of the communities on biodiversity and forest conservation

The project has also been mobilizing and motivating the communities towards formulation of community perspective plans on biodiversity conservation. The reflections on the synthesis of various perspective plans can be summarized as follows:

- Most villages plan to bring more degraded area or jhum under forest cover.
- To plant trees along with the traditional crops in the jhum especially fruit bearing trees and nitrogen fixing trees.
- Increasing efforts in planting of economically valuable NTFP species (bamboo, amla, tree bean, sajana, bay leaf, etc.) along with the crop cultivation in jhum and also in abandoned jhum area.
- To practice soil and water conservation in the crop cultivation area like terracing and construction of bund across the slope, and also in horticultural farms.
- Promotion of off farm activities like bee-keeping, petty business, weaving, etc. in order to create less pressure on forests and local biodiversity.
- Proposal to conserve having good forest cover and not to do any non-forestry activities for 10 to 15 years by the communities with the assistance of forest department.
- Formulation of rules and regulations for restrictive harvesting of forest resources, particularly NTFPs from their protected or conservation areas.
- Greater attempt and initiatives by the communities to link with line departments and financial institutions in order to improve conservation of local biodiversity and forest resources.

In order to realize these perspective plans, the communities expect the following support from the government and also the project:

- Financial assistance for conservation and afforestation.
- Technical support and knowledge in forestry management (particularly for Training cum Exposure visits to successful conservation sites within and outside the region).
- Availability of schemes and projects from where the communities can access financial resources with other support.
- Trainings in value additions and skill development along with marketing support on biodiversity / forestry based livelihood activities.
- Formal recognition of community efforts on biodiversity conservation.
- Support from the government for policy, institutional, financial and technological sustainability even well after the project closure.
- Support for preparation of forest working schemes, etc.

6.8 Community Biodiversity and Community Forest Conservation: Opportunities for PES

It is generally agreed that 'extractive' method of sustainable resource management is much more challenging particularly when areas of conservation are proportionately much smaller than the population that depend on these conservation areas for their livelihoods. The project has been attempting to explore if current community biodiversity conservation and community forestry development efforts could qualify to attract for Payment for Environmental Services or Ecosystem Services (PES) including community carbon payment or community biodiversity payment, etc. All of these community biodiversity conservation areas are catchments forests that provide environmental services by way of catchments water improvement, biodiversity conservation and carbon sequestration. Therefore it would be interesting if these community conserved areas could attract voluntary carbon payment outside the 'Kyoto-consistent-forest' systems but applying the principles and philosophy of Kyoto Protocol for implementation of UN Framework Convention for Climate Change. The least that can be done would be application of PES for the various environmental services that such conservation areas provide. The challenge is who is going to determine how much to pay and for what type of services to pay? How would or for what will the communities use such payment? However, it is generally agreed that PES could provide greater opportunities of incentives for the communities for their efforts of conservation and thereby making the conservation initiatives more remunerative and sustainable.

7. LESSONS LEARNED

The experiences of NERCORMP in promoting community based biodiversity conservation and community based forestry management have taught us a number of lessons. This humble effort of the project is beginning to show signs of transformation and holistic development process in the communities, particularly livelihoods improvement through biodiversity conservation. Lessons learned in these efforts are summarized hereunder.

7.1 Small efforts, big gain

Promotion of community biodiversity conservation and community forestry development is perhaps one area where the project's financial investment has been least or minimal. The only observable major investment has been the professional experiences of the project team that had been invested to mobilize and motivate the communities towards biodiversity conservation together with series of trainings on awareness education and sensitization programmes on biodiversity conservation and community forest development. Creation or development of over 1800 sq km of network of biodiversity conservation across 6 districts in 3 states of NE India has been a challenging yet rewarding lesson learnt. This is one area where the project has made "small efforts but big gain". Small efforts because minimal financial investment; big gain because the project has been able to create a network of biodiversity conservation areas over 1800 sq km. By the end of the project, we expect to achieve higher areas of conservation.

7.2 Community mobilization and institution building: a constant process

Our experience is that community mobilization and motivation process is a constant endeavour if biodiversity conservation and community forestry promotion has to succeed on a sustainable way. Together with this, the community institution and capacity building process is another dimension that require to be constantly attended. Though the concept of building community institution is not new to the project villages, yet lessons learned during the past 4-5 years of project life showed that project interventions were most effective with the emergence of various community based institutions like the Natural Resource Management Group (NaRMG), which is also acting as a Village Development Council in close consultation with the Self help Groups formed in the village. Some of the visible changes that have taken place are as follows:

- Unity among the fellow villagers has become stronger.
- Decision-making is no longer confine to the village headman but the whole village participates in the process.
- These institutions are bestowed with the responsibility of planning and implementation of various developmental activities as well as judicious management of available resources.
- Operating with Bank Account and handling of cash/finance has given them a new experience, particularly with the values of thrift and savings for their own prosperity.
- Accountability and transparency have been strengthened through proper management of records and regular meetings.
- The participation of women in decision-making has increased but remained minimally visible and still needs to be encouraged.
- Biodiversity conservation and community forest management are becoming increasing areas of focus by many of the community institutions, as well as traditional village authorities.

7.3 Increased awareness on conservation education and practices

The villagers are now more aware of the importance and values of conserving natural resources in the village. Though often the communities are not able to state how much area to be conserved, they are now more than convinced that more forests mean more opportunities for their livelihoods. Earlier their valuing of forests was seen only from the angle of the prospect of the forests being suitable for jhum. Prior to the Project intervention, the villagers never heard the words like biodiversity conservation. Now they are thrilled to hear the word “biodiversity” for the first time, which conveys to them everything (plants and animals in the forests, fish in the river, crops in the jhum fields, terraces and home gardens) that they needed for their sustenance, including for the future of their children and grand children. Materials needed for the construction of their houses and shelter for their domestic animals also come from conservation of biodiversity. So also fodder needed for their domestic animals or plants required for their cure of certain ailments. Many other communities also well aware that materials needed for their religious rituals that they have to collect from their forests are all the gift of their local biodiversity.

However, the practice of jhum cultivation still remains as one of the main sources of livelihood in many villages, though the scenario is changing gradually with the effective interventions of NERCORMP. The villages are maintaining community conserved areas in the form of catchment forest reserves, village reserved forests, etc. with the aim to conserve the flora and faunal biodiversity. These forests reserves are being maintained as per customary practices or have been registered or are in the process of registration under the District Council Forest Acts as in West Garo Hills, which give them both customary and legal rights.

7.4 Increasing concerns of the communities for collective livelihoods

Livelihood activities are now collectively addressed by the NaRMGs and SHGs, as well as by individual households much more vigorously and on sustainable manner. Revolving funds and grants for various income generating activities, and also benefits drawn from the social sector investment in the forms of drinking water supply and low cost latrines, inter-village road improvement and culvert/causeways constructions, orchard development, etc. have given them wider menu of choices and scope for improved livelihood activities. Some lessons learned include:

- Jhum cultivation remains the main source of livelihood. However, the jhum area has greatly reduced to about one-third of the area of what it was 10-20 years before. As a result, the jhum cycle has increased from 4-5 years to 7-8 years. The cultivation system still remains unchanged with few options for technical intervention and other soil and water conservation measures. This cultivation involves minimum tillage with no irrigation facilities. However, more rational analysis of input – output ratio between the crops grown at jhum and terrace needs to be undertaken to convince villagers about the benefits of optimizing jhum practices.
- Interventions in jhum practices have been initiated among different communities involving agronomic practices whereby cropping phase has been intensified from traditional one year to two years or more by introduction of nitrogen fixing crops as cover crops either in the second year or third year. Large promotion of traditional agri-horti crops, mainly vegetables, (which do well as per the experience of the villagers) have significantly improved the

cash income by sales of such crops from jhum fields with appropriate interventions for marketing and transport.

- There is a continuous expansion of terraces in the villages. Mono cropping is practiced. Paddy is cultivated only once in a year with the land remaining barren for the rest of the year. The farmers have experienced better paddy yield in terrace as compared to jhum.
- Terrace production systems are being enhanced further by linking such production systems with development of minor irrigation systems, introduction of short-gestation high yield varieties to enable two-season cultivation, cultivation of off-season vegetables in terraces, etc.
- Introduction of orchards and cash crop plantation are influencing to the increased annual income and savings of the households.
- Promotion of fishery, apiculture, sericulture coupled with non-farm based activities has provided widening menu of livelihoods improvement opportunities for the communities. Promotion of home gardens has also yielded very positive and significant higher cash income for many households in most of the project villages, besides improving their sources of nutritional requirements from the vegetables grown in the home gardens.

7.5 Women empowerment through biodiversity and forest conservation

The project interventions, particularly through biodiversity conservation initiatives have facilitated better gender empowerment and development of women status in the society. Some of the lessons learned are stated below:

- The women have become more aware of the health and sanitation and importance of education together with preservation of natural resources. Biodiversity conservation for the women means direct and easy access to fire wood, wild edible plants, plants needed for their domestic animals and of course, more fish to eat (besides to sell) as in the case of the women of Garo Hills. It also means improved availability of quality drinking water for the communities.
- Women are also displaying higher responsible attitudes towards the society; they have become more confident in public speaking, besides being more informative and developing better communication skills. Typical life of the women from traditionally focus activities like the kitchen, family and jhum fields, have now become more open to changes in the society and more confident in the conduct of themselves in the society.
- The trainings provided to the women on various opportunities of livelihood activities including kitchen garden, processing of foods, accounts training, etc. have transform them into more empowered and confident individuals.
- The mobilization and organisation of the women as SHGs have particularly given them a new vistas of experience in the society. Their ability to discuss freely among themselves about the women issues and their development needs has been altogether a new experience and lessons for them. They are also transferring their knowledge and experience to their children / daughters and daughter-in-laws as junior or second generation SHGs. They feel that each household is now a new transformed unit with better cleanliness, hygiene, childcare, improved nutritional level, etc.

- Availability of revolving fund and credit opportunity have given them new lessons and responsibility in life, besides improving their livelihoods, income, savings, and above all the total family resource capital.
- There is significant decrease in domestic violence against women in the households. Disparity between the women in terms of their income is also reducing, as they are able to help each other through the SHGs.

7.6 Improved livelihoods through community biodiversity and community forest conservation

NERCORMP has been sensitive to the factual reality that the concept of biodiversity conservation and management can only be practical and acceptable if it also results in improved income and livelihoods of the communities. The first priority of all villages is water and catchments reserves, which results in securing constant and good water supply for drinking as well as minor irrigation, which in turn results in increased crop productions and food security. Besides these, community forests or village reserved forests linked with bamboo reserves, cane and timber reserves are also becoming increasingly popular among the communities because of the direct benefits they derive out of such reserves for livelihoods and improved income. It is important that any conservation efforts should be directly linked to their livelihood requirements or experiences.

7.7 Building and securing effective networking through conservation initiatives

Since the coming of the Project in these villages, the community mobilization and capacity building has been directed not only towards addressing their own issues, but also the various opportunities that exist for greater linkages with various line departments and development agencies for their own benefits. On the other hand, since the initiation of the Project, there has been increasing inflow of line department's involvement in various development programmes of the communities, not only due to the tireless and constant efforts of the DST and partner NGOs, but also because of emerging 'mobilized and motivated communities' who are able to access on their own. Besides linkages with various line departments such as soil conservation, DRDA, etc., one of the significant experiences have been effective linkages with Forest Department in N.C. Hills through the promotion of Joint Forest Management and biodiversity conservation initiatives. Promotion of cluster level associations of NaRMGs and federations of SHGs are also showing sign of positive impacts particularly in the areas of sharing of information and exchange of knowledge among /between communities.

7.8 Increased promotion of local eco-tourism and local trade through biodiversity conservation

Improved biodiversity through community conservation initiatives have remarkable positive impacts in many villages. For example, the fresh water fish pool reserves created in West Garo Hills are attracting local population to observe and appreciate the varieties of fish available in their river systems. It gives the local tourists not only recreation but also education on their own local fish resources. The fish sanctuary at Rombagre and nearly water fall at Rongbangre are also linked up with popular road-side open vegetable stalls produced and sold by the members of local NaRMG and SHGs. The travelers between Tura and Williamnagar invariably stop at these

places to help themselves with fresh supply of local ethnic vegetables, most of which are the produce of jhum and wild vegetables from local forests, which only gives the clear message on the importance of conserving the local agro-biodiversity and community forests.

In Ukhrul district of Manipur, the Project has promoted a resource centre for promotion of local eco-tourism linked with conservation of Siroy lily, an endangered endemic plant of Siroy Hills in Ukhrul district. By this endeavour, the communities are also immensely benefiting by engaging in different occupations in order to meet the needs and demands of tourists who come in the Siroy Peak.

7.9 Strengthening Participatory Management for Biodiversity and Community Forest Conservation

A very clear message learned from the project is that the conservation efforts can materialize only if the whole village participates. This is because the rules and regulations are built upon voluntary agreement. The sanctity of these agreements also rest on the similar commitment and social agreement from the neighboring villages and visiting outsiders to sustain the practice. The process of declaring forests reserves and river sanctuaries can only happen by ensuring absolute voluntary participation from all the partners and stakeholders concerned. Of course, the project has been able to demonstrate such success stories as in the Chinabat Cluster in West Garo Hills where 18 surrounding villages, both project and non-project villages, came together to preserve 4 Riverine Fish Sanctuaries on mutual agreement and trust, but everyone benefits out of such conservation initiatives. Thus, one of the lessons learned has been increased strengthening of participatory biodiversity conservation and management through voluntary participation.

8. CONCLUDING REMARKS

The requirement of the biodiversity conservation movement and community forestry management is replication and extension of similar activities to the adjacent / adjoining areas of villages over forest areas and riverine stretches. As the population is increasing, there is increasing competition for space for human habitation, agriculture and forestry development. However, one aspect that may not be compromised would be decrease in forest cover or forest conservation areas, which will otherwise seriously undermine local environmental conditions. However, sustainability of such efforts can only be ensured if the neighboring villages also adopt similar regulations to capitalize on the opportunities, which can be also harvested in their lands and streams. Although the Project has its own limitations in terms of its operational life and area, but the practices and lessons learned can easily continue in non-project villages even after the expiry of the present Project. Of course, the overriding principle of conservation would be based on linkages with livelihood requirements of the communities.

The observable experiences of the communities over the direct relationship between the biodiversity conservation and improved fuel wood supply, drinking water availability and more vegetables from the wild tell immediately on the status of women vis-à-vis importance of such conservation practices. The increased availability of fish (as in Garo Hills) improves the nutritional requirements of the mother and child. Such lessons learned need further detailed documentation and

sharing of information of benefits, which may motivate other communities to replicated in their own respective areas.

The follow up actions of registering the reserves with the competent authority in the district (as with District Council in Garo Hills) and adoption of joint forest management exercises along with the Forest department leads to legal recognition, while at the same time accessing professional input. Further, comprehensive forest management plans and approval can lead to sequential harvesting and legal trade of timber and NTFPs by the communities in due course of time. With the establishment of the State Biodiversity Board in North Eastern States and building appropriate linkages with these boards can perhaps give further impetus and missed opportunities for sustainable livelihoods through biodiversity conservation and community forest management.

In a natural resource rich area like in North East India, a project aiming to combat rural hunger and poverty requires to adopt a strategy that caters the development needs of the communities, as well as ensures conservation of local biodiversity. The NERCORMP while addressing the poorest and the vulnerable communities has successfully attempted project activities in a sustainable manner through improved management of their resource base **in a way that contributes preserving and restoring the environment**. The NERCORMP experience over the past years of project implementation has been that a key to success for attaining project objectives can be fostered only through promotion of symbiotic relationship between livelihoods and community based biodiversity and forest conservations.

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