

NewsReach

Pradan, 3 CSC, Niti Bagh, New Delhi 110 049, India
Tel/Fax: 011 651 8619/4682. E-mail: pradhanho@ndb.vsnl.net.in

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Milky Way to Prosperity

Facilitating alternative livelihoods amongst the rural poor in Alwar

Neelam Maheshwari

PRADAN HAS been working in the Alwar district of east Rajasthan for the past 14 years. We began with a pilot project in the Kishangarh Bas block, which was sponsored by the rural development ministry of the Government of India. The purpose of the pilot project was to devise ways to improve the effectiveness of the government's poverty alleviation programmes.

During this phase a Pradan team worked closely with the block level staff to plan and implement projects to create self-employment and wage employment for families below the poverty line by using finances from the government's poverty alleviation programmes. Pradan continued to work in Alwar to enhance livelihoods of the poor after the conclusion of the 5-year pilot project.

The activities we took up were promoting women's self-help groups (SHGs) around savings and credit, watershed development and *paal* (earthen dam) renovation to improve agricultural productivity. In Alwar we now work in the Tijara and Ramgarh blocks apart from Kishangarh Bas. We concentrate

in Ramgarh as the community-based organisations have taken over most project tasks in Kishangarh Bas.

Working with Subalterns

These three blocks are part of the Mewat region, home to the Meo Muslim community. Besides the Meos, scheduled castes form a sizeable part of the population, who are economically the weakest. Ahir Gujjars, Baniyas and Brahmins are the other communities living in this area. Work in Ramgarh began in 1996 around watershed development and savings and credit programmes.

Situated in the Aravali hills, Alwar has an average annual rainfall of 550-600 mm. Like in the past two years, successive years of near total drought are common. Agriculture, the primary occupation, is therefore highly risky. Rearing livestock is a secondary but substantial sub-sector of the rural economy.

If we were to consider food security - assured availability of food round the year - as the measure of poverty, it is not inconspicuous here. Access to wage employment in nearby market towns, Delhi, Punjab and Haryana is an assurance against abject poverty

and hunger. To a large extent, this is one of the labour colonies of Delhi.

This primarily agriculture-based society is trying hard to survive with progressively reducing size of landholdings and declining ground water level, which together make agriculture an increasingly tenuous source of livelihood. The prospect of no land and progressively longer periods of migration stares poor people in the face.

Depleting Resources

Our rationale for working here is the absolute dependence of the rural people on continuously depleting resources and the poverty of ideas to develop alternate livelihoods. The challenge is to develop an alternate yet indigenous and sustainable livelihood. This has been echoed by the members of the women's groups promoted by us.

What are the alternatives is the first obvious question. Fortunately, our team has rich experience in livelihood promotion from the days of the pilot project. On the basis of that we decided against introducing an altogether alien activity. No more plastic moulding for us!⁽¹⁾

Having decided to let the people build on something they already do, the farm sector was the obvious choice as most people in the villages here are engaged in it. With declining farm sizes, agriculture offers limited opportunities. In any case, improvement in this activity calls for large-scale area development initiatives for drought proofing, which requires major government funding.

Our experience of raising large-scale government funds for area development has not been very promising. Dairies thus appeared a very natural possibility, as after agriculture, livestock

rearing is the second largest farm activity people are engaged in. More importantly, women are centrally involved in this activity.

To further scrutinise its suitability, we collected some data ourselves and also commissioned a diagnostic study by Dr Rakesh Kaushik,

a former Pradanite, in Ramgarh and Kishangarh Bas. While we await the results of the study, I have already gained some insights during the eight days I spent in the field with Dr Kaushik.

I realised, for instance, that one would need to bring changes in three broad areas - availability of services, people's attitude towards animal husbandry and people's knowledge about modern livestock rearing - to increase the productivity of milch animals and make dairies a vibrant source of income amongst the poor.

Inadequate Infrastructure

The service infrastructure in this area is grossly inadequate - one veterinary centre with a single veterinarian caters to 30 to 50 villages (3,000 to 5,000 buffaloes) with limited resources and outdated guidelines. It is impossible for the centre to serve such a large population of animals. As a result, it does little of any consequence, especially for the poor.

Local attitudes towards animal husbandry are equally antiquated. For example, no one thinks of getting animals vaccinated against common diseases. There is little knowledge, especially



Neelam with the members of the Santosh Mahila Mandal at Baminikhera village

amongst the poor, about various breeds, cost-effective feeding practices and artificial insemination for breed improvement.

I also learnt that although most households keep milch animals, the practices vary across communities and economic strata. For example, the Ahirs maintain livestock with great care and the Meos by and large do not.

Overall though, I concluded that there is significant unutilised scope, which if realised could make livestock a dependable and the primary livelihood. I thought the way to go is to turn it into a full-fledged occupation instead of a supplementary activity, which it is at present. Besides reconfirming that animal husbandry is viable and possible, the most important gain from these focused explorations was to discover that the people also believe so.

There are, of course, other issues to be considered. For example, a dairy animal is both a costly and highly vulnerable asset. Therefore, poor people would hesitate to invest in such an asset. Also, keeping a good dairy animal would call for regular cash flows to buy feed and supplements, which poor people do not have. Finally, many poor households do not have adequate space to keep a dairy animal.

Having learnt about the untapped productive potential of animal husbandry, I turned to the marketing of milk. That is when I learnt that my biggest roadblock would be the traditional milk vendor, the ubiquitous *dudhiya*.

The *dudhiya* not only buys milk at the doorstep from the producers but also provides them a number of visible benefits, albeit at highly exploitative but invisible prices. He provides them large sums of credit, ranging from Rs 500 to Rs 10,000.

Credit Trap

The credit could be to buy dairy animals, to invest in agriculture or to meet social ceremonial expenses - virtually anything. All that he is concerned about is that the borrower has, or would in the near future have, milk to sell to him at prices he will dictate.

Besides credit, the *dudhiya* also sometimes procures cattle feed and feed supplements, such as jaggery and oil cakes from distant markets and delivers those to the farmer at the doorstep on credit. Some *dudhiyas* also provide rudimentary veterinary services.

In return for his services, the *dudhiya* expects that the farmers sell him milk at about Rs 2 to Rs 3 less per litre than the market rate - a discount of about 20%. The net effect is that credit from the *dudhiya* may cost the farmers as much as 60% interest per annum. The remoter the village, the higher the profits for the *dudhiya*. *Dudhiyas* invest anything between Rs 50,000 and Rs 100,000 per village.

The margins are so tempting that many cooperative dairy secretaries have turned into *dudhiyas*. The *dudhiyas* have well-established links with private milk contractors and private

milk processing plants, from where they obtain money to lend in the villages against an assured supply of milk.

An under-utilised milk processing plant in the cooperative sector at Alwar and several large private milk processing plants in nearby Firozpur Zhirka and Sohana towns offer an assured market for any amount of milk at competitive prices. Good quality animals are available next door in Haryana.

In Ramgarh, over two-thirds of the households we work with rear buffaloes. Over half of these animals are in milk at any given time. Although over a thousand litres of milk is sold daily by SHG members, less than 2% of it is sold to milk processing units.

Enhanced Incomes

Just the difference in prices offered by the *dudhiya* and the cooperative dairy at Alwar would enhance incomes by about 50% if all the milk were sold to the Alwar Dairy. Intervening into production management could further increase this substantially.

The interventions therefore need to be built around these two broad areas, namely, marketing of milk through remunerative channels and enhancing animal productivity.

To conclude that animal husbandry is a possibility was not very difficult. Nor was it difficult to figure out that marketing of milk at profitable prices and improving animal productivity, in that order, were the ways forward. But deciding how to intervene and at what level, took us some time to decide.

There were debates in our team about how to proceed. Should we create a parallel structure against the already established cooperative dairy plant or just

act as a facilitator to link the people to different services? Or, might there be a middle way to act as an active partner?

Third Option

As a team we pitched for the third option. The key reason was the presence of well-established infrastructure at the district level to take care of processing and marketing of liquid milk.

The production system is palpably inefficient at the producers' level, where it would be most productive for us to invest our energy right now rather than in setting up alternate markets.

Organising women to link up with the Alwar Cooperative Union for selling liquid milk would also give us an opportunity to help them improve animal rearing practices and productivity. Therefore we decided to focus our efforts at the community level for the time being.

We decided to initiate work in a few selected villages by promoting women's dairy cooperatives, drawing members from already existing women's SHGs. We also decided to work on all aspects through the coops. Besides setting up a demonstration, this would give us some insights to identify the areas and the appropriate level of future intervention.

Meokhera was the first village where a woman's dairy cooperative was set up. It took a little while to persuade the women to begin a cooperative rather than sell milk to the *dudhiya*. Although the women were convinced, they had a tough time with the *dudhiya*, whose interests were directly challenged. One must admire their determination that they left no stone unturned to form their dairy coop once they were convinced of its utility.

It took five months to open it. We have 3 SHGs there. Out of 37 SHG members, 15 began selling milk to the cooperative right away. Pradan was actively involved at every step, right from helping to select the dairy secretary to setting systems for record keeping.

Transparent Governance

We are trying to introduce transparent systems of governance in the women's cooperative, plugging potential loopholes. Though it is yet to become a model dairy cooperative society (DCS), we have done a comparison between the new cooperative and what normally exists in other places. Clearly, the new women's cooperative is governed more transparently (See Box).

We put a lot of emphasis on making the DCS transparent because we find it the most critical issue in order to ensure that all the profits go to members. True ownership of the DCS by women would ensure 40% increase in their income from milk, making the DCS a vibrant institution. On the other hand, if the women were not able to sustain control, they would desert the DCS and would go back to the *dudhiya*.

We are trying to freeze the process of making transparent DCSs for further expansion. The issues we are grappling with in developing poor women's milk cooperatives are:

◆ The women are illiterate and therefore cannot verify records of transactions.

◆ As secretaries typically run the coops as their private trading business and indulge in corrupt practices to cheat the members, it is a major challenge to shield the secretaries of the women's coops against such widely prevailing norms.

◆ How to ensure that the DCS

A More Transparent Dairy Cooperative Society

A Typical DCS	The Meokhera DCS
1. Members have no direct functional link with the district dairy union. The secretary of the DCS is the only ownership link. Thus, the functioning of the DCS depends entirely on how the secretary functions.	1. Women's SHGs themselves organised and set up the DCS. SHG members were involved right from conducting a dialogue with the dairy union to appointing a secretary and in setting up systems.
2. The secretary, an employee of the society, rules over the society as though he owns it.	2. As the members appointed the secretary themselves, they are able to effectively supervise him.
3. Monitoring mechanism is inefficient. There are no strong measures to check corruption, which is taken for granted. For example, if the secretary pays for milk at a flat rate rather than according to fat percentage as required, the dairy union can do little until the community is mobilised.	3. We are setting up systems to ensure ownership and transparency even without our presence. Members meet regularly and the secretary gives accounts of business transactions. Members discuss ways to run the dairy properly.
4. Members neither perceive any stake nor are they trained to develop one over time.	4. Prior experience of SHGs has given women the confidence to assert themselves.

will remain transparent with members' ownership even without Pradan's presence.

The other area of intervention is to improve animal productivity. Though the approach is yet to pan out, we have made small beginnings with animal health. We organised animal health camps by working with the SHGs with limited but focussed objectives, which included how to prevent outbreak of diseases like the foot and mouth disease. Inspired by the response, we have thought of animal vaccination camps as an entry point activity to initiate dairy cooperatives.

We also organised camps for deworming of buffalo calves as almost 90% these calves die

because of worm infestation. The camps were organised in collaboration with the SHGs and the veterinary department in the district.

Instead of routine lectures by technical people, we were able to make it an interactive process by briefing the veterinarians in advance. The women were encouraged to ask questions about animal health.

A committee of three women was formed to take the veterinarians to individual member's houses to examine the animals rather than collecting all of them at one place. Individual members have been issued health cards to help them to remember next vaccination as

well as to keep a record of it.

Recently, we have undertaken an experiment-cum-demonstration of improved feeding practices in collaboration with the Alwar Dairy Union. The dairy union has a programme of supplying balanced feed to cooperative members. We want to test and demonstrate the advantages of this feed over the traditional feed. If the women find it cost effective, they would switch over. The experiment is being tried out in two villages with selected women.

Gradually, the contours of a

livelihood programme around animal husbandry are emerging from these exploratory initiatives. The elements of the programme are:

- ◆ Access to fair market through cooperatives.

- ◆ Access to credit through SHGs to buy new animals as well as to feed the existing ones.

- ◆ Access to animal health services from the existing veterinary department and the district union.

- ◆ Breed improvement.

- ◆ Access to animal insurance.

The existing SHGs are the cen-

trepiece in our intervention. We will form milk-marketing cooperatives largely by drawing members from the SHGs. The SHGs and the milk marketing cooperatives would also be the local organisations to link individuals to services and inputs as well as knowledge by way of training and exposure.

Note

⁽ⁱ⁾Pradan had set up an experimental unit to explore hand-moulded plastic products as a source of livelihoods in Alwar in 1986. ■

An Outline of the Dairy Programme

S.No.	Proposed Strategy	Expected Outcome	Measurable Indicators	Risk Factors
1.	Linking the milk producers to fair market prices.	Remove middlemen. Let the producer benefit directly.	50% increase in sustainable and incremental income.	Ramgarh route famous for milk adulteration and mal-practice. Large number of private dairies encourages both exploitation and adulteration as they provide big advances to middlemen to further trap producers.
2.	Making credit available.	Larger population able to buy milch animals.	50% population covered under SHG programme. Number of buffaloes double.	Lack of credit sources. Lack of cooperation from bankers.
3.	Ensuring services and providing training.	Improved animal health, increased production, reasonable returns.	Regular de-worming, vaccination and check-up for all buffaloes.	Lack of expertise. Lack of experienced staff.
4.	Improving breed, quality breed studs.	Viable dairy by turning a low productive animal into a high productive one.	All buffaloes covered.	Lack of expertise. Lack of experienced staff. Low initial acceptance. Management of stud bulls a problem.
5.	Providing security via animal insurance.	Reduced risk to save asset value.	Reduced risk by 50% via insurance coverage.	Lack of cooperation from insurance agencies. The poor have very few quality animals that are worth insuring.

Evaluating Poverty and Gender Impact of Micro-Credit Lessons on Methodology from Mahalir Thittam

Ranjani K Murthy, William D'Souza, Annie Valsarajan, Kalpana Sankar and K Rajaraman

PROMOTING MICRO-CREDIT with groups of women is increasingly seen as the panacea for reducing poverty and empowering women. In the past decade, the Indian government, NABARD and various NGOs have started a variety of group-based micro-credit programmes based on this premise.

The time is now ripe to assess the poverty and gender impact of group-based micro-credit interventions so that we can evaluate whether, and in what context, the assumptions of poverty reduction and women's empowerment are valid.

In this article, the authors seek to share the methodology of the mid-term review (MTR) team⁽¹⁾ of the Mahalir Thittam project of the Tamil Nadu Corporation for Development of Women (TNCDW). The team adopted this methodology to discern the poverty and gender differentiated impact of the project and to draw lessons for impact assessment.

Mahalir Thittam

The TNCDW has been implementing a project for women's empowerment in the state since 1989. During 1989-1996, this project was supported by the International Fund for

Agricultural Development.

The success of the project prompted the Tamil Nadu government in 1997-98 to extend this project to the entire state in a phased manner, beyond the original 75 blocks in which it was operational.

The project was given the name Mahalir Thittam (Mathi in short). Currently, Mathi is operational in 385 blocks spread over all the districts of Tamil Nadu. With the support of 297 NGOs and 40 banks in Tamil Nadu, Mathi has facilitated the formation of 68,268 self-help groups (SHGs) in the state.

Mathi entails close collaboration between different groups of people: women from the community, banks, NGOs, line departments and the TNCDW. In each village, there are between 3 to 12 groups of around 20 women each. Clusters of SHGs in around 6 villages are federated into a cluster level federation (CLF).

NGOs are involved in organising, training and building capacity of the SHGs and offering support services in their area of operation. The commercial and co-operative banks channel credit to the groups either under the SGSY (Swaranajayanti Grameen Swarojgar Yojana) or the NABARD refinance scheme.

The district level project implementation unit (DLPIU) of the TNCDW monitors the overall implementation of the project in the district. It is also in charge of facilitating effective co-ordination amongst the different stake-

holders. It plays a key role in fostering credit linkage between the groups and the banks.

Actual co-ordination takes place through different bodies at different levels. At the block level there are block level co-ordination committees (BLCCs) comprising representatives from SHGs in the block, the DLPIU, NGOs and banks.

There is also a district project co-ordination committee headed by the Collector and comprising representatives of different line departments, heads of NGOs and project implementation unit staff. A project management unit in the state is in-charge of facilitating participatory planning and monitoring and evaluating the project throughout the state.

Methodology

Since Mathi has completed three years of active existence, the TNCDW decided in August 2000 to initiate a mid-term review in three districts to assess progress on programmatic and institutional aspects of the project and to draw lessons for the future.

The terms of reference given to the mission members in the Cuddalore district was to look at the poverty and gender impact of the project, as well as the issue of group processes and institutional arrangements. This paper focuses only on the impact assessment component of the review.

We used a combination of qualitative and quantitative

approaches discussed below.

We developed a questionnaire to be administered to approximately 5% of the SHGs in Cuddalore. This questionnaire gathered perceptions of members on:

- ◆ Mathi as a scheme, savings and credit activities of SHGs, group and training processes and linkages with other institutions.

- ◆ Impact of group activities on addressing credit needs, increasing assets, skills and income of members, improving health, nutrition and education of members and their children, strengthening political participation of members and reducing violence against women.

- ◆ Sustainability of the group and its activities and the vision that the group had for itself for the future.

A unique aspect of the survey was that BLCC secretaries (leaders of the SHGs) carried it out after two rounds of training imparted by us.

These methods included a combination of in-depth village-level field study and focus group discussions at other levels. Each of these is described below.

In-depth village-level field studies were carried out in 7 villages, with 7 groups, 40 households and 4 village-level institutions in each village. Each village-level field study took two days, which was facilitated by a team of four people and assisted by animators of groups in the village.

The purpose was to collect more in-depth information from group members on topics covered in the questionnaire, as well as to study the following additional issues not covered in the baseline survey.

Effectiveness of village-level targeting, in particular who is included and excluded from the groups (economic, leadership and caste background), reasons

for very poor women not joining the group (women heading households in particular) and reasons for members dropping out after some time.

We carried out exercises in social mapping, wealth ranking and interviews with non-members and dropouts for this purpose, evolving a format for reporting back the findings. This analysis was carried out in 7 villages, with the participation of members of all the groups in the village.

Care was taken to select villages covered by each NGO in the district. Villages of different degrees of remoteness and different caste and religious composition were selected. The choice of the village was also based on the grade and age of the SHGs, in order to assess performance across a graded scale from A to D and across ages varying from 6 months to 3 years.

Gender-differentiated impact at the household level (through household level interviews) to assess the impact of group activities on the gender-based division of labour, workload, access to and control over assets and income, access to food, health care, clothing and education and access to decision-making.

In addition, issues of impact on decision-making, mobility, violence and happiness of women were examined. Yet another issue we looked into was the impact of the group activities on reducing periods of food scarcity and seasonal fluctuations in poverty, as well as the tendency for women to bear the brunt of any food shortage.

The methods we used for this study were interviews, seasonal mapping, mapping out a gender analysis matrix, happiness mapping and mobility mapping. We conducted interviews with 20 women individually and

20 women in a group. Criteria for selection of member households included the nature of activity, age of women, household leadership and economic, caste and religious background. We also met a few children, husbands and in-laws to gather their perceptions as well, evolving a format was to record our findings.

Examining Records

Measuring impact on nutrition, health, literacy, education and political participation of members and members' children, as well as in bridging gender gaps. We examined records of Anganwadi centres, schools and village sub-centres to study the nutritional, enrolment, attendance, infant mortality, child mortality and pre-mature adult mortality of member's families vis-à-vis non-members families.

The difference, if any, in the gender gap in the above variables amongst men and women in member's families and non-member's families were also examined. Data was also collected on the numerical participation of women members in *gram sabha* (village council) meetings.

We also looked at whether the participation of members was higher than that of men and non-member women, the kind of issues they discussed in the *gram sabha* meetings, the extent to which these were addressed and the nature of linkage between the *gram panchayat* and the SHGs. These were collected from the *gram panchayats*. The kind of linkages established between the SHGs and these institutions and perceptions on ways of strengthening these were also gathered.

We also discussed the effectiveness of the scheme in addressing social evils and capacity to take

up community and social action programmes. Box 1 gives additional information on the different participatory methods that were used as part of the MTR and also on how they were used.

Focus group discussions were the next method used to collect qualitative data from different stakeholders. These stakeholders were:

- ◆ Cluster level federation and one block level co-ordination committee. The topics covered included the composition of, need for and role of these forums, the general and gender specific issues at the cluster and block level that these forums have been able to address and recommendations with respect to these two forums and Mathi as a scheme.

- ◆ Participants in 2 *gram sabha* meetings actually in progress with the view to assess issues of numerical and qualitative participation of members. This was also to ascertain the nature of demands that were made by groups and the degree to which the demands made in previous meetings were addressed. We also looked into whether group members demanded accountability of the *gram panchayat* as a whole and whether the groups commanded respect in *gram sabha* meetings.

- ◆ Staff of 7 NGOs and all programme implementation unit (PIU) staff (separately) to gather their perceptions on the strengths and weaknesses of Mathi, co-ordination between different stakeholders (PIU, NGO, line departments, SHG, bank and project monitoring unit), training programmes under Mathi, financial incentives to groups and NGOs, systems that are adopted for monitoring and recommendations for the future on programme and institutional aspects.

These focus group discussions were followed by questionnaire administration to representatives of 3-4 women's organisations and legal aid support groups based in Cuddalore to gather their awareness of Mathi, their role in implementation or steering of the programmes, their perceptions on strengths and weakness of Mathi and their recommendations for the future.

Individual interviews were also held with the District Collector, heads of line departments, bankers, senior managers of project management unit at Chennai on Mathi as a scheme and mechanisms for strengthening the same.

The team also reviewed secondary literature, manuals and systems pertaining to Mathi.

Given that the team of three people was not sufficient for carrying out the qualitative methodology, 9 PIU staff were trained and were partners throughout the exercise. Each of the mission member was accompanied by three PIU staff during the in-depth field study.

Lessons Learnt

There are several lessons on impact assessment that flow from the above experience.

Need for clarity on conceptual framework on poverty: The methodology has to measure impact on poverty both from an "ends" and "means" perspective. The "ends" perspective entails examining actual levels of access to basic needs like food, clothing, shelter, education and nutrition.

The "means" perspective entails examining the access to means to access basic needs: credit, labour power, income, productivity, employment, private assets and finally, social capital (in terms of ability to stake claim on *pan-*

chayats, social networks, different common property resources and government resources). Further, the methodology should also capture sustainability of the means to overcome poverty in the next generation.

Need for clarity on gender and poverty: The methodology should recognise that increase in household income need not lead to increase in well being of all members. It should capture inequalities within households in access to basic needs indicated above and in means to overcome poverty (in ownership of assets, in wages, in control over income, in decision-making, in division of work, in mobility) and so on.

The methodology should also capture women's own perception of empowerment and well being. For example, it was discovered that women's own perception of well being extended beyond access to basic needs to include "happiness". It was also mediated by things like fertility, quality of marital relationship, relationship with children, violence within or outside the family, nearness to marital home and so on.

Need for participation of all stakeholders in designing and carrying out the methodology: Representatives of all the stakeholders should evolve the methodology collectively and to the extent possible, they should be involved in implementation and interpretation of the findings. This adds to the quality of design of the impact assessment study, as well as strengthens ownership over the process.

It is likely that the findings will be acted upon. In this case a workshop was organised with NGOs, SHG representatives, PIU staff and PMU staff before designing the methodology. Literate SHG representatives were trained to actually carry out the questionnaire survey.

The quality of the survey was better than surveys carried out in the past by fresh social workers. Similarly, PIU staff were trained in the methodology for in-depth village level field study.

Need for ensuring universality and reliability of results, without compromising on quality: To ensure this, it may be important to combine large-scale base-line surveys, with small-scale qualitative studies using qualitative methods. Further, there is bound to be diversity in impact based on age, composition and grade of the group, NGO orientation, the backwardness of the village and socio-economic background of each member household.

Hence large-scale surveys should be based on stratified sampling, and even selection of villages, groups and households should take into account this diversity. To ensure that the findings are valid and reliable, it is important to cross-verify perceptions of different stakeholders with actual facts. For example, we verified members' perceptions on nutrition, health, education and political participation with data from actual records from different village-level institutions. Wherever there are contradictions in data it is important to triangulate and come to a consensus.

Need for tracking down causality of impact: Not all changes in the members' lives or in the villages can be attributed to the group or micro-credit interventions. It is therefore important to compare improvements or deterioration amongst the lives of non-members with changes in the lives of members. It is also important to differentiate improvement or deterioration in lives of members due to the

Box 1: Participatory Rural Appraisal Methods Used in the Mid-Term Review (MTR)

Social Mapping: Social mapping entails detailed mapping of people by caste, class and leadership background of households, institutions and infrastructure in a village. The MTR team facilitated the formation of a simple social map by the members, so that they could identify broad caste-wise settlements in the village and the number of groups in each settlement. This provided a broad idea of targeting of group formation and enabled the mission to identify 3 to 4 streets for in-depth targeting analysis, using a wealth-ranking exercise.

Wealth Ranking Exercise: The wealth ranking exercise usually entails classification of households in a village into 3-4 economic categories by 4-10 members of the same village based on their perception of each households' economic status. Subsequently the group of informants is asked to spell out the reasons behind their classification. Using this list of reasons, they are again asked to classify the economic condition of the households. Ideally this exercise should be done with 2-3 groups of informants and then the results should be triangulated. The MTR team carried out wealth ranking only in 3-4 streets in each village predominantly with members of SHGs. The exercise was carried out street-wise to make it more participatory. For the SHG selected for in-depth study, the exercise was carried out "as of now" and "before group formation" to discern improvement or deterioration in status. Causes of these changes were discussed to isolate impact of Mathi from other factors.

Gender Analysis Matrix: This matrix was evolved by Rani Parker and involves analysis of effects of projects on four different groups: women, men, household and the community across four variables: labour, time, resources and culture. The matrix was modified and converted into questions and used in the MTR.

Mobility Mapping: This entails mapping how far and to which institution women and men travel to carry out their roles and responsibilities. In the case of the Mathi MTR, the exercise was used to discern changes in mobility patterns of women and men as a result of taking part in the activities of the project

Chapatti Diagramming: Chapatti diagramming entails examining how close or far away people are from particular issues, institutions or locations. In the MTR one of the mission members used it to see the closeness of a SHG to different institutions in the village, block and district.

Happiness Mapping: Happiness mapping entails mapping of whether people are sad, happy or somewhere in-between. It is premised on the belief that income and poverty measures need not capture happiness of people. In the MTR, the mission members used this exercise to capture whether members were less or more happy as a consequence of joining the group.

activities of the group from those arising due to other factors (like access of a member to a government job without group support).

Need for ensuring that the social relations governing the methodology are sensitive to gender concerns: The hierarchies between the facilitators and poor women have to be broken if women are to open up. It is hence crucial that the facilitators build a rapport with the women, sit at the same level as women members, do not ask leading questions and at no point contradict the opinions of the women themselves.

Ideally, women facilitators alone should ask questions pertaining to violence against women, decision-making on reproduction and issues such as reproductive health of women. All questions pertaining to household issues need to be asked in total privacy.

Women and men should ideally be interviewed separately. The facilitators should be accountable to the women and ensure that in no way that there is a male backlash because of the kind of questions asked and the way they are asked.

At a more nitty-gritty level, it is important that the impact assessment is done at a time, season and place convenient to women. If the method demands 4-5 hours, it should not be carried out at a stretch as women have multiple responsibilities to cope with.

Need for taking back findings to different stakeholders: It is important to feedback the findings and recommendations to all the stakeholders. This facilitates correction of any misinterpretation of data or findings, ensures that the recommendations are acceptable and feasible and brings to light the

challenges in operationalising the recommendations.

In the case of the Mathi, a meeting was held in Cuddalore on April 10, 2000 to place the preliminary findings and recommendations before members of selected SHGs (around 30), NGO staff, PIU functionaries, PMU staff, District Collector and other line departments.

Following the presentation of the review team in Tamil, stakeholder-specific groups were formed and each group was asked to give feedback on whether they disagreed with any finding or recommendation and whether they wanted to add anything new missed out by the mission.

Some recommendations had to be shelved for the future. The members of SHGs, for example, rejected the recommendation of the mission that BLCCs should organise dowry-free mass marriages, stating that unless men agreed such a recommendation, it cannot be implemented.

The barriers to other recommendations also came to light. Animators were opposed to yearly rotation of the BLCCs, pointing to vested interests in the development of leadership. The presence of the District Collector for over an hour helped. He immediately committed himself to recommendations that were within his powers (like convergence between line departments and other actors) he will act upon immediately. He also identified the recommendations to be dealt with at the state level.

Apart from this meeting it is planned to disseminate the findings and recommendations to SHGs in all districts in Tamil Nadu through the monthly magazine *Mutram* of Mathi.

Relevance to Pradan

Many of the above lessons are

relevant to development professionals of Pradan seeking to evaluate their own work. The challenge in such situations would be to take out the time for such evaluation at a stretch amidst one's busy schedule. It is also a challenge to keep one's mind open to new and critical ways of looking at one's day-to-day work and to give confidence to members of SHGs to come out openly with both strengths and weaknesses.

Ideally, if Pradan is considering an in-house team, it should comprise some people from within the project and some from another Pradan project. Experienced community leaders could also be involved in the impact assessment.

Note

⁽¹⁾The team originally comprised Ranjani K Murhty, Consultant, William D'Souza of Myrada and Annie Valsavaraj, Consultant. As one of the members fell ill, Kalpana Sankar of the TNWDC became a full-time member of the mission half way. SHG members themselves assisted this team as well as 9 staff members of the TNCDW.

The mission and the extended team worked under the overall guidance of K Rajaraman and Anuradha Khati Rajivan, the Executive and Managing Director of the Corporation, respectively. The authors are grateful to Anuradha Khati Rajivan for her comments, as well as the extended team of SHG representatives and PIU staff.

Thanks are also due to the courageous women who took out so much time amidst their busy schedule.

Interested readers can write to NewsReach for copies of formats referred to in the article. ■

Letters to the Editor

Dear Editor,

This is in reference to the article titled "Going Bananas in Gumla" by Ajit Naik and Kirtti Bhushan Pani that appeared in the February 2001 issue of the *NewsReach* (pp. 12-15). As I was reading it I felt concerned that we might actually be accentuating income inequality so that the rich gets richer and the poor, poorer.

The article mentions promoting small-scale plantations on homestead land and that too for farmers who are keenly interested. Would not this intervention augment income inequality in the long run since only a few risk takers (the progressive ones) would take it up?

True, poverty levels would go down for them but unless it is replicated across the population in the particular village, wouldn't income inequality creep in? This applies especially for tribal families who are not very keen to undertake risky activities.

In contrast, in spite of problems in the economic gains of cereals, would rice-based interventions not reduce income inequality, as they would be adopted on a mass scale? After all, any intervention would be but a modification from their traditional methods. As rice-based income is anyhow a significant part of the income basket, wouldn't interventions in this arena have a higher probability of being replicated?

Thus, interventions in summer paddy and commercial rice might have more chance of getting adopted. And income inequality might also go down.

I would also like to know more about the *litchi* intervention described. What was the crop cultivated before the *litchi* began fruiting? How were farmers convinced that horticulture would

start providing returns by the fifth year? This would help us, too, as we were struggling with similar questions when I was in Dholpur. Also, what are the risk factors associated with *litchi* plantations?

About the market - Muzzaffarpur is famous for *litchi* plantations. How does our product stand in competition to the existing market in the event it might be replicated? It would also face stiff competition from existing products unless the scales of economy are maintained.

Finally, there is an institute of pomology near Bhopal where they have developed some interesting models on agro-horticulture and horti-forestry with mango. The team might be interested to visit.

*Soumik Bannerji
Godda*

Dear Editor,

I write in response to your note following Sanjeev Phansalkar's article in the March 2001 issue. You have already pointed out the areas of our interest and I need not repeat those.

It would be great if the author wrote more on those issues. It would also help us to relate better if he gave a quantitative overview of the watershed and its people. He could then take us through the processes of watershed development. It does not matter if it is imaginary.

He might also give us an idea of the quantitative gaps on various aspects between a visualised developed watershed and its present state. And then he might tell us how he made or facilitated these changes.

I have a second issue, which I am a little hesitant to raise. But let me share it as an ignorant student of development. This has ref-

erence to Nelleke's article in the March 2001 issue again. Could she help us visualise the life of a Barhi woman or man or any poor Indian woman or man we had we worked with from the gender perspective she has described in her article "On Eyes and Agriculture"?

I find it very difficult even to imagine a different role for women and men in my own community. She might, I feel, be able to help us to imagine an ideal state for women and men in our society. That would go a long way to helping us work for a desired change.

Her suggestions (as described in the write-up) are for women in isolation. The communities we work with cannot, however, be treated in isolation from the rest of the society. So setting aside the context of lift irrigation, would Nelleke help us to map out the roles that men and women are playing as of now and the ideal state after a developmental intervention?

*Dinabandhu Karmakar
Purulia*

Dear Editor,

Thanks for the copy of the March issue of *NewsReach*. It was quite interesting and well put together. I was pleasantly surprised with the print quality (instead of the earlier photocopy).

It would help if you had half a page as a synopsis of what is happening in which project, so that many people like me who do not know what is presently happening, will be updated. It would also help to know the editor's name or the names of the team members.

*Mustafa Mochala
Chennai*

Metamorphosing Insects, Changing Lives

Rearing *tasar* silkworms in Narayanpur-Tasaria (Part 1)

**Hemant Kumar and
Shamshad Alam**

A HUNDRED and twenty Paharia and Santhal *adivasi* families live in the twin villages of Narayanpur-Tasaria, about 29 km south-west of Godda in Jharkhand. They are surrounded by 110 hectares of forest, dominated by almost 95 hectares of *asan* block plantations.

Asan holds a special place in their lives, economically as well as ethically (See Box). Although other species of trees are felled, and their numbers dwindling, the villagers conserve *asan* trees, actively protecting them from human or cattle damage. They also make special efforts to increase the quality and leaf yield of these trees.

Traditional Activity

Rearing *tasar* silkworms is a traditional activity for the families in these parts, as are many other forest-based livelihoods. The latter include collecting medicinal and oil seeds, gathering leaves to make leaf plates, tapping gum and collecting wood for domestic and commercial purposes.

Tasar holds a special place in their livelihood cycle - it provides a subsidiary income during the months of September to December, a lean period in the year when other opportunities for wage earning are scarce.

This is also the time when most families are forced to take loans from moneylenders at interest rates as high as 100%. Many families sink deeper into the

them. The reasons for this situation are many. They include the failure of the crop several times due to use of indigenously prepared layings (IPL), which

Sacred Tree

The *asan* tree has been associated with the Santhals from the time of their origin and their settlement in Santhal Parganas. According to their mythology, the Santhals originated from a bird's egg, which gave birth to Pirchu Haram and his counterpart under the shade of an *asan* tree.

The history of *tasar* culture also tells of the Santhal god

Kalu as the first one who reared the silkworm on an *asan* tree. Santhals also worship the *asan* as *tasar* culture itself is seen as a form of worship of Lord Shiva. There are many other stories also associating the *asan* tree with Lord Shiva.

It is for this reason that *asan* trees have remained while all other trees have been felled.

debt trap at this time.

The returns from traditional *tasar* rearing are extremely uncertain for the 52 families who are traditional rearers here. In terms of returns, it is more or less comparable to local agriculture: the basic dependence on the vagaries of nature and the variable nature of outcomes. Rearing *tasar* worms to produce cocoons for the market has thus remained an activity with low productivity, minimal remuneration and high risk.

This has led many rearers into dormancy. For instance, only 40 out of the 120 families in these villages actively reared *tasar* year before last and we selected only 24 families out of

are diseased; lack of proper knowledge of feeding the worms in different stages; lack of knowledge to identify diseases and prevent their spread, and vulnerability of the crop to nature and predators.

Rearers following traditional methods are more likely than not to lose their crop. Year before last, for instance, almost 40% of the worms were lost due to heavy rains, strong winds and pest and predator attacks.

Rearers in Narayanpur-Tasaria are but 52 of an estimated 60,000 similar families across the state of Jharkhand. And this figure goes up to over one lakh families if we include the states of Orissa, West



A field meeting with rearers at Narayanpur-Tasaria

Bengal, Chattisgarh and Andhra Pradesh.

Minimising such losses has been a critical area of Pradan's intervention. Based on the research findings of the Ranchi-based Central Tasar Research and Training Institute, we have adopted an easy and economic package for rearing *tasar* silk-worms.

This simple package of practices minimises losses and has helped in improving the yield of quality cocoons to the tune of 25% (by 10-15 cocoons per disease free laying). We call this package "*Chawki*" rearing in *chawki* gardens under nylon nets".

Chawki gardens are a new concept in *tasar* culture. Here the host plants are pollarded and pruned at 5 feet height, and given near royal treatment. The area that is required for a *chawki* garden is 10% of the total area of the food plants.

Newly hatched worms are brushed onto these plants, which have already been covered under a nylon net (40 feet x 30 feet x 10 feet). Such a net accommodates 25-30 plants at a

spacing of 6 feet x 6 feet.

The first two in-star⁽²⁾ rearing is carried out under nylon nets in order to protect the tiny worms from various pests and predators. Rearing in a compact area also facilitates more intensive care to the small worms, ensuring that each has adequate access to feed. The worms are transferred to regular plantations after the second moult by cutting branches from these plants and placing them on the regular plantation.

The United Nations Development Programme (UNDP), under its sub-programme to develop non-mulberry sericulture in the Godda, Dumka and Banka districts of Jharkhand, closely supports this package.

This effort to increase the production and productivity of cocoon production in Narayanpur-Tasaria had two basic components:

◆ Seed rearing, starting July 2000.

◆ Second crop rearing, starting September 2000.

Described below are the basic steps we took to introduce the package, which led to bumper

crop of cocoons and incomes that were the envy of nearby villages.

Initial Hiccups

We selected Narayanpur-Tasaria to initiate this programme of *chawki* rearing and nylon nets. The reasons for this were its accessibility throughout the year and the dense forest of *asan* trees.

We planned to introduce this package with 24 of the 52 traditional rearers here. Shamshad initiated a dialogue with the villagers but did not get very far. Communal tension broke out between villagers of Ghatiari, primarily Muslim, and of Narayanpur-Tasaria, primarily Santhals, over an issue of near-

Anybody entering the village was viewed with suspicion. A permanent police camp was set up and the police was interrogating all those who entered the village. The tension spilled over and it became difficult for us to operate.

by coal mining.

Anybody entering the village was viewed with suspicion. A permanent police camp was set up and the police was interrogating all those who entered the village. The tension spilled over and it became difficult for us to operate.

Shamshad was scolded and abused by one of the villagers and when I tried to go there he chased me away, too. There was a time when we decided not to work in this village and con-

veyed this to our team. After a lot of discussion we put the issue into perspective. Such stray incidents could take place anywhere any time and we need to be prepared to deal with the consequences.

That sounded logical enough but fear continued to grip me, as tension was thick in the air. It was no consolation that Shamshad was now busy with other tasks and I was responsible for the *tasar* programme here.

Luckily these were only initial hiccups. I began visiting the village again, meeting individuals rather than conducting group meetings and explaining the potential of *tasar* and the scope for improving rearing practices and generating better returns. This yielded positive results and people began to respond.

Elaborate Preparations

We then went through an elaborate process of selecting rearers; selecting sites and plantations for rearing; training the rearers, and preparing the sites for rearing⁽³⁾. We planned to rear worms to produce good quality seed for the commercial crop, starting in September 2000.

We accordingly placed orders for 1,580 specially prepared disease free layings (DFLs) of a bi-

voltine variety⁽⁴⁾ from the Boirdadar Basic Seed Multiplication and Transfer Centre of the Central Silk Board (CSB). These layings were distributed on July 18, 2000.

For the first twelve days, mounting the DFLs and rearing of early in-star worms was carried out entirely under the cover of nylon nets. We trained the rearers to apply sodium hypochlorite solution on the worms after each moulting to reduce virus infections.

Rearers were also trained about the importance and practice of keeping the rearing fields clean. We monitored this closely with visits every day during this stage. This helped building up of disease resistance in the worms.

The output of seed cocoon per DFL went up dramatically - from 20-25 to 40-45 cocoons per DFL. The quality was also superior - they were well built and tough, leading to good quality eggs. This finally led to a bumper harvest of cocoons in the commercial crop (40-45 cocoons per DFL).

Earlier, bad quality seed cocoons had meant unhealthy eggs, fewer worms in a position to complete the life cycle and poor productivity of 20-25 cocoons per DFL at best. The local grainage⁽⁵⁾ owners promoted by us in earlier years purchased this entire harvest of good seed cocoons.

We monitored the production of DFLs in these grainages. By the middle of September 9,690 DFLs prepared in these local grainages were distributed among the 24 rearers.

The early in-star worms were again reared under nylon nets, with close monitoring and supervision from our team. The crop took an average of 70 days

till the final harvest of cocoons.

We invited the Raw Material Bank (RMB) of CSB to extend marketing support to the rearers. They procured 90% of the harvest and the rest was sold to local traders. About 75% of the produce were evaluated as Grade "A". Critical indicators used to evaluate performance here were cocoons to DFL ratio, technology used, rearing duration, maintenance of host plants, engagement of manpower, etc.

The outcome of this exercise was an increase in income of per family in the range of Rs 38,334 to Rs 7,325 with no more than three months labour. The average earnings were Rs 21,329. The three graineurs in the village earned an average of Rs 9,000. See Box 2 for comparative economics between traditional and modern package of practices for an average producer.

Most *tasar* rearers operated at levels of annual income ranging from Rs 9,000 to Rs 12,000. Not a single family had earned such a large amount of money at one go. Many even feared to keep such huge amounts in their houses and thought of opening a bank account where they could keep their money safely. For the first time some of them have actually ventured to open a bank account.

Crucial Addition

The timing of this additional income was also crucial. The failure of the paddy crop that year had led to extreme distress in the village. Many farmers were forced to go to moneylenders, paying up to 100% interest. The 24 rearers we worked with did not need to take distress loans from local moneylenders and traders.

The outcome of this exercise was an increase in income of per family in the range of Rs 38,334 to Rs 7,325 with no more than three months labour.

It is mostly poor people who rear *tasar* worms. Most do not have adequate housing for themselves, let alone enough storage for the cocoons produced. As a result, they have not been able to protect the cocoons, which were damaged and fetched lower prices than anticipated. Some good seed cocoon also deteriorated, adversely affecting DFL production.

However, this windfall has been a godsend for them and they are all thinking of building *pucca* houses. Those who have thatched roofs that require fre-

quent changing are planning to tile the roofs.

Some rearers who do not have enough rooms to adequately accommodate their family members and the cattle are building more rooms so that they can live more comfortably and are also able to protect the cocoons from any kind of damage.

Many have purchased jewellery from the money earned from rearing. Some families have redeemed jewellery mortgaged to moneylenders in earlier years.

Many rearers had defaulted on loans taken from cooperative societies and banks. Notices to

Many have purchased jewellery from the money earned from rearing. Some families have redeemed jewellery mortgaged to moneylenders in earlier years.

annex their properties have been served to them but they were unable to respond. These rearers have now paid back outstanding amounts and are free from the fear that their property will be seized. They are now eligible to take fresh loans from these banks.

Some are planning to use the money earned to marry their children off. Marriage is not expensive in the Santhal community but villagers here still have to go to the moneylender to meet these expenses.

Some have bought bicycles. They say that it helps them to be more independent in their movements. Earlier, they were forced to purchase items of daily use in their village itself from the local grocer at higher rates. Now they will be able to go to the nearby market and purchase daily items at more reasonable rates. This also provides them the choice to sell their agricultural and forest produce in the local *hatia* (market). These were otherwise sold to the local trader at low rates.

Box 2: Traditional versus Modern Technology: Comparative Economics of *Tasar* Rearing

S No	Particulars	Traditional	Modern (<i>Chawki</i>)
Expenditure			
1.	Cost of 400 DFLs @ Rs.4/DFL*	Rs 800 (IPL**)	Rs 1,600
2.	Maintenance of block plantation (Pruning, hoeing, fertiliser, etc)	-	Rs 1,000
3.	Miscellaneous (Insecticide, BHC, bleaching powder, etc)	-	Rs 50
4.	Cost of labour @ Rs 25 per man day	Rs 2,250	Rs 3,000
5.	Depreciation on nylon net	-	Rs 1,000
6.	Crop insurance and Janata Personal Accident Scheme	-	Rs 435
	Total	Rs 3,050	Rs 7,085
Income			
1.	Yield	5,000 cocoons	16,000 cocoons
2.	Sale of cocoons @ Rs 0.70/cocoon	Rs 3,500	Rs 11,200
3.	Net profit per family	Rs 450	Rs 4,115

*Disease Free Layings ** Indigenously Prepared Laying

Change in Beliefs

Even more exciting for us was to witness the sea change in attitude that a single year's efforts brought about. Rearers traditionally ascribed that the *tasar* crop could fail for three years and that there would be a

good crop in the fourth year to fate. *Tasar* was seen as Lord Shiva's crop, a gift of nature.

Rearers did not stop for even one year although the chances of infection spreading in the rearing fields went up in the subsequent seasons. Last year's experience has transformed this belief. They question whether it is God alone who determines the fate of the crop or modern technology that also determines production. The belief in the certainty of returns from this activity can be seen in many ways.

People from here used to migrate to other places in search of work during the lean season. On seeing the results of seed crop rearing itself, they have decided not to migrate and are rearing *tasar* in the plantations. They are also interested to continue with this activity.

Snowballing Effect

People are also becoming more conscious of conserving the forest and plants, especially the *asan* and *arjuna* trees, even going to the extent of requesting other villagers not to cut down trees of these species. We, too, highlight issues related to conserving and optimally utilising the resources available to them judiciously.

In the past 4-5 years a very lim-

With results of last year's successful rearing spreading like wildfire, people are coming forward with proposals to do more plantations on private lands that are unutilised.



Spraying sodium hypochlorite to prevent viral attack

ited number of plantation farmers have been involved in *tasar* rearing. This year, after the harvest of good crops, almost all plantation farmers have come forward for *tasar* rearing.

There is also a growing demand for more plantations to fill gaps in the forest. With results of last year's successful rearing spreading like wildfire, people are coming forward with proposals to do more plantations on private lands that are unutilised, places where the soil is gradually eroding away.

Also, this year dormant rearers have awakened to the prospects of *tasar* rearing and 90 rearers from the 120 families in the village have come forward to participate in the programme.

There is also a demand for establishing new grainages in new areas. With the concept of DFLs spreading, there is increased demand for establishing new grainages to cater to the demand of additional DFLs from the growing number of rearers who are becoming active under this UNDP programme.

Men traditionally dominate

tasar rearing. They dominated even the meetings we held. It was only after this initial taste of success that women for the first time came forward and shared their views about rearing with us. They told us that they were keen to rear *tasar* themselves and their men showed no hesitation, being keen to earn more by increasing family labour engaged in *tasar*.

Role of Women

The role of women in rearing has, till date, been to help their family members when there was some emergency and when the men had to go out of the village. We plan to work with them closely to identify opportunities for their involvement beyond this. There is also a strong demand to open a savings and credit group for the women that would later take on spinning yarn from the cocoons to enhance their income.

It was also interesting to see how a single year's experience has helped these rearers become more business-oriented,

with plans to reinvest their money into the *tasar* rearing activity and into other options that could yield sustainable incomes to them in the future.

In consultation with others and us, some persons have already made bricks that they plan to sell.

One of them plans to buy a pump to irrigate his land and to earn additional money by renting it out to others. There is a river beside the village but there were no means to lift water. The purchase of this pump has made this possible.

One rearer has bought a de-husking machine as a source of income once the rearing and grainage season is over. This is when paddy harvesting starts and de-husking machines are in very short supply in this area.

Rearers also plan to invest some money in fixed deposit schemes in the bank so that they may replenish rearing equipment when the amount matures.

Buying Equipment

Some rearers are also thinking of buying rearing equipment and DFLs from their savings for the next rearing season. Previously, they used to purchase DFLs in cash from the grainages by selling livestock, which is a buffer stock for them. They are also planning to buy sprayers so that spraying can be done to individual rearing fields in time to prevent occurrence and spread of diseases.

Some of the rearers have brought a trunk for themselves to protect the nylon nets - which are very expensive - from rats. In this trunk they can also keep their warm cloths, which also requires protection. In this way the boxes will serve a double purpose and will be an asset for them. In Narayanpur-Tasaria,

where the production has been the maximum, most of the rearers have purchased a trunk.

Now that they have tasted success, rearers are also thinking ahead to improve the terms of trade. There is more demand for organised marketing. They are able to hold onto stocks for 15-20 days and have the choice to sell to local traders, the RMB or to spinners and reelers.

They used to sell their cocoons to local traders earlier, who purchased cocoons at a lower price and did not pay the entire amount at one time. This meant that farmers were at the mercy of these traders.

These local traders used to decide the rate of purchase at their will. But nowadays rearers go to the market to learn about the price or ask us about the minimum support price we are willing to offer before they begin to negotiate with the local traders. This season we contacted the CSB's RMB to purchase cocoons, ensuring a good support price to the rearers.

Notes

⁽¹⁾Chawki are tiny worms.

⁽²⁾Moulting of the worm

⁽³⁾These are dealt with in detail in the second part of this article, to be published in May 2001.

⁽⁴⁾Some *tasar* worms give 3 crops of cocoons in a year and others, two crops. We introduced the latter, *bi-voltine*, as it provides better economic returns.

⁽⁵⁾One critical factor that has limited the production of *tasar* cocoons for rearers has been the lack of availability of quality *tasar* silkworm seeds or Disease Free Layings (DFLs). This affects cocoon production by reducing productivity, overall production and remuneration to rearers. As of now, almost all DFLs are prepared and distributed by the cen-

tral and state sericulture establishments, hardly meeting 3-6.5% of the overall need.

We started with a careful analysis of the process of making DFLs, which revealed that it is a highly labour intensive process and involves tasks that could easily be performed by well-trained village youth. Pradan therefore mooted the idea of promoting decentralised grainages or egg production centres.

These are owned and operated by village youth as tiny service enterprises. Each has a capacity to produce 3,000-6,000 DFLs in one cycle, serving 10-20 rearers in the surrounding villages. Three such grainages already existed in Narayanpur-Tasaria at the time of this intervention.

Editor's note: In the next issue of Hemant and Shamshad will write about what it took to weave modern technology into traditional *tasar* rearing practices. ■

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Faces of Grief

Vignettes of gender tribulation from rural Chattisgarh

Mousumi Sarkar

I HAVE spent the past five years promoting women's self-help groups (SHGs). This period could be divided in two distinct phases. The first phase was in the Purulia district of West Bengal, where I joined as a Development Associate. It was here that I picked up basic skills required to promote SHGs.

The second phase was in the Raigarh district of Chattisgarh, where I have been fortunate to initiate SHG activity. Being a woman, I have always been quickly accepted among the women in the villages and have freely mingled with group members, sometimes even discussing personal matters. These interactions have often given me an opportunity to learn about their emotional problems, which mostly seem to be suppressed or neglected.

I describe three instances here. I am yet to figure out a role for myself on these issues. What could I do to prevent this from happening again, and again, and again? I do not have the answers yet.

**How could a woman accept her husband marrying another?
How could the villagers come to terms with the kind of decision the wise men of the village took?**



Rathkuer Rathia is an *adivasi* woman with four children. The family depends on agriculture, the forest and wage earnings for a livelihood. Rathkuer is one of the group members of the Saraswati Mahila Mandal promoted by Pradan in the Danout village.

"Second Marriage"

She once took a loan of Rs 3,000 for the purpose of "marriage". I was present in the meeting and asked her whose marriage it was. She turned to hide the tears rolling down her face. The first thing that struck me was that maybe I was wrong in asking this question. The

meeting ended and I did not pursue the matter. It was afterwards that I learned that she was borrowing money for her own husband's marriage!

Rathkuer's husband brought home another married woman of the same village, with whom he had a long-standing relationship. This woman's husband took the matter to the Rathia *samaj*, a village decision-making body consisting of wise men. His allegation was that Rathkuer's husband had forcefully taken his wife. He demanded Rs 1,000 as compensation or threatened to take the matter to the court. The Rathia *samaj* settled the dispute. What did they do? They imposed a fine

of Rs 1,000 and a community feast on Rathkuer's husband.

I was so uncomfortable. Firstly, how could a woman accept her husband marrying another? Secondly, why did she herself take a loan to meet that expenditure? How could the villagers come to terms with the kind of decision the wise men of the village took?

The second incident happened in the Amaghat village. Philisitabai was also a member of a SHG. She is probably the only woman in the village to work all 30 days in a month as agricultural labour. Her contribution to the family's well being far exceeds that of her drunkard husband.

Life as Beating

One day her husband beat her up very badly. It all happened in front of the villagers who, along with Philisitabai's brother, rescued her. The three SHGs in Amaghat convened a meeting and asked Philisitabai to leave her husband for a few days. They also called her husband to apologise to her in front of all the members.

Philisitabai did not accept this decision. Not only that, after a few days I came to know that Philisitabai had filed a case against her own brother for interfering in a family quarrel and beating up her husband. When I last went there, I heard that Philisitabai also wanted to leave the SHG.

I have talked to both these women to understand the reasons for such behaviour. In both cases the answer was the same. They say that they have to think of their children. How can a woman manage to live without her husband? It is too difficult, they say.

Anusua Soni is vocal member of Om Shanti Mahila Jagriti Samiti in Regra. She did not get on with her husband and was

Are these stray cases that do not reflect or represent the population? Does this happen because of the roles that women play - as daughters, sisters, wives and mothers?

forced to leave him. Anusua returned to her parent's home and got married to another person. The second marriage did not last long either. She now has three daughters, works in an Anganwadi and earns Rs 200 per month. She also works as an agricultural labour.

In one of the group meetings, a conflict arose between Anusua and Sarifabai, also a member of the same SHG. The conflict was settled by the timely intervention of other group members.

That evening Sarifabai's husband, Iqbal came searching for Anusua. Anusua saw Iqbal and ran, taking shelter in a nearby house. However, Iqbal did not spare Anusua. He beat her and dragged her to Sarifabai's feet.

All this happened in front of some villagers but nobody intervened or rescued Anusua. The group members and some villagers suggested that Anusua take the case to the police. But Anusua did not agree, fearing that Iqbal might kill her brother.

Fear of Men

The SHG then convened a meeting and called Sarifabai and Iqbal. But no one actually dared to call Iqbal. The group members decided to take this matter to the cluster meeting. In between, I kept hearing murmurs from nearby villages that

Anusua was of bad character and that she was the cause for everything that happened. If there was a relationship and it was the cause for the quarrel, why did the villagers not blame Iqbal (a father of six children) as he was equally responsible?

This issue was raised in the meeting, too, but no one, including the *mahila sarpanch* (woman head) dared to summon Iqbal to the forum. Anusua also lost interest in this case and apologised for bringing the issue to the group. Several days later, I heard some group members talking again in low voices about Anusua's bad character.

Mysterious Behaviour

I would like to understand more clearly why these women behaved the way they did. Women in Chattisgarh have traditionally enjoy more freedom, something that has perhaps been denied to women in most parts of our country. According to available data and the gender development index, the districts of Chattisgarh are placed higher than districts of Madhya Pradesh.

How can I then accept that there was nothing wrong in the cases of Rathkuer, Philisitabai or Anusua? Are these stray cases that do not reflect or represent the population? Does this happen because of the roles that women play - as daughters, sisters, wives and mothers?

How come I did not come across such strange happenings in Purulia? What happens when we leave such issues to be settled in traditional ways, where men are the arbitrators? Don't we suppress women's feelings and dignity? Don't we deprive them of the voice they should have in running their own lives? ■

Reflections on Micro-Finance in Southern India (II)

Bijay Swain shares the second of narratives following a visit to four organisations in southern India in June last year. In this issue we present his account of Trichy-based Activists for Social Alternatives (ASA). Forthcoming issues will carry his reflections on his visits to DHAN Foundation, Madurai and FWFB, Chennai.

Bijay Swain

STUDYING DIFFERENT models and tools of development could help a development professional achieve a broader perspective. With this objective in mind, I spent between June 3, 2000 and June 16, 2000 visiting four grassroots development organisations working in southern India.

Trichy-based Activists for Social Action (ASA) is well known as a high performance micro-credit organisation. Indicators of its performance are widely shared. With recovery rates of 98%, it is justifiably held up as a model.

Of the loans ASA disburse 80% goes for income generation, 12% for agriculture and only 8% for essential needs. Attendance of members in meetings is 100% and systems and structures are streamlined, keeping in mind key concerns of efficiency and financial viability.

I describe here their work focusing on their micro-finance activities. The following description is to the best of my observation and based on data I collected during my visit.

ASA started in 1986 at Trichy

having a vision of a value-based and poverty-free society. Besides providing credit support to the families it works with, ASA also works in the areas of health, education and building awareness in the community. In this article I will describe its credit support activities in some detail.

Grameen Bank Model

ASA is structured more or less along the lines of the Grameen Bank in Bangladesh, with an apex body, bank branches, clusters, centres, groups and members.

Group: The primary group consists of 5 members, one of who is elected group leader.

Centre: Some 5 to 8 groups form a centre, depending on the size of the village and the number of poor women living there. The general trend is that there is a centre in each village and all groups in a centre conduct their meeting together. One of the 5 to 8 group leaders is elected centre leader.

Cluster: This is the next level of association, where the centre leaders represent all centres.

Branch (Federation): This is

the association of all clusters where cluster leaders elect 9 members from amongst themselves to form the Board. One of the 9 board members is elected as additional branch manager.

Apex: This is the top administrative and policy-making body of all the branches. There are 9 executive members in the Apex body. Six of them are elected from 6 branches (one member from each branch), 2 members are ASA officials and one member is the area manager from the Area Zonal Office (AZO). The AZO looks after six branches. The apex body is also called Graminvidiyal.

In order to understand this structure, I found it useful to look at how ASA's presence unfolds in an area.

Sustainable Credit

ASA generally promotes one federation in one block. It targets to promote 70 centres within 2 years (approximately 2,500 members). They require a minimum of 40 centres to be formed in the first year and 30 centres in the second year in order to start a bank branch. It is then anticipated that the branch

would reach full maturity in the third year.

According to ASA's experience, this maturity means operationally sustainable, when lending is Rs 6 lakh in the first year. The branch is considered financially sustainable when lending is to the tune of Rs 25 lakh in the third year. A branch is considered self-sustaining when lendings of Rs 50 lakh is anticipated at the end of 5 years.

Prior to initiating work in a particular block, the team from ASA follows several steps which includes the collection of secondary data about the area; preparation of a housing index through participatory rural appraisal and conducting a feasibility analysis for initiating such an activity for each target village, assuming 40 members each. All this is done in the hinterland of an existing federation or where a new federation is expected to emerge.

They initially appoint only 5 trained field officers, essentially young people educated up to the +2 level, to form groups in villages. The officer targets to form 5-8 groups in a village, so that there may be a centre.

Work begins with the forming of one group. Once 5 members are identified, they undergo a group recognition test to ensure that the group members know each other well. This is an essential pre-requisite if the peer group is to be the collateral the group offers to the banking structure that will subsequently emerge.

The status of all members is filled up in a specified format. Each group matches the basic criteria set out in the recognition test such as members with the same age, same caste and no blood relationship among them.

Those fulfilling these criteria

Box 1: Relationship between Savings and Loan a Member is Eligible to Avail

Time	Savings	Total savings	Credit available
1st Loan 3rd Month	Rs 5/week	Rs 60	Rs 2,000
2nd Loan 12th Month	Rs 10/week	Rs 500	Rs 4,000
3rd Loan 24th Month	Rs 15/week	Rs 750	Rs 8,000
4th Loan 36th Month	Rs 20/week	Rs 1,000	Rs 16,000

are considered for the next level of training, called CGT (continuous group training). CGT is a 4-day programme, which orients members on various aspects such as objective of group formation, process, leadership norms and functions, decision-making and accounts, etc. Members contribute training fees, a minimum amount fixed by ASA. It is only after this that the group is considered "formed".

Strictly Weekly

Every transaction in the group is strictly weekly. After formation, each group elects its own leader and continues to save weekly. It is only after they have saved for 3 months that they are eligible to lend the amount.

All members of the group cannot get a loan at the same time. The first two members get a loan at the end of the third month from the formation of the group and the next two at the end of the fourth month and finally, the last member (the group leader) gets a loan at the end of the fifth month. These loans are given in a specific ratio of savings with respect to

the loan (See Box 1).

The 5 to 8 groups that form the centre sit together at one place with a designed format. All members of the groups, including group leaders and centre leaders, attend each centre meeting. A field officer from the branch office (federation) also sits among them.

The meeting has a predefined order. The seating positions are also fixed. They sit in a circle group by group. The group leader sits at extreme right of the particular group. The field officer sits to the right of the centre leader. The entire meeting is orderly, according to a predefined structure and focussed to help the field officer prepare the consolidation sheet (See Box 2 on page 22).

This system is streamlined and structured for efficiency, as mobilising savings is critical to the viability of the structure. The group also offers a number of savings products to its members, products that would attract them to increase their savings and hence enhance the viability of the structure.

The cluster is more of a problem-solving forum, where centre leaders get together to ensure that the groups are func-

Box 2: Sequence of a Centre Meeting

- ◆ Prayer song
- ◆ Awareness / Empowerment song.
- ◆ Oath taking
- ◆ Attendance. Field officer marks attendance using three colours - green for present, blue for late and red for absent.
- ◆ Group leader collects passbooks and savings (and repayments) from own group and deposits it with the centre leader.
- ◆ Centre leader passes the collected amount to the field officer one by one.
- ◆ Field officer enters the collection in the respective passbooks in a pre-defined order.
- ◆ Field officer enters the collection in his own format, carried to bank (branch).
- ◆ After consolidation, the financial status is declared in the presence of all groups and the centre leader signs the sheet.

tioning. The branch is the primary financial institution, consisting of a branch manager (earning Rs 5,000 per month), an additional branch manager (Rs 1,500 per month), an accountant (Rs 4,000 per month) and 6-7 field officers (Rs 3,000 per month). The basic system incorporated by ASA is that the staff member of the branch goes directly to each centre.

Each field officer attends two centre meetings a day, from 6 am to 10 am and is responsible for 10 centres (80 groups, 400 members). He or she collects their savings, repayment

amounts and loan applications and verifies loan utilisation in the field.

The field officer then goes to the branch office from 10.30 am to 11 am to deposit collections to the accountant. He spends the rest of the day maintaining ledgers of the members he is responsible for.

Visiting Bank Manager

A branch manager is in charge of 7 to 8 clusters or 70 groups. He or she visits 2 centres per day, working 5 days in a week. Here the manager verifies member passbooks, checks centre meetings and appraises loans based on the applications received. At the branch office he or she also checks the ledger postings, cashbook, office maintenance, manages cash flow and reports to the head office.

The accountant also visits 30 centres every month. He manages financial transactions at the branch office, maintains record and helps the field officer in ledger postings. The additional branch manager is elected from the community leaders,

one of the 9 members of the executive committee. Her main role is to monitor the centres in the absence of other field staff. She also visits problematic areas as required.

The entire structure offers women members in the villages a safe and beneficial savings facility and an easy to access, affordable source of credit at the doorstep.

Savings Products

The group offers its members five savings products and an insurance scheme that includes compulsory savings, voluntary savings, recurring deposit facility and a term deposit. The bank also offers insurance benefits to members who deposit Rs 500. Members may withdraw membership only within the second year or after the fifth year but not in between (See Box 3).

While the group is primarily responsible for vetting loans and ensuring repayment, the field officer and the branch manager play a critical support role by continuous observation for utilisation of loans and ensuring that the loan is used for income generation, with minimal focus on consumption needs.

As mentioned earlier, loan amounts are restricted with respect to time (age of group) and savings (weekly). A member expresses her interest to take a loan to her group in the centre meeting. The group vets the purpose of the loan and prepares a list of approved loans and hands it to the centre leader.

She in turn hands this to the field officer at the centre meeting and he appraises the viability of the income-generating activity and fills in the applica-

While the group is primarily responsible for vetting loans and ensuring repayment, the field officer and the branch manager play a critical support role by continuous observation.

Box 3: Savings Products

Savings Product	Amount per Member	Interest Rate	Facilities Available
Compulsory savings	Rs 5 per week, increasing to Rs 20 per week	5% per annum	--
Voluntary savings	Multiples of Rs 50	5% per annum	Member can withdraw savings up to Rs 500 from the centre, and larger amounts from the bank
Recurring deposit facility	Minimum Rs 10 per week	13.5 % per annum	Loan as 1:1 ratio of savings @ 24% per annum
Term deposit facility	Multiples of Rs 100	Up to 3 month - 6%. Up to 6 month - 7%. Up to 1 Year - 12%.	Doubles principal in 5 years
Compulsory social welfare security scheme	Rs 500 initial deposit in three instalments	Deposited in commercial bank generating Rs 65 per annum towards premium for insurance	Refundable

tion form. Before proceeding to the branch, the application has to be signed by respective group members, the centre leader and the field officer

This goes to the branch manager, who vets it and passes it on to the area manager who sanctions the loan. The information reaches the group within the next week in the reverse order and the loan is sanctioned.

Loan applications are submitted to the area manager on Mondays and Thursdays and loans are disbursed on Tuesday and Fridays, when the client goes to collect her loan from the branch office with her husband and the centre leader. Loan terms vary from member to member depending upon their activities, but the total loan amount is divided into a num-

ber of weekly equal instalments, with a flat rate of interest.

Typical reasons for rejection of loan applications at the branch include that individual savings do not match with the loan amount required, the estimation of returns from an income-generating activity are incorrect and that signatures are missing in the loan application.

Route to Development

ASA believes in the concept that credit support to the poor is the route to development. In order to build a sound financial credit system, it has carefully replicated the Grameen Bank model with minor changes adjusting to the environment.

Loan recovery is critical for the system to function efficiently

and financial management systems are designed accordingly. The success of ASA is due to its high recovery rate and credit rotation, which is the key to sustain a micro-finance institution.

Some factors that I observed contribute to the smooth running of the system included:

Community Organisation: I visited a group in a village named N Paraipaity. The members of the group were engaged with small income-generating activities and bubbling with ideas about what they could do to enhance their income.

It appeared that those who form groups are those who are already engaged in some income-generating activities. Their primary need was for loans for working capital. This led to a strong cohesiveness within the group, perhaps

enhanced by the prayer and pledges that spiritually bind the women members.

The size of the group (5 members) appears to be a third reason for the strength of the group. It is small enough to help members develop a close internal understanding. Yet they are able to reap benefits of size as a sub-division of a centre, deriving energy from the mass (40 women) to deal with social issues with courage.

Financial system clarity among members: Group recognition test is the first step before starting of a group. It ensures target people as per the need of the organisation. Well designed training (visual and classroom) at time of group formation develops efficiency of the entire system, reducing lots of problems that generally arise after the formation of groups.

Record maintenance and monitoring: The field officer

The size of the group (5 members) appears to be a third reason for the strength of the group. It is small enough to help members develop a close internal understanding.

maintains records and provides direction to the group for the daily management of financial affairs. This has simplified matters for the group, reducing their load and helping them to focus on social issues.

The field officer's prompt handling of financial matters also strengthens the financial system, especially where it might

have been difficult to find a literate person to handle such tasks. My experience in Lohardaga confirms that an efficient accountant contributes to the sustainability of a group.

An inefficient accountant consumes more time in writing books, also creating confusion in accounting matters. This blocks and delays other activities of the group and members tend to lose patience, especially in busy periods like the agricultural season.

Very soon participation in meetings goes down and peer pressure, the muscle of the SHG, reduces. Gradually, one by one, group norms are violated. As all the members are in the same boat, no one objects and confrontation all but disappears.

Members gradually lose faith in the group, eroding the binding force among group members. In this way, the group's further growth is also blocked and problems begin to arise. Soon, the group begins to draw more and more energy from supporting organisations like us.

Recruiting efficient cluster accountants might be a probable solution to avoid such a situation in Lohardaga. But then, problems arise when the group members' control over the accountant is low. Also, irregularities of any one accountant tend to disturb a large number of groups.

The ASA model seems to easily avoid this situation, as field officers are recruited for maintaining records and monitoring field activities daily. The system also has an alternate provision for the function of field officer in case of absence or leave.

A well-settled bank: This provides honest financial services at the local level, with the

full involvement of the community at different levels. This builds faith and confidence in the system. Again, insurance schemes and saving products provide alternative choices to members.

Structures and systems: The systems and structures I observed here are easily replicable.

High on-time repayment rates: Rigid financial strategies (only productive loans, strict external utilisation verification, etc) and a strong monitoring system have led to high on-time repayment among members.

Epilogue

Visualising this structure at Lohardaga or in other places in Jharkhand and similar poverty pockets where Pradan works, I had some concerns.

How have the poor benefited? One of the lacunae I observed viewing ASA as a credit delivery mechanism is that it leaves out a section of the poor. These are the poor who are at the bottom level who need frequent, easy to access and small-sized loans for production and consumption at their convenience.

In our scenario, the ability of poor families to absorb credit is very low. Average people require frequent small loans both for consumption and production and the pace of dreaming up a future is very slow.

They need external support, to facilitate the process of unshackling from the present and visualising an alternate future. Security and skill development are prime requirements here. And intensive support is required to identify and reap benefits from opportunities presented by the market. ■

Resource Book on Micro-Watershed Development

Vinod Jain

EMPHASIS ON micro-watershed development over the past few years acknowledges that rain-fed areas need to be developed and managed in a sustainable way. The purpose of watershed development is to increase the carrying capacity of the land and water resources in the rain-fed areas for food and livelihood security.

In the past, watershed development programmes concentrated mainly on technical aspects. As a result, expected results could not be achieved and the impact could not be sustained. These programmes failed to achieve their objectives since the people for whom these programmes were meant were not involved.

NGOs recognised the need for community participation, and concentrated their efforts on building community level institutions for implementing watershed development programmes. Watershed development came to be recognised as both a technical as well as a social programme.

The overriding concern has always been to ensure community participation, to integrate gender and equity concerns, to build capacity of the community and project staff and to establish monitoring mechanisms.

In each of these areas of concerns, significant progress has been made in terms of developing strategies for implementation and addressing specific needs of the communities, NGOs and government organisations.

Certain common principles have emerged to ensure community participation. The book

presents best field practices under each of the following principles: integrated approach, participatory planning, institutional arrangements at the community level, equity, capacity building, cost sharing, micro-finance initiatives, participatory monitoring and evaluation and sustainability and scaling up.

In each section, relevant NGO and government experiences and best practices are discussed. General steps, key lessons, etc are shared with the cases from the field. Experiences of virtually everybody in the field of watershed development in the country are now available in one publication for the first time.

Social and Institutional Issues in Watershed Management in India is a 400-page resource book based on a workshop that brought together 60 participants from NGOs, government implementers, policy makers, academicians, donors and above all, community leaders. The book has brought together "tried and tested" experiences in dealing with social and institutional issues in watershed development drawn from across the length and breadth of India.

The book is presented in a simple format. It presents practical experiences in easy-to-follow frameworks. The style is easy with short bullet points. Lessons from the field are clearly stated. The layout is friendly and full of appropriate cartoons and sketches meant to convey messages easily. The book is relevant and



contemporary for watershed practitioners.

While the book brings a number of field experiences, it only skims them. The narration summarises many person years of work. It is not deep enough to help the practitioners to learn the nuances required when applying the principles in the field.

Hence, while the book has great breadth, it has lost somewhat on depth. Overall, I would recommend it as a must-read for all those working or dealing with micro-watersheds for its sheer potential to provide ideas relevant to their situations.

Social and Institutional Issues in Watershed Management in India

Edited by P N Mathur, Amba Jamir, Sheila Vijaykumar, Zeyaaul Haque, Mohammed and Apurva Rai

Published by IIRR and OIKOS

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Livelihood for the Poor

Two Sketches from North Bihar

Deep Joshi

August 1994

DEVELOPMENTALLY SPEAKING, I have always found North Bihar as daunting as the Himalayan foothills and the Rajasthan desert. The sociology of North Bihar is as complicated as the ecology and topography of the deserts and the mountains. Most of Bihar's landless people live here, as do most of the state's - perhaps even the country's - biggest landlords. Socio-economic relationships between the landed and the landless are iniquitous to the extreme and the poor have no room to manoeuvre.

Therefore I was braced for the worst when I recently went to see the income generation projects of two voluntary agencies supported by the Rashtriya Gramin Vikas Nidhi (RGVN) in East and West Champaran districts. I was pleasantly surprised by the success, however modest, and picked up a lesson or two as a bonus.

Both the projects involve poor and landless scheduled caste people. The poorest of the lot are from the Musadh or the Musahar community. They do not even have houses and are squatting on a piece of the village road. The rest of the erstwhile road has been 'merged' by the landed with their paddy fields.

From a quick conversation I learnt that their average family income from local sources hovers around Rs 2,000 to Rs 3,000 a year.

Harvesting (300 kg wheat)	Rs 1,200
Paddy transplanting (150 kg cheapest grain)	Rs 600
Hoeing and weeding (@ Rs 6-8 per day)	Rs 200
Total	Rs 2,000

How do they survive? Well, partly by scrounging around like other poor people (for example, they collect snails and fish to eat whenever they can); partly by migrating in search of wage labour to Punjab, Assam and the Nepal Terai, and partly through the subsidiary occupation of rearing calves. It is this last occupation that one NGO is building upon in villages near Motihari and East Champaran.

Fattening Calves

Traditionally, the landed farmers give calves, mostly bullocks, to the Musadhs for fattening. A notional price is attached to the calf when it is given and then taken away after two years. The owner pays the rearer half of the notional value as fattening charge. In case the calf dies due to 'negligence', the rearer has to pay the owner the original price.

The owner can terminate the contract midway. In such a case the rearer is free to keep the calf by paying the original price plus half of the value added. Alternatively, he can take his share of the added value and let the owner take the calf back. There is an arbitration mechanism in case of disputes.

The Musadhs, as one would expect, usually get the wrong end of the stick. The arbitration mechanism ensures this. The owners often terminate the contract prematurely if the calf is doing well and does not need intensive care, thereby cutting into the rearers' potential share. The death of a calf is almost always ascribed to negligence. The incoming calf is always overpriced and the outgoing always underpriced. The owner knows that the rearer cannot afford to pay and keep the heifer, nor can he break the relationship.

Our NGO friends chose this activity because that is what the Musadhs wanted to do. They had the basic, albeit traditional, skill, experience and confidence. Also, the established practice among farmers of buying rather than rearing animals from their young ensures a local market at both ends of the enterprise.

The NGO has extended small loans to the rearers for buying calves. Each family rears two calves and now makes Rs 1,500 a year from this subsidiary occupation. This is an increase of Rs 900 to Rs 1,000 over the previous situation.

This admittedly small sum is more than what they can bring home by migrating for three months. By increasing the number of calves and introducing some sophistication in rearing, it is possible to increase the income to Rs 5,000 a year, which would make calf rearing at par in this region, income and scope-

wise, with poultry in Kesla.

There are, of course, other avenues the NGO has not tried yet. This region is a major producer of potatoes and turmeric, sold at low prices without processing. Processing of these commodities offers another potentially large source of livelihood, though the skills and business experience would have to be developed.

Making Bricks

The other NGO is working near Bettiah in West Champaran among the Dusadh scheduled caste community. Here the activity is making bricks. It may sound rather outlandish for the landless Dusadhs to think of running a brick 'factory', although they are clearly better off than the Musadhs. But the enterprise is working and that is what matters.

This year, a group of about 35 Dusadhs has made 500,000 bricks and was readying to fire them when I visited there. They rent land from the farmers by paying Rs 1,000 per *katha* (15 *kathas* to an acre) from which they can make 25,000 bricks.

After baking, they would get about 15,000 'A' grade, 2,000 'B' grade and 3,000 'C' grade bricks sold at about Rs 800, Rs 500 and Rs 300 per 1,000 respectively, ex-factory. About 75 person-days of labour are required to make and bake 25,000 bricks.

Besides rental, the expenditure includes Rs 6,400 for about 4 tonnes of coal and about Rs 2,000 for wood and water supply. The net income is Rs 4,500 for 75 days' work, not deducting interest on working capital (Rs 9,400 for 3 months). This compare well with the Rs 1,500 they would make by

working for 75 days in someone else's kiln.

The market seems pretty large considering that several kilns were operating in the village that I visited. I was told that some 80 lakh bricks would be made during the season in the block. And if one could improve the process so that losses were minimised (20% of the bricks are totally lost) and the quality improved, this occupation would become even more robust. Then one can go into making tiles.

If brick making sounded preposterous, the idea they presented to me of making *khandsari* (a product between *jaggery* and sugar) was even more so. After all, they said, we are the ones who make it for the *maalik* (employer), so why not do it for ourselves?

The area produces a lot of sugarcane. They said about two-thirds of all land is under sugarcane cultivation, which I did not believe. But there was plenty as far as one could see. *Poonji* (capital) was all they said they needed.

To my question about where they would sell it came the answer, 'to the Marwaris who come from Calcutta'. 'And if we can hold the stocks for a couple of months, we could even get a better price!' They had obviously done some homework and if they have graduated from being wage labourers to managing a turnover of nearly Rs 3 lakh from making bricks, maybe they can manage a *khandsari* unit as well.

Finding Robust Ideas

Finding livelihood ideas remains a difficult challenge at the grassroots, especially for those working with landless or marginal farmers. Try as one may, there just do not seem to be enough robust ideas around. Inevitably, Kesla, where broiler

rearing and mushroom cultivation have been tried successfully, crosses the mind. But everyone cannot grow mushrooms or rear broilers, nor in these days of subsiding subsidies, can you spin *khadi* endlessly! It is in this context that this experience from North Bihar is interesting.

In both cases so far, the participants are by and large experienced in the chosen activities. This is similar to our work with flayers and charcoal makers. In case of the Musadhs, the activity and its scale (two calves each) is really focused on confidence building, although it has a reasonable income-generating potential if unit size and rearing sophistication are increased.

This is what Pareek and Carroll in their review report call the 'small wins' strategy though here the reasons for choosing such a strategy are very different from why they recommend it to us. I thought that brick making, and more so *khandsari*, was a leap in imagination. Our wet blue tanning is not quite the same, as the conditions and income gains are not comparable. I suspect we have not noticed a lot of opportunities of this nature. A salt co-operative promoted by NDDDB is in the same category, although in a much bigger scale.

A final point worth noting is that in neither case is there growth in the local or global economy, though productivity would perhaps increase. Thus, while growth in local and global economy and wealth are considered important evaluation criteria for livelihoods projects, there may be plenty of opportunities in redistribution as well, especially through access to credit, business support and markets. ■

Leading Environmentalist Passes Away

P R Mishra was a leading soil conservationist at the Central Soil and Water Training Institute. He spent most of his years converting Sukhomajri in Rajasthan, and later in Palamau in Bihar, from drought-prone, poverty-stricken villages to self-sustaining units of prosperous economic activity. He passed away on March 25, 2001.

P R Mishra embarked on this project in the 1970s, when environmental concerns did not receive the kind of attention it receives today. He decided to fight poverty by involving people to protect their land, realising that the real wealth of the nation is in its ecological health.

His philosophy was that people must be involved at the

grassroots level for any activity to succeed. He was closely involved with the concept of "social fencing" in which villagers agreed to restrain their livestock from grazing on degraded forests.

In the 1970s Sukhomajri was a sparsely vegetated village, which could barely sustain any crop. Groundwater levels were low although the region received adequate rainfall. Rain falling on the denuded hills caused severe soil erosion resulting in gully and ravine formation.

The efforts of P R Mishra changed all that. The Sukhomajri project gave villagers an opportunity to turn this situation around. They learnt to be concerned not only

about individual livelihoods but also about the common good.

When the drought of 1979 affected most of the country, the series of small tanks built to collect rainwater in Sukhomajri led to increased forest cover. The village became a model for sustainable development. Today it is one of the best-known success stories in community forest management.

Many Pradanites might not know that Deep Joshi worked closely with P R Mishra in Sukhomajri in the 1970s. It would also interest us to know that Dinabandhu Karmakar was inspired by his visit to P R Mishra's project in Palamau to begin conceptualising the 5% model. ■

People News

◆ We welcomed Dhiraj Horo back to work on April 2. He has been on long leave following an accident he met with in Cuttack.

◆ Jitendra Naik, based at Khunti, was also on long leave this year. He has rejoined work at Khunti and will join our project at Baliguda in Orissa in the last week of May 2001.

◆ Anirban Ghose has shifted from Lohardaga and is now the Team Leader at Khunti in the Ranchi district of Jharkhand. Kirtti Bhushan Pani has also shifted from Gumla to Jamshedpur.

◆ Saroj Mohapatra and Tamali Kundu at Godda tied the knot on April 28, 2001. Congratulations! They are also in the process of shifting to our project in Chakradharpur in

the West Singhbhum district of Jharkhand.

◆ Amulya Khandai, based at Baliguda, also tied the knot on April 26, 2001. Congratulations!

◆ Deep Joshi is on sabbatical for six months from May 1, 2001, as a Fellow with the Sir Ratan Tata Trust.

◆ Manas Satpathy is on sabbatical for a year, from May 1, 2001, as a Fellow with the International Water Management Institute, Anand.

◆ Activity continues on the apprenticeship front. Twenty apprentices have joined the 22nd batch starting April. Three apprentices from the 20th batch, Shipra Jaiswal and Salilesh Sukla have left. ■

Events

◆ The Consultative Forum met at Sukhtawa from April 13-16, 2001.

◆ Pradan has given Indira Gandhi Open University multiple telecast rights to the video film "The Paal System" for its various TV slots for 2 years.

Awards to Alumni

◆ Vijay Mahajan received the IIT Delhi Alumni Association "Outstanding Contribution Award for National Development" for the year 2000-2001.

◆ Ranu Bhogal has been awarded the Hubert Humphrey fellowship for the year 2001-2001. ■