Adivasis and Livelihood

Case Studies on Livelihood Interventions in Adivasi regions of India

# ADIVASIS AND LIVELIHOOD

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#### NGOs covered in this publication

- Jana Jagaran, Belgaum, Karnataka
- Centre for Community Development, Gajapati, Orissa
- Seva Mandir, Udaipur, Rajasthan
- Keystone Foundation, Nilgiris, Tamil Nadu

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# Acronyms

- BR Biosphere Reserves
- CCD Centre for Community Development
- CPR Common Property Resource
- FD Forest Department
- FPC Forest Protection Committee
- FYM Farm Yard Manure
- GPS Global Positioning System
- GVC Gram Vikas Committee
- GVK Gram Vikas Kosh
- ITDP Integrated Tribal Development Programme
- MFI Microfinance Institutions
- NGO Non-Governmental Organization
- NRM Natural Resource Management
- NTFP Non Timber Forest Produce
- PRI Panchayati Raj Institutions
- SAS Shramik Abhibrudhi Sangh
- SHG Self Help Group
- SC/ST Schedule Caste and Schedule Tribes
- TCS Tribal cooperative Societies
- TN Tamil Nadu
- VFC Village Forest Council
- VLW Village Livestock Worker

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Seva Mandir Jana Jagaran Centre for Community Development Keystone Foundation

February, 2007

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# **Executive Summary**

The volume documents adivasi livelihood interventions and subsequent outcomes that were and are being carried out by the Centre for Community Development in Orissa, Keystone Foundation in Tamil Nadu, Jan Jagran in Karnataka and Seva Mandir in Rajasthan, all of whom have been long time partners under the SDC-IC NRM programme that was initiated in 1999. The publication introduces facets of adivasi livelihood, the vulnerabilities that they constantly face and intervention designs that have had positive impacts on their livelihood strategy. The publication considers through detailed case studies, the interventions employed by the four NGOs in the different states.

Case studies from Orissa illustrate examples of associations for improving agricultural production through information sharing and soil and moisture conservation activities as well as women empowerment by awareness generation on rights. The Keystone case studies are on skill development, market linkages for forest produce and land development for food security.

Jana Jagaran from Karnataka works with the semi-nomadic community in the area. Their intervention was focussed on providing veterinary services for their livestock and fodder cultivation. An innovative method of generating employment was by training the villagers and shepherds on wool based handicrafts and finding markets. The case study from Seva Mandir in Rajasthan traces the interventions which had focussed on institution building for the people and their outcomes

# The SDC-IC, NGO - NRM Programme came to an end in December 2005 and culminated in a meeting in Hyderabad of all the partners from across India. With the idea of carrying forward the last phase, which documented

Background and Methodology

culminated in a meeting in Hyderabad of all the partners from across India. With the idea of carrying forward the last phase, which documented experiences emerging from the meeting, it was decided to cluster the NGOs in relation to their specific areas of work. The groups included Watersheds, Tank Rehabilitation, Adivasis and Community Organizations.

Four NGOs working with Adivasis came together to exchange experiences and document the interventions made by each. It was decided that the groups would use this opportunity to travel to each others' project areas and learn from their experience. Thus, on the specific themes of Land and Livelihood - 3 outputs were to be realised - a folder on Land Issues, this booklet on Livelihoods and a film on pastoralism. This methodology ensured that the partners visit each other and document the interventions as a 'third party' would, with a fresh outlook.

The exchange was to enable partners to learn and also present the interventions in a manner that promote the work of the NGOs and the approaches they have adopted for addressing livelihood issues in their respective areas.

# 2 Livelihoods and Adivasis

The issues related to indigenous communities (referred as adivasis throughout this publication), have been alive since history. Whereas earlier regimes and kingdoms left them to their forests and way of life, others supported their art and craft and cultural heritage. In India, these communities form approximately 8% of the population and are widely distributed across the country with the central and north east regions having a major concentration. The southern states and Andaman Islands have some of the oldest communities, also classified by the government as 'primitive tribal groups'. Besides having primitive traits, these people are geographically isolated, have a distinct culture, are mostly illiterate and economically backward. The Constitution of India incorporates several special provisions for the promotion of educational and economic interest of Scheduled Tribes and their protection from social injustice and all forms of exploitation. There are now 194 special Integrated Tribal Development Programme (ITDP) projects running in the country, where adivasi populations are concentrated (www.tribal.nic.in).

Traditionally, adivasis have differed from the other communities in their lifestyle which was a combination of shifting cultivation and hunting and gathering of forest produce. Their festivals and culture venerated nature and usufruct rights and communal ownership took precedence over private ownership.

The British colonial rule either appropriated their forests or drastically curtailed their access to them while suppressing shifting cultivation. It also imposed a system of revenue collection, which, while re-constructing natural communities into administrative 'revenue villages', also opened the doors for

exploitative moneylenders and traders to start settling in adivasi areas. Today, the tribal majority areas, which overlap with the country's major forest areas, are also areas with the highest concentrations of poverty. (FAO, Investment Centre Studies, 1998)

According to the Census of India, 2001, there are presently around 42% of adivasis who are classified as 'main workers' out of which 54% pursue cultivation and another 32% as agricultural labourers. Remaining follow mixed livelihood options - hunting and gathering, fishing and pastoralism. Some of these livelihood options are discussed in detail in the forthcoming sections.

# 2.1 Livelihood Options for the Adivasis

#### a) Forest Communities

Some adivasis are traditionally hunter gatherer communities and depend on the forest for their existence. Usually, a symbiotic relationship exists between these communities, each having their own 'foraging' territories. Forests have not only contributed towards providing succour to the people but are also instrumental in their economic upliftment. People get both direct and indirect benefits from it, which play an important role in their livelihood. The people collect Non-Timber-Forest-Products (NTFPs) for trade, honey being one of the major ones. Other items collected for trade are mainly medicinal plants, gums & resin, gooseberry, myrobalans, soapnut, broom grass, bamboo and rattans, wild pepper and nutmeg, etc. This collection is a major source of livelihood, seasonally, for these communities.

# Change in Livelihood Patterns of Adivasis

Most adivasis depend on daily wages in estates. The number of women going for regular work is much higher than the men. Rarely does an adivasi work for more than 4-5 days a week, earning a maximum of Rs. 200 -250/-. This includes NTFP collection work. The rest of the time is spent on other personal activities. The number of days people work and what activity they take up depends on the kind of remuneration available and the season of the year. According to the survey, adivasis go for collection of NTFPs starting Jan/Feb and end with honey harvest in May-June. This period is interspersed with some daily wage plantation labour work. Between July-November, the people in the upper plateau have no option other than wage labour (Keystone, 1998)

Traditional and cultural uses of the forests are also high for most adivasi communities. Their deities live in the forests and often result in large tracts being 'sacred groves'. The rules for the use of such forests are strictly governed by the people.

Non commercial use of forests is high amongst these communities - where the forest is accessed for local medicine, fibre, food, fuel, fodder, timber, thatching and so on.

They have been using NTFPs since they probably started living in the forests and their indigenous or ethnic knowledge of their surroundings is immense, diversified and still remains to be totally unearthed. Numerous instances have been documented wherein the adivasis show precise knowledge with respect to the properties of a particular plant. Traditionally, they used to harvest species as per a time tested schedule as a result of which there was minimal harm to the harvested species. Besides, adivasi paintings and oral tradition make a mention of their relations with the forest. Traditional *vaidyas* are still the mainstay for the indigenous people and their services taken great use of. This reciprocal relationship underscores the importance and need to preserve NTFP resources.

## b) Agriculturists

As indigenous communities change their livelihood strategies, agriculture tends to become a primary occupation, cohabitating with animal husbandry and forest produce collection. When conditions are favourable towards agriculture, people sustain their livelihood for more than six months from the output. Traditionally most of these communities grow mixed crops of millets in a shifting cultivation practice. Now, most of these practices have stopped and commercial crops have taken over homestead and marginal lands. The main crops now grown are tea, coffee, vegetables, paddy, banana, ginger, corn and millets. Mixed agriculture practices have reduced drastically. However, a persistent problem with agriculture is that it requires significant investments of time and money; it is rarely remunerative in a rain fed region and crop destruction from wild animals is also a constant threat. Thus agriculture continues to be a major gamble increasing the vulnerability of dependent communities.

#### c) Pastoralists/ Herders

After land and forest, livestock constitute the most important resource for livelihood strategies of the adivasis in many parts of the country. This activity is an important component of adivasi culture and of their production systems, constituting a cash reserve in times of distress. Traditionally, livestock is grazed on commons and wastelands and also in the forest during the monsoon season. Once produce is harvested, the stubbles and volunteer grasses become the main grazing areas throughout the rest of the year. Livestock is mostly of local breed. The adivasi inhabit those parts of the land where the potential for crop cultivation is limited due to lack of rainfall, steep terrain or extreme temperatures. Many pastoralist adivasis groups maintain a nomadic or semi-nomadic lifestyle as restricted by natural and financial resources they need to optimally exploit the meager and seasonally variable resources of their environment and to provide food and water for their animals (www.pastoral-people.org).

#### d) Wage Labourers

Other than the above, wage labour is one of the major occupations of the people. Many adivasis work in agriculture fields and farms, tea and coffee estates, brick kilns, construction work, etc. on daily wages. In several villages, wage labour supersedes most occupations as it assures a constant supply of cash money. However, other than providing direct income, wage has numerous drawbacks. People depend too much on this form of employment and refrain from carrying out traditional activities such as NTFP collection and agriculture. This, results in loss of traditional skills and inability to carry on these activities in the future generations, the most important being the loss of food sovereignty and nutrition. Migration for wage work is a common feature among the adivasis. Some migrate to nearby villages and towns while some go to the cities as well.

#### Jamman, Irula, Kil Koop, The Nilgiris

According to Jamman, the number of days in a week for wage labour in a week is dependant upon food availability in the house. Only when the reserve comes down to 1-2 days food, they start thinking about going for work. Usually a week's provisions costs them Rs. 200/- (for 2 people) and can go upto Rs. 500/- if the family is large. They do not keep any substantial reserve money - but they do have provisions. If one person is ill, the other will go for work and if they are short of money they will take a loan. He had a debt of Rs. 800/-, which he had to repay in installments of Rs. 100/- each, over 10 weeks (the lender earns Rs. 200/- in 2.5 months i.e. he lends at 120% per annum!) Some people from Sirumughai or the tailor at Maamaram, lend money regularly. Usually a loan is taken to spend on 'something more than food' or for festivals and funerals. (Keystone Survey, 1998) Most adivasis own marginal land which are usually hilly, unproductive areas and grow millets which sustains them only partially, in a year. Also increasingly, it is imminent that control over forests will continue to be a matter of confusion and possibly, contention between the stakeholders who consider themselves to be a part of the forest complex. It is possible that their alienation and depravation is being aggravated leaving them with scanty livelihood options and at the mercy of exploitative market forces. As a result of these factors, the livelihood of adivasi is a mixed lot changing from NTFP collection to subsistence agriculture, livestock rearing as well as wage labour. These are again determined by season and availability of work. Levels of dependence on each of these vary according to the availability of resources and opportunities for occupational diversification.

# 2.2 Issues of Concern - Vulnerabilities that Adivasis Face

The gamut of factors leading to rapid degradation of forests and changes in policy, demography and land use has had an impact on the indigenous communities - these include loss of tenurial rights over forests, loss of food security, conversion of available lands into nonfood crops and a high degree of dependency upon wage labour. This has also led to a breakdown in their community governance systems and indebtedness to money lenders.

The weaning away of traditional rights, the dependence on wage labour, rain-fed agriculture and poor ill-fed livestock for livelihood makes the adivasis highly vulnerable to various shocks, trends and seasonality. The crucial feature to be understood in their vulnerability factor is that they are not controllable by the people in the immediate term and the livelihood insecurity arising from these is but a constant reality for the poor. If we examine the livelihood options available for the poor adivasis, the vulnerabilities they are subjected to lies clear.

In forest related activities, seasonality of NTFPs and policies govern the outcomes. Seasonality and fluctuation of NTFP prices coupled with products



being sold in bulk without value addition provides minimal returns. The NTFP policies being followed in many states across India have failed to give them the desired benefits

and left them at the mercy of contractors and traders. Lately, however, with the setting up of Village Forest Committees (VFCs) and cooperatives, there is scope for enhancing their returns from collection of forest produce.

With respect to agriculture, which is usually carried out on hilly unsuitable land, harvest is of subsistence nature which becomes further scarce in times of drought as the land is rain-fed. With poor technical knowledge on farming and soil and moisture conservation techniques, lack of information on seed varieties and other related information coupled with lack of marketing skills

makes it unlikely for optimal returns in any form. Agriculture being the major source of sustenance, albeit primarily on a subsistence level, is most prone to shocks such as drought, famine and floods. In



most adivasi dominated regions, agriculture needs to be augmented against these continuous shocks that ultimately have a highly detrimental effect on the lives of the adivasis dependent upon them. Animal husbandry is another source of livelihood for large number of i n d i g e n o u s communities. In some areas, adivasis maintain a nomadic lifestyle shifting places to search for fodder



for their cattle and sheep. Low-grade breeds and insufficient fodder resulting in underfeeding of the animals affects milk production as well as the young ones. Moreover, lack of timely veterinary help leads to further crisis for the families in the form of death and diseases among the livestock. Other threats include expansion of agriculture into former pasture lands and also the shortening of fallow periods. Setting up of hydro-electric and irrigation projects take over former grazing lands and additionally supply water for irrigation facilitating 2-3 crops a year, leading to fewer options for pastoralists. Besides, policies aimed at 'settling' the population by providing land, house, etc, also add to the breaking up of groups and make them vulnerable by weaning them away from known ways of livelihood.

In the present scenario, most adivasi households depend on wage labour to eke out a living. Dependence on wage labour is much higher when food from their own lands is not available. Within the village, it is mostly agricultural work whereas outside, the villagers work as unskilled construction labour and various other regular jobs. Migrating with families makes the children and women vulnerable to health problems as well as the education suffers. Migration of male members adds to the already existing burden of chores which women have to perform. In this scenario, the worst hit are old, sick and disabled people, who cannot do wage labour and have nothing to fallback on. Food insecurity peaks when the harvests are exhausted. In the past, this deficit was contained by produce from the forests. With depleting forest resources and restricted access, this source has reduced making them dependent on the market for purchasing food. Cash requirements for this make them migrate for work, dependent on wage labour and money lenders, thereby falling into a debt trap.

# 2.3 Livelihood Interventions

As it may happen elsewhere, the adivasis in Rajasthan, hunter gatherers of the Nilgiri Hills of Tamil Nadu, shepherds of Belgaum district in Karnataka and hill agriculturists of Gajapati district in Orissa face a tremendous problem of



securing their livelihoods without exposing themselves to the sudden shocks they face. The challenge of how large numbers of people can have a m e a n i n g f u l livelihood which

sustains them needs to be addressed. As groups working with adivasis attest, interventions that are single minded in approach and do not wait to think about the multifaceted needs of the people may not be successful in the near future. Working with adivasis require tailor made strategies and livelihood interventions that not only help increase income, but also empower people to make these choices.

Depending on specific issues, interventions can take various forms and can be facilitated through various approaches. Interventions can be through existing

peoples' institutions like the Village Forest Councils or by facilitating the formation of people's institutions - formal as well as informal, like Self Help Groups (SHG), Watershed Management Committees, etc. These peoples' bodies represent the poorest and the weakest in the society. Village institutions can play an important role in determining the quality of life, improved income and standard of living of rural masses e.g. easy access to credit through SHGs, Cooperatives engaged in marketing, etc. Access and influence of masses over institutions play an important role in improving peoples' conditions. Institutions also contribute in vulnerability reduction, asset building and diversification of livelihood strategies.

Interventions could be technological e.g., providing technical assistance in agriculture - irrigation, soil and moisture conservation activities, in the form of information sharing as in case of improved seed varieties, market linkages, livestock management, breed selection, etc. Interventions could also be for skill development by providing training in handicrafts and value addition of NTFPs, providing start up capital for entrepreneurial activities or collective trading.

Interventions may often overlook gender participation and equity. In rural areas which have traditionally been marred by gender inequities (clearly seen in the distribution and access of resources to women), incorporating the gender perspective in development programmes and interventions is very crucial.

Interventions in any particular area can at times have a spillover effect and influence changes in other sectors as well e.g. an intervention in skill development like handicrafts can lead to higher income for women, thus increasing their say in household decisions. At the same time, this could result in children being sent to schools thereby supporting the social development of the village.

## **Common Property Resources**

For their livelihood practices like agriculture and animal husbandry, the adivasis are dependant upon other common property resources (CPRs) like pasturelands. Indirectly, the health of these commons is of great significance in determining the productivity and production from agriculture and animal husbandry (because of the ecological cycle). The tenure rights on the commons also serve as the determining factor towards the strength of the institutions that determine the use of commons in general and forests in particular. One of the major hurdles that has been faced with regard to working for the commons has been encroachment. It has been realized while working with village institutions that if the forests have any trace of private ownership (in the form of encroachment) the stakes/ interests of other villagers tend to get diluted. Secondly, this becomes a forum where old animosities surface leading possible breakdown of the collective action/institution. More often than not, these rivalries have their roots in a fight over encroachment over a resource. According to a study conducted by Seva Mandir in 10 of its programme villages, 26.7% of the forestlands were encroached upon while 54.13% of the pasturelands were encroached upon.



Interventions need not wean away people from their traditional livelihood activities, as a lot of cultural significance would also be attached to it. Interventions can be made acceptable by striking a balance between traditional livelihoods activity, biodiversity and enhancing income by making traditional livelihood profitable. The case studies listed describe the livelihood interventions and subsequent outcomes of the development activities of four NGOs working with adivasis across four different states in India.

# 3 At Work with the Saoras of Gajapati, Orissa

Centre for Community Development (CCD) works in the extremely backward district of Gajapati in Orissa, a region with a population of about 5.2 lakhs where more than 50% of the people are adivasis.

The situation in the district is that of abject poverty and rapidly degrading forest cover that sustains much of the population. With a predominant adivasi population, ongoing destruction of natural habitats and overall backwardness of the region, the district needs focused social and ecological interventions.

A majority of the population in the district is that of indigenous communities with Saoras dominating. Saoras belong to the group of primitive tribals with a large number being hunters and gatherers. In the present day, a large number of the Saoras are primarily agriculturists.

CCD's core area of work is in natural resource management, women empowerment promotion of MFI (microfinance institutions), enabling the physically challenged and child rights.

The following case studies demonstrate the successful livelihood interventions carried out by capacity building, women empowerment and sustainable livelihood and food security initiated through NRM. The NRM intervention for agricultural development in the area was through the Participatory Technology Development (PTD) process.

#### Case Study 1

Village Kurlundaguda - enhancing income through technological intervention and skill development

#### The setting and livelihood patterns

Situated 10 kms from Parlekhemudi in Gajapati district, this forest village of the Saoras has 52 households. Most of the families own between 1 to 1.5 acres

of land. Legally however they have no rights over the house land as well as agricultural land. Most of the villagers are daily wage earners and also grow paddy, ragi, maize and vegetables seasonally.



area is accessed for fuel wood collection while NTFPs are generally not collected. Forest department has carried out cashew plantations in the area; the income from the resource is shared by the villagers.



The intervention

CCD began work with the villagers by forming SHGs and introducing improved farming techniques. Water crisis during nursery development and flowering period was identified as the major crisis being faced by the villagers. Through the SHGs and with support from CCD, two community wells have been dug and pumps have been set up. The SHGs have taken up the task of monitoring water usage and collecting water charges.

#### The Outcome

As a result of the soil and moisture conservation activities like staggered trenches, earthen bunding and gully plugging which was, taken up in the higher elevations of the village, the water level has risen considerably in the wells. Even in the dry seasons there is enough water for all farmers.

All this has led to improved income to households. 37 acres of land are under cultivation and the paddy yield has increased 200% i.e. from the earlier yield of 4-5 quintals/acre it has gone upto 12-15 quintals/acre.

#### Case Study 2

# Village Ippaguda - Curbing Migration through Structured Intervention

Ippaguda is a tiny hamlet of 25 Saura families situated on the foothills



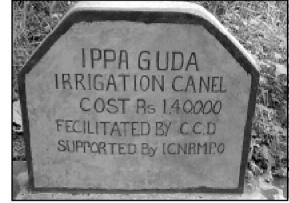
of a dense forest. The families faced severe water crisis for irrigation as well as for domestic purposes. Although the hills had perennial sources, the villagers had to climb up to fetch water and agriculture was rain-fed. As a result, the villagers were out of work for most part of the year. This resulted in migration - many men and in some cases, entire families moved, looking for jobs.

#### Participatory Planning and Action

With CCD's intervention, the community sought solutions to the problems plaguing them. They identified perennial springs in the hills and laid out canals. These canals supply drinking water through gravitation from a spring high up in the hills to two tanks constructed in the village. Small outlets in the canal supply water to the fields for irrigation.

Earlier, forests in the area were beginning to degrade. However with availability of water, the villagers have now realized the importance of forest cover for water needs - the forests in the surrounding areas are now being conserved.

CCD provided technical and monetary support to the villagers for the construction, but planning and executions of the entire activity was carried out by the villagers themselves. As a result of the canal the area under cultivation has increased which has



raised the income of the people and the landless have also been able to find work in the area. This has put a stop to migration.

#### Case Study 3

#### Thausang Village - Improving Skills through Information Sharing

Set on the banks of a stream, the village has 36 households with an average landholding of 1-2 acres per family. This is one village where the PTD process was not only successfully implemented but the farmers are now resource persons providing technical support to farmers from neighbouring villages.



Prior to PTD, the villagers were engaged in *Jhum* i.e. shifting cultivation. Presently, the entire forest area around the village is covered with cashew plantation. Through PTD, the villagers learnt seed treatment, composting and other agriculture related information like plant gap and green mulching. This information they now share with other farmers thus realizing the PTD objective of encouraging farmer to farmer training and information dissemination. The village also has a big nursery with close to 40,000-50,000 saplings of coconut, mango, drumstick, gooseberry, lemon, pomegranate, teak and cashew.

#### Highlights of CCD's work with the Farmers through Participatory Development Technology (PTD).

- Farmers are engaged in collective purchase of seeds, bio-fertilizers and other agricultural equipment as they have realized the benefits of collective bargaining.
- A lot of group activity was seen in the villages group nursery, shared transportation, collective irrigation, ploughing, harvesting, and threshing, etc. which is leading to improved labour productivity and effectiveness.
- According to the farmers they are able to observe more clearly, analyse the issues, draw lessons and take decisions in a group e.g. improved varieties, seed germination tests, healthy seedling characters, etc.
- Revolving funds are being utilized efficiently and this has facilitated reduction in financial vulnerability which is enabling them to take up agricultural activities and inputs on time.
- According to the farmers who were involved in the PTD process, non - PTD farmers in the village who were earlier reluctant to join, are now eager to practice the proven technologies.
- Women have become more self confident and share their experiences and learnings with others. They are highly motivated to continue this process and learn more.
- According to the villagers, the process has strengthened community cooperation, self confidence, and social capital in the village. Besides, the process has improved the linkages with neighbouring villages and helped the cross-learning process.
- Green manure and local organic matter (green leaf/straw) mulching have been taken up to address the non availability and high cost of Farm Yard Manure (FYM) and group nurseries have been set up to meet the entire village requirement.
- The uniqueness of the program is that the information on farming practices is being spread by the farmers themselves. 'Farmer's field day' is organized for practical demonstrations.

#### Case Study 4

Village Konneipur - Participation of Women in Panchayati Raj Institutions (PRI)

Konneipur is an adivasi village of Kujasing panchayat with 25 families. CCD promoted a Self-Help Group called Sarala Mahila Sangam in the year 2000 which included all the 25 households. Being unaware of Palli Sabha (hamlet meetings) and Gram Sabha (village level meetings) the women never attended the meetings. SHG meetings were a common meeting ground for the women. During such meetings they discussed the problems faced in agriculture which was due to lack of availability of irrigation. Though the village had a check dam and sufficient water, the same was not being utilized suitably for irrigation. Discussing the issue with CCD staff, they realized that the construction of a water channel was needed for irrigating the non-irrigated land.

Encouraged by the CCD staff, the women for the first time, attended the Palli Sabha meeting and also put up their plan with the Sarpanch and ward member. All others present appreciated the idea and asked them to present it in the Gram Sabha meeting, themselves. Laxmi Dalbehera, SHG leader, attended the Gram Sabha and highlighted the issue and the proposed action plan. As a result of the initiative, the construction of the canal work has been listed in the action plan by the Gram Sabha and Sarala Mahila Sangam has been approached to execute the work. The Panchayat has forwarded the work in the name of Laxmi Dalbehera and sanctioned the requisite amount also.

#### Discussion

We can deduce from the above case studies that planning and participation of the people in development work is of utmost importance. Moreover it increases ownership stakes and empowers people for informed decision making. Even in difficult fields like increasing yields, the role of peoples' knowledge and participation is important. Interventions like this can go a long way in improving the livelihood of people, by improving their income from the sale of marketable surplus and assuring food security.

# 4

Valuing Forests and Agriculture in the Blue Mountains

Keystone Foundation is a NGO working with indigenous mountain communities for more than 10 years on poverty alleviation and sustainable development through eco-development initiatives.

The principal programme areas are: Natural Resources Management (NRM),

Enterprise Development (ED) & Institutional Development. The groups works in more than 36 tribal villages on diverse activities such as Apiculture, Land Development - Food Security, Water Resources, Non Timber Forest Produce,

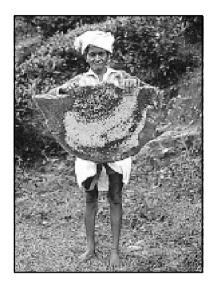


Marketing and Value Addition of Adivasi Produce and Local Capacity Building.

Nilgiris District has the highest tribal population (8%) in the state of Tamil Nadu and is home to several primitive tribal groups and indigenous people. Their population is only 25,000 and they remain largely marginalised and isolated. The percentage of adivasis in the state of Tamil Nadu is only 1.25%. There is no special tailored intervention for these forests and migratory communities. They are amalgamated with Scheduled Castes (SC) who are larger in number and have significant political patronage.

#### Case Study 1

Value Addition Interventions in Honey and Amla



Indigenous people of the Nilgiris are amongst the most primitive groups in Southern India. Living in resource rich areas, they suffer from what can be termed material poverty, though they are not necessarily poor when the diversity of nature is taken into consideration. Ecosystem people that they are, indigenous communities maintained a lifestyle that was traditionally not exploitative of natural systems. However, surrounded by relatively prosperous communities of migrants, these communities feel a deep

sense of apathy at their present condition and often tend to blindly follow the ways of the dominant and richer communities. This has an impact on their

culture, food and overall lifestyle.

In this backdrop, Keystone started work in the Nilgiris in 1995 with adivasi communities on honey gathering and beekeeping. Initially work concentrated around these activities covering aspects of training, documenting practices, sustainable harvesting methods, hygienic methods of processing, use of bees wax and simple methods of domesticating bees. One of the biggest problems faced by the community was of marketing



honey. The honey collected after hours of work in the forest with skill and years of ancient knowledge, sold for Rs. 17-30/- in the local market. This situation led Keystone to take its first steps towards marketing this special product, by purchasing honey at twice the market rates. This caused trouble with the existing traders in the market, but discussions with them resolved the issue. This helped in increasing the purchase price of honey locally. Different stages of intervention: At Collection Level Post harvest handling Filtering system Documentation Conservation Marketing

Today, the honey is filtered and packed at the resource unit, by Adivasis, who have been trained and sold through outlets called 'Green Shops'. Keystone has started 3 Green Shops in Kotagiri, Ooty and Coonoor in the Nilgiris, which are exclusive outlets for honey and other NTFP products. The profits are ploughed back into building the enterprise.

Amla (Emblica Officinalis) or Nellikai as it is known here, is a NTFP found in the Nilgiri forests in high volume and in good demand in the market. Consid-

ering that low skills were required for collection and the low cultural significance attached to it, the *nellikai* is usually sold raw in the market place/*mundies* through auction to hawkers, pickle makers and suppliers to nature cure/ Ayurvedic / Siddha



institutions. As the fruit was sold in raw form and the end uses being varied,

the raw material suppliers, who are the adivasis, were the people who gained least in the process.

Keystone's intervention was concentrated on value-adding the produce with women production groups in 4 village centres and finding markets as well. The



people were trained in grading and preparation of value added *nellikai* produce like candy, mouth freshner, pickle and *nellikai* powder. These are marketed through the Green Shops as well as through like-minded outlets elsewhere in India.

The village resource units or production centres are places where the villagers bring the collected NTFP and value add them. The process has found employment for youth and women and increased their share in the profits.

## Case Study 2

#### Food Security and Adivasi Land - the Challenges

#### (Adapted from 'Choice of Grain'; Keystone Foundation, 2005)

Adivasi lands in the Kotagiri and Coonoor slopes of the district have difficult features. The thin layer of soil is lateritic with low biomass content. The slopes vary from 20-70°, causing land slips and erosion. Most of the lands are also in the rain shadow region with rainfall ranging from 500-800 mm (years 2000-2003).

The lands of adivasi people in the Nilgiris are usually registered as a village patta i.e. a common title for the whole community. This is shared among the people of the village and used for different purposes. The boundaries of these lands are



adjacent to Reserved Forests or private estates. Most of these boundaries are unclear and unmarked, making it difficult for the adivasi people to stake their claim, and enabling the larger estates to encroach onto their lands.

These aspects made working on this land challenging and had to incorporate several soil and moisture conservation measures. This translated into the building of stone bunds and gully plugs, digging contour trenches and growing vegetative bunds along steep slopes. Overall biomass increase and mulching was also undertaken to improve soil conditions.

As a first step to growing food, several adivasi villages were enabled to demarcate their boundaries, which were marked using the Geographical Positioning System (GPS) by Keystone staff and planted by the people with species like Agave, Sapindus spp. or *Coffea liberica*. Often this involved discussions and negotiations with the estate owners and confirmation of boundaries with the Forest Department. Several villages gained specifically from this exercise. Nedugalcombei recovered 27 acres (11 families) which had been taken over by a social forestry scheme. Another extent of 65 acres for Pudurcombei (5 families) and 90 acres for Vellericombei (15 families) were demarcated with specified trees and the boundary clarified with the Forest Department.

However, the most difficult and significant case was that of Banglapadigai. 80 acres of the village land, belonging to 36 Irula tribal families, was under litigation with the nearby Shajbas Estate. The programme helped the villagers to gain access and rights over their land. This land is now cultivated seasonally for millets and vegetables. Some has been planted up with coffee and other mixed species.

# The Changing Future

This effort aims to raise issues of food sovereignty amongst marginalized adivasi communities. In a larger scenario, it challenges genetically modified and hybrid crops and brings back crop diversity into a largely monocultural plantation area. The programme has also brought many other benefits like bringing the community together, marking of boundaries vis-a-vis estates and forest lands, clearing of fallow land for growing high value crops, raising community nurseries and using soil and moisture conservation activities. Covering approximately 800 acres of adivasi land in 16 villages, the impact of the programme has been widespread.

Keystone proposes to strengthen this activity by spreading more information and awareness, creating more seed banks and initiating appropriate technology interventions for post harvest and value addition.

The above case studies show how appropriately designs interventions can go a long way in ensuring food security and regular income for improved livelihood. When trainings and value addition skills are provided the processes may be slow and may require support for considerable time before the communities learn and begin to manage on their own.

# 5 Suildin

Building Resilient Institutions in Rajasthan

Seva Mandir, an Udaipur based non-profit organization has been actively working with the marginalized adivasis through various natural resource management efforts like agricultural technology improvement, watershed development, afforestation on private and common-lands and Joint Forest Management on forest lands. Seva Mandir's work in the field of Natural Resource Development is based on the premise that improvement in the natural resource base leads to improvement in the land-based livelihood of the tribal communities. Majority of the interventions have been routed through formal and non-formal institutions like Gram Vikas Kosh, Village Forest Protection and Management Committees (VFPMCs) whose focus has been on promoting collective action for bringing about development of common property resources (CPRs) like forests and pasturelands. These CPRs, especially forests, have been afflicted with problems of institutions to deal with encroachment cases on the common panchayat and forest land. Negotiations are mainly routed through the village institutions regarding vacation of encroachments.

When Seva Mandir began supporting communities to undertake development activities, it was with the expectation that this would ease two major constraints. The communities did not have to wait for approvals and funds from the state, and non governmental support meant that the communities were free to evolve their own rules and regulations. The initial expectations that people would come together to rehabilitate their degraded resource were very high especially since livelihoods were dependent on them. While most communities did respond positively to opportunities to improve their private resources, a similar response was not seen in the case of resources vested with the state and village councils. The state was not willing to facilitate access to the resources under its control. A deeper complication was that the communities themselves had lost their stakes in the development of these resources (especially land), and were mired in controversy regarding their ownership, use and future. (Bhise.S.N. 2004. Decolonizing the Commons. Seva Mandir, 2004)

#### Gram Vikas Kosh

The Gram Vikas Kosh (GVK) (Village Development Fund) was designed to be the village corpus fund. The GVK was the new commons, historical and conflict free. It was to be built out of the villager's own contributions, there by ensuring absolute ownership. It would provide the villagers a reason to meet and deliberate on issues of common concern. GVK would act as the conduit for all funds and accountability (from recipients of funds). GVK would also provide communities with a platform where new norms could be created and tested, and then applied to other spheres of life. Also, the process of creating and managing the GVK would foster among them the capacities to demand accountability from other than development actors. At present there are 533 GVKs with a total fund of more than Rs.22 million. It provides a context to all village level interactions of Seva Mandir. This is seen most clearly in the case of the livelihoods programme. The establishment of GVK grew out of the need to create solidarity and capacity for sustainable land use at the village level. Now that the idea of GVK has taken root, it has become an instrument for foraging the solidarity and norms needed to make broad - based work on natural resources possible.

(B.Pankaj, 2004,Land, Community and Governance, Seva Mandir and www.sevamandir.org)

The following is a case study of the village Barawa. The setting up of the Gram Vikas Kosh and interventions in the area of natural resource management not only succeeded, additionally the effects were seen in various other aspects like women empowerment and child development.

#### Case Study 1 - Village Barawa

Barawa is a village of 122 households in Nedach panchayat of Rajsamand district, at a distance of 38 kms from the district headquarters. The households are a mix of Rebaris, adivasis (Bhils) and Rajput castes. The village has been associated with Seva Mandir since 1975, initially through the adult education programme and then subsequently in the form of pastureland development, watershed development, health, education and women & child welfare. These activities in Barawa are centred on the idea that village people come together to work for quality education, health care and sustainable livelihood resources for all its inhabitants, irrespective of gender, class or caste denomination. The activities are also designed to develop a democratic ethos that can enable well off and poor people alike to work together for a more just society.

#### Gram Vikas Kosh - the Village Development Fund

The village group, also called the *samuh*, has 118 members from all caste backgrounds. All the castes are equally represented on the 12-member Gram Vikas Committee (GVC/the executive body of the *samuh*), of which 4 are female. The committee is very active in the management of the pastureland and also handles the responsibility for monitoring the paraworkers in the balwadi (pre - school centre), health and forestry extension programmes. The paraworkers' stipend is contingent on the GVC's evaluation of their work, making them directly accountable to the village.

With the addition of a grant of Rs. 150,000 from Udaipur based company Hindustan Zinc Limited, the village development fund currently stands at Rs. 580,213. In addition to providing financial support to the old interventions, the GVK also helps the village undertake strategic and new interventions. In March 2004, one of the SHGs of Barawa borrowed Rs. 125,000 from the GVK to set up a milk dairy. This was added to a loan of Rs. 50,000 from the local Bank and to the existing SHG savings to create an account of Rs. 189,000 which was shared between the 14 members of the SHG. Seva Mandir assisted in the purchase of cattle and their insurance and helped formulate a repayment schedule at 12% per annum. After the success of this venture, a second SHG borrowed another Rs.125,000 from the GVK in December 2004, using the fund for investment in dairying and meeting consumption requirements.

#### Women's Groups

Traditionally, the Rebari women do not venture outside of their homes much. In Barawa also, the Rebari women have, with great difficulty, started



venturing out of their homes only recently. While most of the Barawa women belonging to all castes are part of the women's group, 61 of them are also involved in savings and credit activity. In the past few years, these SHGs have formed linkages with banks and

borrowed Rs.180,000 that has been repaid on time. They have used this loan for diverse purposes such as purchase of cattle, house and well repair, purchase of income generating assets like sewing machines and for marriages. The SHGs have also used their savings and bank loans to pay off their old debts of the moneylenders for which they were otherwise paying huge interest. Moreover, this was an extremely difficult task for all involved as the loan taker and the moneylenders both belonged to the same social fabric. Hence negotiating for a new kind of relationship within the village was not easy.

# **Regeneration of Pasturelands**

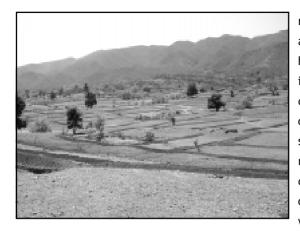
Seva Mandir's earliest intervention in the village on natural resource development was in the form of community pastureland development in 1989, despite

the opposition of some allegedly corrupt panchayat members. The Barawa villagers were aware of the corruption and inefficiency rampant in the panchayat, and insisted on involving Seva Mandir in the work. Even after the work



started in 1989, a few villagers instigated by the panchayat tried to create obstacles in the work. This opposition was, however, surmounted by the collective will of the rest of the community and the development of the pastureland was completed in 1992. About 23 ha of pastureland were covered, with 7 hectares remaining open for grazing.

However, in 1994, encroachments on the common land, supported by the Sarpanch were proving damaging. The village collectively decided to remove these encroachments and enclosed the remaining portion of the pastureland too. In 1996, the remaining work on common pastureland was completed. This way, a total of 30 ha of pastureland has been developed. The regeneration of grass has resulted in assured fodder availability for the village. Even in poor



rainfall years, the average households' grass harvest has been high. It is remarkable that even during the summer of 2000, when the surrounding areas were reeling under the drought-induced shortage of food, fodder and water, Barawa village was

in a position to fulfill its own requirement of cattle fodder and sell off the excess two truckloads of grass worth Rs. 25,000 outside the village.

#### Watershed Development

When the benefits accruing from the pasturelands became evident to the people, they decided to extend this work to the entire area of the village by developing all kinds of land - agricultural land and wastelands - and requested Seva Mandir's support for the work. This was the beginning of the watershed development programme. After the completion of the soil and moisture conservation activities in 2000, three more anicuts were constructed by the year 2005. In all, 338 ha. of land were treated under the watershed programme. The results of the intensive work on development of pasturelands, agricultural land, wastelands and water resources are evident in Barawa. Non-irrigated land in Barawa has almost halved in the past decade, which indicates that increased availability of water has encouraged irrigated farming. The improved water availability and soil moisture regime has also influenced the cropping pattern and crop productivity. The share of wheat (an irrigated crop) has increased from 27% to 33% of the total land, while the share of maize (a rain fed crop) has dropped dramatically from 62% to 37%. The reason for this drop being that maize has been replaced by cash varieties like sugarcane and

vegetables. This has led to considerable economic benefits resulting in decreased differences between the castes and greater village confidence.

#### **Child Development**

A *balwadi* centre is being run by a woman named Laxmi, since November 1999. Laxmi is very creative and active; the children attending the centre take keen interest in activities like paper folding, stories, songs and games. Laxmi is also a Master Trainer and plays an important role in imparting training to fellow *sanchalikas* in the block.

#### Social Transformation

Socially too, the village has seen a transformation after implementation of these programmes. The common property resources of the village allow equal access to everyone, including the poorer adivasi families. Distribution of benefits from the commons - for example, grass harvested from the pastureland - is equitable, due to which the poorer sections have a sense of equal ownership of the resource. The process of developing common resources has created a mechanism in the village for the people to come together and form a truly empowered village institution. None of this has been very easy and even in a strong village like Barawa, this cohesion seemed to be threatened during the last year's panchayat elections. Barawa is representative of struggles and successes of development action.

The above case studies set in the same village, show how interventions for developmental activities in one sector can have a spill-over effect and support and aid development of the community in other spheres as well. It also points towards the importance of a multi faceted approach, which goes to improve quality of life and the environment.

# 6

# Innovations with Grazers in Belgaum

Shramik Abhibrudhi Sangh (SAS) is a unit of Jana Jagaran working in the Belgaum district of North Karnataka with the aim of building harmonious communities of diverse people, religions, languages and cultures with access to basic necessities of life in a clean and healthy environment. The main activities of SAS are -

- \* Empowerment of traditional efforts
- \* Formation of Self Help Groups
- Programs on Panchayat
  Raj institution
- \* Functional vocational trainings
- \* Pre-school education
- \* Micro watershed development and management
- \* Bio-gas and rural sanitation
- \* Livelihood and institutional learning

The livelihood initiatives of Jana Jagaran (SAS) have been very effective with the results being visible at field level.

# Case study 1

# Skill Development and Market Linkage

Kadoli village in Balgaon Taluk has 48 houses with the main livelihood activity being livestock rearing and cultivation. On an average, each household possess

20-50 sheep of Dakkar breed. The sheep are black in colour and each sheep gives 15-20kg of wool per year as the wool grows fast. Prior to independence the community was engaged in supplying blankets to the police and defence but post independence, the orders stopped and so did the work.

SAS promoted an SHG in the area and trained sixty people including men and women in handicrafts and weaving. The people through the SHG have contributed to the setting up of a village centre. A market for the finished products has





added to the income from livestock and the centre serves as work place for the people. Similar intervention was undertaken with the shepherds in other villages like Huvloor, Rajkatti and Makelmadi. Besides generating employment, additionally as a result of the

intervention people have started sending their children to school.

#### Highlights of their Intervention

Vocational trainings on handicrafts with various items like cloth, leather and jute have been provided. The products being manufactured are known for the quality and design with a huge demand in Indian as well as in Japan and European countries.

Community centres have been set up where both training and the work is carried out. This has resulted in assured employment and income for many villagers.

The organization has promoted 600 SHGs, 8000 Bio-Gas plants, 40 barefoot workers in 4 taluks of Belgaum district. NRM - Watershed Development has been taken up in 6 villages. Regularly, capacity building trainings on PRI, Vocational, Gender, and health is done in different places of the area.

him improve his livelihood and livestock from 10 sheep and 5 goats to 60 sheep and 15 goats. This community, in groups of 3-4 persons, travel hundreds of kms in search of food and fodder for their livestock. They usually contact landlards who in

food and fodder for their livestock. They usually contact landlords who in exchange for manure in the form of cattle dung and livestock droppings provide food items like jowar, tea, sugar and upto Rs. 100 per day and fodder for their cattle and small ruminants like sheep and goat. They are also allowed to camp in the farmers land. sheep. Mr. Bassappa Hanumanthappa Torgal and Mr. Fakirappa Hanumanthappa Torgal of Chunchnur village in Ramdurg Taluka are two traditional sheperds and brothers as well. The brothers amongst themselves own 201 sheep,

Trainings were also given to unemployed youth as para veterinary workers.

With the loan, lamb were purchased by the tribes for Rs.800 to Rs. 1000 and within a year of rearing they managed to sell it for Rs. 2300 to Rs. 2500. Thus they earn a profit of around thousand rupees in a year on each sheep, Veterinary support has also increased the livestock population.

#### Case Study 3

SAS began providing loans to SHGs formed

by this group for sheep

and goat rearing. They

organized training

programs on the care and management of the livestock and estab-

lished linkages with

livestock department.

# Free Range Grazing and Cultivated Fodder Grazing

Chunchnur village in north Karnataka is home to nomadic tribes, who have, since ages, been following a nomadic lifestyle migrating to find food for their

# Case Study 2

## Livestock Development

Another important area of work for SAS is the development of livestock. The main livelihood of the communities depend on livestock rearing and agriculture. Kuruba community is a nomadic pastoral community of the area.

# Trained Livestock Worker

Mr. Maruti Lakappa belongs to the remote village of Chunchunur. As he showed interest he was given training as a para livestock worker during 2004. His individual interest in learning allopathic as well as ayurvedic methods of cattle treatment coupled with training has made him knowledgeable. Besides, he has established a good rapport with the communities as well as livestock department.

He undertakes visits to different villages to treat animals and in critical cases uses his contacts with the livestock department to get the animals treated. As a result of his services he has become popular and currently earns on an average Rs.250/-per day. A motorbike and mobile phone are the accessories helping him extend his area of operation. He expresses satisfaction from the service rendered which has also helped him improve his livelihood and livestock from 10 sheep and 5 goats to 60 sheep and 15 goats.



197 ewes and 4 rams, 10 acres of irrigated land and 6 acres of semiirrigated land. (They bought ten acres of irrigated land at the cost of rupees two million.)

Of the irrigated 10 acres, sugarcane is grown on 2 acres and the rest used for cultivating fodder. The 6 acres of semi-irrigated land is also utilized for sugarcane cultivation. With the help of grazing hands, the sheep graze on free

#### Village: Chunchnur

Land: Semi irrigated and irrigated Shepherds: Bassappa Hanumanthappa Torgal, Fakirappa H. Torgal Number of sheep: 197 ewes + 4 rams Fodder land: 8 acres (all irrigated) Sugarcane land: 8 acres (6 semi irrigated and 2 Irrigated) grazing land in exchange for droppings. In the evenings from 5 to 7 p.m. the sheep graze directly on the 8 acres of standing fodder land - mixed crop of maize, jowar and cowpea, section by section. The land is

very well managed to provide fodder for their 201 adult flock and the additional young ones around the year.

Their flock is robust and the healthiest among all the flocks of the village as the additional food, tops up their food intake from free grazing. The ewes conceive regularly and deliver healthy lambs. The lambs fetch around Rs.1250 - 1300 each as they rarely suffer from diseases. Besides the food, the village livestock workers (VLW) now play a big role in this. These VLWs are in constant touch with the shepherds to vaccinate and de-worm their sheep and goats regularly and provide mineral supplement during pregnancy. The chart below has been prepared by the brothers with Jana Jagaran workers. The figures clearly show that fodder cultivation is more profitable than cultivating sugarcane.

	Sheep and goat		Sugar cane	
1.	Meat price is on the increase year after year	1.	Price is static and it becomes less	
2.	Lambs market is cash, easy liquidity, don't have to go far, no panic selling	2.	It takes months to en-cash, difficult if cutters are not available, cutting cannot be delayed.	
3.	Limited water required for fodder, crop don't suffer badly in case of shortage	3.	Needs lot of water, in scarcity the crop suffers.	
4.	Less manure and no pesticide	4.	More manure, more pesticide	
5.	Enriches soil in the long run	5.	Depletes soil in the long run	
6.	Superior soil not needed	6.	Needs superior soil	

But the brothers feel that even though the economic returns were higher per acre through shepherding one should opt for mixed farming, keeping in mind the bio diversity needed to balance both the professions. The brothers are convinced that sheep husbandry with agriculture is more rewarding than pure agriculture. According to them the sheep unit should not exceed 150-200 with one person to graze 50 sheep and their lambs. This daring experiment of these two brothers has given a new challenge to shepherds in this area and a boost to fodder cultivation.

The case studies in this section demonstrate how interventions can be made without undue changes to their traditional ways and also by educating people to realize and assess benefits and losses for themselves. They also demonstrate an innovative integrated thinking on agriculture, which combines agriculture and pastoralism in a difficult semi-arid area.

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