
Enhancing Livelihoods from Non Timber Forest Produces: Approaches, Strategies and Lessons

Barna Baibhaba Panda

Introduction

Case studies as an instrument of creating/evolving a body of knowledge on a particular subject are now well established. Case studies are multi perspectival analyses that bring out the voices, views and standpoints of a range of stakeholders and the interactions between them. Typically, the unit of analysis in case studies is a course or system of action rather than an individual or group of individuals. Hence the issues that are fundamental to the course of action adopted/may be adopted are examined and implications brought out. The Livelihood School as part of its knowledge building agenda documents livelihood interventions by both state and non state agencies and develops case studies to understand the intricacies involved in the livelihood promotion efforts. The knowledge so developed are meant to be disseminated to the practitioners who in turn develop a systematic understanding of livelihood promotion, learn from past experiences and are better positioned to handle livelihood promotion tasks.

Non timber forest produces (NTFPs) have served as an engine of livelihood promotion in a number of interventions made by both Govt. agencies and NGOs, especially for the forest dwellers. The Livelihood School as part of its effort to systematically understand the livelihoods of forest dwellers decided to document livelihood interventions using non timber forest produces(NTFPs) as the principal natural resource. A set of six interventions spread across the country were selected. Cases were documented during 2008 and were given the final shape based on feedback received in a workshop held in early 2009. The cases, location of the interventions and the intervening agencies are given in Table 1.

Table 1
List of Cases, Location and Agency

Sl. No.	Location of the intervention	Intervening Agency
1	Nilgiris Biosphere Reserve	Keystone Foundation, Kotagiri
2	Visakhapatnam district of Andhra Pradesh	Kovel Foundation, Visakhapatnam
3	Mandla District of Madhya Pradesh	Udyogini
4	Tamia block of Chhindwara district of Madhya Pradesh	Madhya Pradesh Vigyan Sabha, Bhopal
5	Chhattisgarh state	Chhattisgarh Minor Forest Produce Federation (CGMFPF)
6	Daspalla block of Nayagarh district of Orissa	Manav Vikas/Sraddha Enterprises, Bhubaneswar

This paper looks at the environmental and organizational setting of the interventions, the design of the interventions including the scale, the outcomes and impacts and attempts to synthesize the elements common to the success or shortcomings.

Selection of the Cases

While selecting cases various criteria were considered. Geographic location was an important criterion. While Kovel is located in the Eastern Ghats, Keystone is in the Nilgiris in the south. The interventions by Udyogini and MP Vigyan Sabha are in the Vindhyas and Satpura in Central India. While CG MFP Federation had its operations in Eastern plateau, Manav Vikas worked with the *adivasis* living in the foothills of northern end of Eastern Ghats. Out of the six cases, Govt. agency is the intervening organization only in one case, CG MFP Federation. However in three other cases, Govt. agencies are major collaborators. Uniqueness or strength of each of the cases was taken into account while selecting the cases. While Kovel is a technological intervention including its adoption by the local communities, Keystone is working in a designated Protected Area with a clear conservation focus. Udyogini's intervention is more about enterprises and markets. MPVS' intervention is about appropriate technological solutions, testing the solution and releasing it to the market. CGMFP is a story of large scale intervention by a state created special purpose agency. Manav Vikas is about entrepreneurship and technology.

Context of the livelihood interventions

People and their livelihoods

The primary clients in all the six interventions are adivasis and other forest dwellers. While Kovel Foundation is working with the adivasis in the agency areas¹ of Visakhapatnam, Vizianagaram and East Godavari districts of Andhra Pradesh, Keystone is working with tribal groups such as *kurumbas*, *irulas*, *sholigas*, *todas*, *paniyas*, *kotas*, *badagas* of Nilgiris in Tamilnadu. In Mandla of Madhya Pradesh where Udyogini is the intervening agency, tribals account for around 57 per cent of the population. MPVS is working with the primitive tribes of Patalkot Valley of Tamia block of Chhindwara district. Manav Vikas' intervention in Daspalla block of Orissa's Nayagarh district is with the *kandha* tribes.

Subsistence agriculture, wage labour and collection, processing and sale of forest produces form the livelihood basket of the people in all the cases. The major forest produces collected are *mahua*(*Madhuca indica*), *amla*(*Embilica officinalis*), *chironji*, *bhilma* in Mandla, honey, *amla*, gooseberry, *shikakai*, soap nut, silk cocoons in Nilgiris, gum *karaya*(*Stirculia urens*) in Visakhapatnam, *tendu*(*Diosporos melanoxylon*) *patta*, *sal*(*Shorea robusta*) seed, *amla*, *harra*, gums, medicinal plants in Chhattisgarh, *sal* and *siali* leaves, *sal* seed, *mahua*, *amla*, *harra* and mushrooms in Nayagarh. People are engaged for varying periods ranging from two to six months in NTFP collection and sale. As regards returns, it varies from 20-40 percent of the household income. But this income is not evenly spread and comes at a particular period of the year especially during the agricultural lean season.

Organizations and their philosophical standing

Each of the organizations has their distinct history and that shapes their views of existing problems faced by the people with whom they are working. The philosophical standing born out of their world view shapes their strategies and course of action. "Kovel" means gum and Kovel Foundation is the apex association of gum pickers. Hence kovel tree is the basis of livelihoods. So it has to be protected and propagated and the resource has to be harvested scientifically for optimizing the livelihood outcome for gum pickers. Keystone has a strong biodiversity focus and honey bee is the reference species for that. They believe that life cycle of honey bee has strong correlation with the larger environment. Hence honey bee is the "key stone" for their livelihood intervention. Udyogini is about "udyog" (being industrious). Enterprises and economic returns are their core ideologies. Hence creating women entrepreneurs and community managed enterprises were conceived as the solution for the *adivasis* of Mandla. MP Vigyan Sabha's core ideology is "vigyan" (science). Coming up with scientific solutions and popularizing scientific methods are the ideological stance of the organization. CG MFP

Federation is an apex cooperative body having the mandate to manage nationalized NTFPs with the intended outcome of welfare of *adivasis*. Manav Vikas is the result of a desire of a budding entrepreneur who did not succeed in a Govt. agency and intended to experiment the idea in a brain child of his own. Hence machine stitched leaf plates for the urban customers is seen as a tool to enhance the income of *kandha adivasis*.

The policy and institutional context of NTFP management in states

Policies relating to management of NTFPs including procurement, storage, processing, disposal and utilization of revenues accruing from such operations vary from state to state. The two stated objectives of such policies are conservation of resources and welfare of the *adivasis* and other forest dwellers. Till mid 1990s, most states followed a policy of nationalization of produces and a designated state agency had monopoly rights over procurement and trading NTFPs. These were enforced through appropriate transit rules. With the enactment of Provisions of Panchayats (Extension to Scheduled Areas) Act 1996, ownership of minor forest produces was handed over to gram *sabhas*. States accordingly modified their policies and changed their state acts. This ended monopoly rights and brought multiple players, small and big, into the arena. But states still retain monopoly rights over major NTFPs like *tendu/kendu* leaves by not declaring them as minor forest produces. Similarly most states retain control over gums and resins, barks, roots, tubers for conservation and regeneration purposes. In case of Andhra Pradesh, Girijan Cooperative Corporation(GCC) is still the only agency procuring NTFPs. But a certain percentage of revenues now go to respective gram *panchayats*. Madhya Pradesh and Chhattisgarh have a three tier cooperative structure called Minor Forest Produce Federation for management of nationalized NTFPs. In addition they also procure, process and market non nationalized NTFPs. In Chhattisgarh, *tendu* leaves, *sal* seed, *harra* and certain gums and resins are classified as nationalized. In Orissa, 69 produces including *siali* leaf, *sal* seed and *harra* have been handed over to gram panchayats under a new policy on procurement and trade in NTFPs. While management of *kendu* leaves is governed by a separate Act and nationalized under that Act, *sal* leaf extraction and trade is governed by a separate policy. Since Tamil Nadu does not have any area under Schedule V, they need not be guided by PESA. But honey collection in none of the studied states was ever banned per se. But restrictions imposed under Wildlife Protection Act 1972 apply to any human activity inside sanctuaries and national parks. *Mahua* flower does not come under the purview of excise rules in the studied state, Madhya Pradesh. But in states like Orissa, *mahua* flower, though has been handed over to *panchayats*, it is governed by excise rules. Post PESA, transit rules have been liberalized for transport within the state. But most states still retain transit permit for inter state transport barring few like Orissa. States also impose *mandi* tax and forest development tax which distort the terms of trade in the national market.

The issues perceived and understood

In all the six cases, the commonly stated problem was “*the adivasis are exploited*” and “*they are not getting remunerative prices for their produces*”. In Mandla, it was *mahua*; in Visakhapatnam, it was gum *karaya*; in Nilgiris, it was honey; in Nayagarh, it was leaf plates. The reasons cited are defective instruments used by the traders for weights and measures, poor quality of the produce, too many market intermediaries, lack of access to the market, absence of collective arrangements/institutions for procurement, value addition, processing and marketing, lack of knowledge about grading, sorting, drying and lack of money/credit for taking up production and enterprise activities. The second major problem identified was unsustainable and unscientific extraction of NTFP resources leading to long term damage to livelihood security. Kovel, Keystone and MPVS tried to address the second problem in a systematic manner.

The interventions

The six interventions studied vary in their objectives, nature and design. Though the sector is the same for all, strategies vary. Three of the interventions are interventions in a single product (Kovel in gum *karaya*, Manav Vikas in *siali* leaf plates). In three others, though there is a basket of NTFPs involved, the core product remains one (Keystone in honey, Udyogini in *mahua*, MPVS in honey). In CGMFPF case, though there is a basket of NTFPs that are nationalized, the major part of the revenue comes from *tendu* leaves. Two cases namely Kovel and Keystone have a clear conservation focus and sustainability is the key word. Five of the Six interventions have built some kind of infrastructure in the form of procurement cum production centres, godowns, etc. Two of the cases have exclusive retail outlets (Keystone’s Green Shops, CGMFPF’s *Sanjeevani*) for marketing. All the six cases introduce new technology and practices for harvesting and processing of the produces.

Table 2
Cases and the strategy employed

Case/Intervention	Strategy
Kovel	Introduction of harvesting and processing technology for improving the quality of gums, training for adopting the new technology and practices, institution building in the form of Girijan Gum Pickers' Association, advocating for procurement points in <i>shandies</i> (local markets), disseminating knowledge about prices and quality parameters, introducing modern weighing instruments and cash only transactions, increasing resource base through large scale plantation of gum <i>karaya</i> saplings
Keystone	NTFP resource assessment, six conveniently located production centres, introduction of technology for non destructive harvesting and processing of honey, production of a different product(honey and marketing through exclusive retail chains(Green Shops), product innovation and development like candle, pain and lip balms, soaps from bee wax, initial ownership and management by the intervening agency, ownership transfer based on the community fulfilling certain criteria, research for new products, promoting apiculture
Udyogini	Institution building in the form of Women Enterprise Groups, training for enterprise management, building a cadre of Business Development Service Providers, diversifying business, putting up processing units for oil, flour, pulses, provision of working capital
MPVS	Establishment of procurement cum production centre, introduction of new technology and products, market linkage
CG MFP Federation	Formation of three tier cooperative institutions, training for scientific and sustainable harvesting, putting up processing centres, marketing through exclusive retail outlets, certification and branding
Manav Vikas	Training for adoption of new technology, product development(machine stitched leaf plates and card board pressed buffets), provision of sewing machines through a Govt. programme, putting up infrastructure like work sheds, godowns, marketing and market linkages

The actions of the intervening agencies can be classified into two broad categories viz. product and technology related interventions and institution and capacity building related interventions.

Product and technology related interventions

Aggregation involving collective procurement and sale of forest produces has been a major strategy for realizing better prices and income for the producers in livelihood interventions. Both Govt. and non governmental efforts often aim and end at this. But of late there is a realization that this does not make much of an impact on the livelihoods. At best it replaces one or two levels of intermediaries. Equipped with tools like value chain analysis, livelihood promoting organizations (LPOs) have started figuring out where lie the biggest benefits in the chain. They have started working on offering an improved product or a different product that fetches higher value for the primary producers.

In Kovel Foundation case in Visakhapatnam, “*product quality*” was identified as the biggest bottleneck in realizing higher prices. Gum *karaya* is an edible gum and is widely used in food and pharmaceutical industries. The price is directly related to its quality. The tasks were

- i. identify the quality parameters,
- ii. study the current practices that come in the way of adhering to the quality parameters
- iii. come up with a set of practices that would result in desired quality of products

The product that market wanted was gum *karaya* with low bark and other foreign material(BOFM), good viscosity, good swelling ability and in its natural white colour. But the harvesting and the post harvesting practices were resulting in a product far different from what the nature made it to be. Appropriate practices have to be designed, codified and adopted for the desired product. In fact this part of the intervention was made by Girijan Cooperative Corporation, a Govt. of Andhra Pradesh agency having monopoly rights over procurement and trade in minor forest produces. Faced with the problem of burgeoning inventories of gum *karaya* in early nineties, it engaged a pharmaceutical scientist to suggest solutions. Based on his findings and suggestions, gum collection, drying and storage practices and grading norms were developed and disseminated to the *girijan* gum pickers.

Product diversification and product innovation is an important feature of the Keystone Foundation’s intervention in the Nilgiris. Processing for higher value is the mantra. The strategy is designed around “*production centres*”. Each production centre has a defined catchment area and specializes in processing of identified core products. It started with honey. Honey from rock bees(*Apis dorsata*) has got a niche market and enjoys a premium. It offered rock honey in its natural taste yet free of impurities. But the R&D activity has ensured that the byproducts in the production process become the sought after consumer products. Bee wax candles, lip and pain balms using bee wax have been developed, produced and marketed. Production centres are processing *amla*, soap nut, *shikakai*, wild *ber*, *eecham*

grass, etc. Product basket includes salted silvers of *amla*, candied *amla*, soap nut and *shikakai* powders, food additives from *ber*, mats and screens from *eecham* grass, etc. Another innovation that the organization has come up with is the beehives using bee wax.

CG MFP Federation emphasizes and specializes in producing herbal products especially *ayurvedic* preparations. 55 processing centres process *mahua* leaf, honey, *amla*, oilseeds, tamarind and herbal products. Processing techniques have been standardized with the technical assistance of specialized institutions like CFTRI Mysore, CDRI Lucknow and CIMAP Lucknow. That enabled products of desired specifications even though the production centres are dispersed and managed by the SHGs. The products are reaching the market with a common brand name, '*Chhattisgarh Herbal*'.

Changes in consumer preferences and acquiring market spaces in a different orbit require efforts in product innovation and development. Manav Vikas' intervention in Orissa with the forest dwellers is a case of product development and technology introduction and adoption. The agency attempts to convert the market for "*green plates*" into a livelihood opportunity. It enables the producers to produce a different product for the elite segment of the urban market. Hand stitching with twig pieces is replaced by machine stitching with thread. A hard cardboard base is added to suit it for buffet. Standardized products by skilled women catering to a new market offering a premium is the USP. The idea was mooted by a prospective buyer in an exhibition. A state government agency called Orissa Rural Marketing Society(ORMAS) and Manav Vikas grounded the idea and made it a marketable proposition.

MPVS intervention in the Patalkot Valley experiments with new products like *bel* and *jamun* beverages though the scale is very low. Udyogini's intervention in Mandla has not gone beyond aggregation of produces as far as NTFPs are concerned. Processing of agricultural produces like paddy, wheat, oil seeds and pulses have been attempted to meet the consumption requirements of local community.

Institution and capacity building related interventions

Livelihood interventions make systematic efforts at equipping producers in terms of information, knowledge, skills and capital in order to take advantage of both existing and emerging scenario. All the six interventions studied invest heavily in the producers.

Building institutions of local producers has been a critical element of the strategy in all the cases. But the form they have chosen varies from case to case. SHGs are the dominant form of institution at the grassroots level and seem to be omnipresent.

Udyogini goes for Women Enterprise Groups(WEGs) after an intensive selection and motivation process. They adopt a federation form called UJAS at the apex level. CGMFP adopts a representative three tier cooperative model with managerial assistance from state forest department. Keystone prefers to keep the group at the production centre level informal till they graduate to a level where they can manage the relevant functions on their own. Manav Vikas prefers an entrepreneurial approach and functional requirements and costs guide the choice of institution. Hence it has registered a small scale industry to avail credit and tax benefits. Kovel goes for producers' associations called GGPAs and NTFP CIGs. The processes adopted in each of the interventions have been dealt separately in the following paragraphs.

Kovel Foundation facilitated a practice change by grounding the technology suggested by the technocrats. This involved training in scientific collection methods, use of new equipments like improved sickles instead of axes and knives, collection in open mouthed baskets lined with polythene sheets, drying on elevated platforms covered with polythene sheets or *palmyra* leaf, cleaning and grading while it is still wet, etc. Gum pickers are provided with a tool kit as part of the training imparted by the organization. 250 Girijan Gum Pickers Associations (GGPAs) were formed in 15 districts. GGPA members were trained in the new package of practices. Three types of village level organizations are formed and found in this case. They are SHGs of women, NTFP Common Interest Groups(CIGs) and GGPAs. SHGs are the first level of organization in the villages/habitations and universal in nature. All the SHG members engaged in NTFP collection are organized into NTFP CIGs. GGPAs have only gum pickers as members. Seven Mutually Aided Cooperative Societies(MACS) have been formed with 2000 *adivasi* families from 204 villages of 18 gram panchayats of Visakhapatnam district. Its intervention was initially limited to gum *karaya*. Later, it started working on other produces too. Higher prices also led to higher levels of extraction thereby depleting the resource. Looking at the grim resource scenario, Kovel promoted plantation of gum *karaya* species on a large scale. NTFP nurseries were raised and saplings provided to the gum pickers.

Keystone Foundation intended to come up with community managed village level production centres processing forest produces. Producers needed to be equipped with non destructive harvesting practices of various forest produces to ensure a continuous flow to the production centres. Processing and quality control skills needed to be imparted. A select group also required managerial skills to facilitate a smooth transfer of management responsibility to the community members. Keystone had a well laid out plan for capacity building of local community. The first step of the intervention was resource assessment. It was done with the collaboration of local community. Identification of products to be produced in a production centre and details of establishment of the centre were decided in joint meetings. Groups of enthusiastic and competent individuals were formed to

manage production centres. Group size varied between three to twelve persons. A series of trainings on value addition and management were organized. After the establishment of the centres, the groups would work with the Keystone staff for hands on experience. There after groups are provided with revolving fund and their performance monitored. Keystone works with both individual collectors of NTFPs and Village Forest Councils.

Udyogini's focus is on women entrepreneurship. The first stage in the process is the formation of Women Enterprise Group(WEG) with group size of 10-15. Then the new members are exposed to entrepreneurial domain through "*Orientation to Micro enterprise*". 1500 women have been organized under 127 WEGs in Narayanganj block of Mandla district. They are engaged in a variety of activities like *mahua* collection, drying and storage, vermin composting, vegetable cultivation and petty trades. Active members of WEGs are identified during the capacity building phase and are designated as Business Development Service Providers(BDSPs). The second level of training are imparted to BDSPs and that includes skills like supervision, management, quality control, market assessment, etc. 110 BDSPs have been identified and trained by Udyogini. The model adopted by the organization requires two BDSPs, one looking after community mobilisation and book keeping and another serving as transaction point. A federal structure of WEGs called Udyam Jagaran Sansthan(UJAS) was formed in 2005. The idea of UJAS is rooted in the philosophy of community managed enterprises. All WEG members are equal shareholders of UJAS. BDSPs are the agents of UJAS doing the tasks of procurement and sale of produces. UJAS receives revolving funds from Udyogini and on lends it to WEGs. WEGs then on lend it to the members.

CGMFP is a federation of 913 Primary Forest Produce Cooperative Societies (PFPCSs). The federation came into being for realizing the policy directive of a decentralized set up for management of *tendu patta* trade in the then state of Madhya Pradesh in mid eighties. CGMFP Federation is the successor institution in the newly carved state of Chhattisgarh. Village level SHGs form the core of the intervention. They collect NTFPs from the producers. 100 identified PFPCSs procure the produces from SHGs.

MPVS' intervention in Patalkot valley was through the instrument of Common Facility Centre as the point of aggregation of NTFPs and processing of selected produces. The process of organizing the community started with the selection of the *marga darshaks*(opinion leaders) in villages. Then SHGs with both male and female as members were formed. 22 such groups were formed in the area. The organization specifically identified honey hunters and formed six groups of honey hunters. They were trained in scientific methods of collection and processing of honey and use of the kit specially designed by the organization. The four day training included an understanding of bee types, their characteristics, mapping the bee hives, precautions, etc. From 1997-98 to 2006, 719 honey hunters were

trained by the organization across Madhya Pradesh(MP) in collaboration with MP MFP Federation.

Manav Vikas choose the route of technology to enhance income of leaf plate makers. Hence the efforts were directed towards adoption of technology by the plate makers. Supported by the Special SGSY programme, the organization promoted 50 SHGs in Daspalla block. Advanced leaf plate making was identified as an income generating activity for the groups. Initially 45 women from 17 villages were imparted an intensive one month training by a master trainer from Andhra Pradesh. The training had three components viz. basic tailoring involving operation of a sewing machine, leaf plate stitching and minor repairing. Trainees were provided with a stipend during the training period and the produces were purchased. This group of motivated women became the trainer for others as the operation expanded.

All the cases have either built significant collaboration with Govt. agencies or tapped funds from Govt. programmes. In the process they have influenced policies at various levels especially at the micro level. Kovel was able to impress GCC to open collection centres in *shandies*(local markets) in addition to their normal operational strategy of procuring through Daily Requirement Depots. Manav Vikas was able to get the management contract of a state established processing infrastructure. This became an operational model for other sectors also. MPVS was able to sell its new technology and honey hunters' kit to state institutions for large scale replication.

The outcomes

The six interventions studied have produced new technologies, package of practices, consumer products, established new market segments, evolved new financial products apart from community assets and institutions. Let's discuss each of the interventions from the point of view of what they attempted and what they achieved. Table 3 below describes the bottlenecks that were identified by the six livelihood promoting organizations and actions followed by an analysis of livelihood benefits accrued to the forest dwellers.

Table 3
Bottlenecks encountered and actions initiated

Bottlenecks	Actions
Product quality	Introduce new PoPs, train producers in the use of new PoPs
Lack of small scale processing technology	Invest in developing appropriate technology
Lack of appropriate skills to tap an emerging market	-Extensive skill building programmes - Create trainer cadres who are first generation producers of new products
Lack of entrepreneurial aptitude	-Orientation and exposure to business, handhold them to learn the skills -Manage the business, let them see and participate and express their willingness to own and operate, then hand over them
Low volume	-Diversify into other produces -Develop new products using by products
Credit	-Provide credit directly to the producers -Provide through groups(revolving fund for groups)
Low production due to weather fluctuations	-Develop appropriate insurance products for risk mitigation
Marketing channels	-Exclusive retail shops marketing the produces (<i>Sanjeevani</i> of CGMFP) -Retail shops marketing organization's products as well as others' similar products(<i>Green Shops</i> of Keystone)

Kovel wanted better prices for the gum pickers. Poor product quality was coming in the way of better prices. The effort was to improve product quality through adoption of suggested harvesting and post harvesting practices. The practices have to be grounded. That required training of gum pickers, improved infrastructure for drying and provision of harvesting kits. Kovel supported by GCC took up the task. GCC got quality gums and gum pickers got higher prices. The PoP has been standardized and TRIFED, national level apex institution for marketing of tribal produces, has accepted it for dissemination in other gum producing states. Higher prices for gums have also led to increased extraction. Kovel trees have almost disappeared from the area.

Keystone was concerned with conservation of genetic resources in Nilgiris. The key to conservation lies in making the inhabitants stakeholders in the conservation

process. Moreover the locals were the repositories of knowledge about these critical resources. Processing was chosen as the route to give more value to the local community from the same amount of extraction from forests. The intervention started with a systematic understanding of the people and the resources. It was followed up by a resource assessment exercise before actually deciding the nature of the intervention. The strong push for research has enabled development of many consumer products which can be sold locally. Forest dwellers are now managing enterprises. One of the production centres is planned to be handed over to the local community. Govt. departments are requesting Keystone to expand operations to other areas. Traditional knowledge relating to usage and extraction of various species has been utilized.

Manav Vikas was an entrepreneurial effort at providing better prices to a producer group. It attempted this through product development and standardization and market development. It successfully introduced a new product in the market and gave a new technology to the producer. Producers have got better prices. Women are able to influence decisions regarding children's education and health care. A model of collaborative effort with Govt. investing in creating assets and NGO managing the same by paying a royalty has been established.

CGMFP Federation is a state effort at improving the livelihoods of forest dwellers. The structural effort of organizing people dependent on forest produces was backed up by investments in research, extension, putting up warehouses, processing plants and marketing including certification and brand building. The all encompassing strategy is a characteristic of an apex institution for a sector. An institutional mechanism for collection of a large number of NTFPs was established. Produces which were not processed earlier are being processed now. Standard processing techniques for a number of produces have been developed. A retail chain and a brand, *Sanjeevani* and CG Herbal, to take the product to the consumers are in place. Producers have got a buyer who can pay them at pre decided prices.

MPVS aimed at multi sectoral development of *adivasis* of Patalkot Valley. It mostly worked with a small group of tribal honey hunters(*bharias*). Its efforts were concentrated in developing and testing technologies. Honey hunting has become less risky. Honey hunters are getting higher prices. The kit has been accepted in the market and reached a larger number of people engaged in honey hunting through collaboration with MPRLP. Other produces collected by the tribals are being processed at the common facility centre thereby enhancing the livelihood basket.

Udyogini wanted to replicate its model developed with weavers in Pugal in Bikaner, Rajasthan with NTFP collectors in Narayanganj in Mandla, Madhya Pradesh. It followed a systematic approach of promoting women's collective enterprises. It invested heavily in capacity building of tribal women. It created a cadre of semi

skilled service providers. An apex community institution called UJAS was facilitated and nurtured. Women now engage in a variety of collective activities and have the confidence to engage in business. They have read the market for vegetables and successfully entered into that arena. Various costs associated with collective marketing efforts are now being understood better. A base for future entrepreneurial initiatives has been created.

Lessons for the practitioners

a. Forest dwellers are not risk averse and are open to new ideas

Six interventions have tried and implemented many new ideas to which forest dwellers in that particular area were never exposed to. Yet the acceptance level was remarkably high. They have embraced new technologies (processing technologies in Keystone), adopted new practices (collection practices in Kovel), used new tools and equipments (kits for extraction of gums in Kovel and honey hunters' kits in MPVS) and learnt new skills (stitching leaf plates in sewing machines) and newer ways (WEGs in Udyogini) of doing things. This is perhaps because their lives are already filled with daily encounters with risks and uncertainties. The familiar notion of blighted world view due to inadequate exposure coming in the way of progress of *adivasis* does not hold good. If an organization believes that they can make change happen and they have done proper ground work, they could go ahead with their ideas.

b. Long term engagement and commitment paves way for better results

Organizations that have exhibited long term commitment have found better acceptance among the local community and tested success. It takes time for an organization to become a part of the community. Projects come up with infrastructure and institutions and are often loaded with withdrawal strategy and sustainability clause. But organizations promoting livelihoods should have people in mind and strategise for long term engagement with the community irrespective of the duration of the project. Keystone interventions have moved from one level to the other and they have been still working in the area and struggling also. On the other hand, MPVS intervention mostly coincided with the project period.

c. Assess the resources before starting the intervention

LPOs need to conduct an assessment of NTFP resources before engaging in any intervention. NTFP resources though renewable take time to regenerate. The LPO needs to estimate the optimum harvestable quantity of a produce without hampering the regeneration ability. Secondly resource assessment helps in deciding our product basket and designing the right scale of operation. Keystone did a systematic resource assessment exercise before deciding on the produces to

be processed in each of the production centres. Though MPVS attempted processing of forest produces by putting up a common facility centre, but that was not backed up by systematic resource assessment and market development. Hence the turnover and incremental income for the *adivasis* remained low or even miniscule. Kovel also faced the problem of resource depletion as they concentrated on extraction albeit with better extraction practices. Manav Vikas is now procuring *siali* leaves from far off places incurring higher costs to run its production centre in Daspalla.

d. Moving beyond aggregation

Aggregation of produces to realize better prices for primary producers do constitute an intervention in the market. But it may not lead to desired results especially when the scale is very low in comparison to overall size of the market(Udyogini's *mahua* trade). If aggregation mechanism and points exist, the organization need not go for aggregation as a strategy. Rather it should advocate for expansion of the set up(Kovel).

e. Warehousing requirements should not be confused with aggregation

Dwelling units in our forested areas are not suitable for stocking high space requiring produces like leaf plates. That's the reason forest dwellers sell it to both cycle wallah and truck wallah at differential prices. Often this is misconstrued as an aggregation problem. Interventions with this belief attempt at aggregation at SHG level and end up on the losing side unable to bear the loss due to storage. Manav Vikas succeeded because it took it as a warehousing problem and concentrated on warehouse management rather than putting its energies into SHG formation and SHG meetings.

f. Small scale processing may be the solution

Interventions in NTFPs do not necessarily mean endless search for far off markets or market linkages with big corporate players. Big players demand precision in terms of product quality, packaging requirements, delivery schedules, procedural requirements involving huge amount of paper work. It takes time to understand these, meet the specifications and of course involve transaction costs. NGOs on marketing missions need to look at the resource base(total volume available for trade), decide on the scale at which they intend to operate, look at the local markets and explore the possibility of small scale processing to serve these markets (Keystone).

g. Hedge risk through diversifying

CG MFP Federation volumes come from its operations in nationalized forest

produces like *tendu* leaves. But they have diversified into non nationalized ones investing in processing of such produces, product development through R & D, certification and marketing through exclusive retail chains. Volume of business is miniscule compared to the volume in *tendu* leaves. But it helps the organization position itself in the larger green market and hedge risks.

h. Exclusive retail chains need not necessarily exclude others

Two interventions employ exclusive retail chains for marketing their produces. But there is a fundamental difference between the two. Keystone's Green Shops markets products produced by the organization as well as other nature products produced by other NGOs. On the other hand, *Sanjeevani* chain of CGMFP markets only the organisation's products. Keystone has adopted a strategy of achieving volume and making the venture viable on its own. In case of *Sanjeevani*, capital investments and working capital are financed by surpluses from *tendu* leaf operations.

i. Leverage the reach and resources of state agencies

State agencies like GCC in Andhra Pradesh and CG MFP Federation not only enjoys mandate and power, they have the advantage of reach. Moreover they have money and can provide the cushion in depressed market conditions. They have built and nurtured brands (Girijan and CG Herbal) in the market. Organizations can concentrate their efforts in product development and capacity building while using the resources of these agencies for procurement and marketing.

j. Sell the technology and influence livelihoods

One can influence the market by propagating the technology it has developed. Kovel influenced the gum market by transferring the technology to gum pickers in other states after it tested success in its operational area in Andhra Pradesh. MPVS sold its honey hunters' kits and influenced availability and quality of wild honey. In both the cases, state agencies (TRIFED in case of Kovel, MPRLP in case of MPVS) have transferred the technology to larger audience.

k. Keep it with you if required

"We have handed it over to the community. We have no further role." It should not be the universal mantra. If the purpose of livelihood augmentation is served by the ownership and management of the enterprise by the intervening agency (Manav Vikas and Keystone), then so be it. Premature handing over to unwilling and unprepared community groups implies shirking of responsibilities and often negates the gains made.

l. Too small a group may not help

NTFP collection is a labour intensive work. Everything will follow after collection from the wild. This requires hands. If the producer base is very small, the intervention may lead to a wonderful technology; but it would not bring any perceptible impact in the livelihoods of target population (MPVS in Patalkot Valley). It would lead to idle capacity, both institutional and infrastructural. Economically viable sizes should be considered while designing livelihood interventions.

m. Price monitoring is not market intelligence

Price monitoring in the local and wholesale markets should not be confused with market intelligence. Intelligence requires tracking of changes in destinations, use patterns, substitutes, production and price trends in the larger market, tax and duty structures and forecasting of emerging scenarios. *Mahua* market is highly organized and interconnected. There is hardly any difference in the product procured in Mandla in Madhya Pradesh or Gadchiroli in Maharashtra. End use is also the same. But the production and consumption seasons vary. Udyogini's WEGs could not look beyond Mandla. Of late interventions in *mahua* has moved to proper drying and storage rather than aggregation. Credit for enabling increase in holding period has also been tried as another intervention.

n. Conservation pays

Conservation is an economic necessity. Livelihood interventions using forest resources must pay attention to conservation of resources and incorporate conservation in its design. Most of the forest produces exhibit a cyclic trend in production. A depleted resource base may mean a premature end to the intervention itself. For the investments to yield returns over a period of time, organizations must adopt practices that enhances the availability of raw materials. Keystone reaped the benefits of having a clear conservation focus. Manav Vikas is worried because it did not pay attention to conservation.

Conclusion

Six LPOs working in six different parts of the country offer important lessons for those organizations intending to work in the forest produce sub sector. Similarly livelihood professionals can benefit from the experiences of these organizations and have the advantage of starting from better knowledge platform. Strategies that have worked in different contexts, institutional designs that have been employed, tasks related to various functions like procurement, processing, marketing and quality control, responses of stakeholders in different situations, attempts at tackling key concerns like women's legitimate role in decision making processes