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# Livelihood Diversification and Non-Timber Forest Products in Orissa: Wider Lessons on the Scope for Policy Change?

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# Acknowledgements

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| Amba sadha | *Mangifera indica* |
| Aonla | *Emblica officialis* |
| Char seed | *Buchanania lanzen* |
| Chironjee | *Bachanania clauzen* |
| Gum karaya | *Sterculia urens* |
| Harda or Harida | *Terminalia chebula* |
| Harra | *Terminalia bellerica* |
| Karanj seed | *Pongamia pinnata* |
| Kendu (patra) | *Diospyros melanoxylon* (Orissa) |
| Khair | *Acacia catechu* |
| Khanda-khai | A tree bark for which no botanical name could be found |
| Kosa cocoon | *Phoenix sylvestris* |
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| Shikakai | *Acasia concinna* |
| Tamarind | *Tamarindus Indica* |
| Tejpatta | *Cinnamomum tamala* |
| Tembu | *Diospyros melanoxylon* (Madhya Pradesh and Chhattisgarh) |
| Tendu (pata) | *Diospyros melanoxylon* (Andhra Pradesh and Madhya Pradesh) |
| Tholi musli | *Ocimum sanctump* |
| Tora | A bush for which no botanical name could be found |

# Glossary of Terms

| | |
|---|---|
| *Bidi* | Indigenous cigarette, which uses the kendu leaf instead of paper |
| *Crore* | 10 million |
| *Godown* | Warehouse |
| *Gram Panchayat* | Village representative body |
| *Gram Sabha* | Village assembly |
| *Haat* | Village market |
| *Kachua* | Petty trader |
| *Kallam* | Open field for post-collection storage of NTFPs |
| *Kuchia/Kochiya* | Village trader |
| *Lakh* | 100,000 |
| *Phad* | Collection centre |
| *Panchayati Raj* | System of rural local government |
| *Sarpanch* | Head of a *Panchayat* |

# Acronyms

| | |
|---|---|
| AP | Andhra Pradesh |
| DFO | Divisional Forest Officer |
| DRDA | District Rural Development Agency |
| FAO | Food and Agriculture Organization |
| FCI | Food Corporation of India |
| FD | Forest Department |
| (O)FDC | (Orissa) Forest Development Corporation |
| FP | Forest Product |
| GCC | Girijan Cooperative Corporation |
| GDP | Gross Domestic Product |
| GNP | Gross National Product |
| GoI | Government of India |
| GoO | Government of Orissa |
| GP | *Gram Panchayat* |
| HH | Household |
| IRDP | Integrated Rural Development Programme |
| JFM | Joint Forest Management |
| KL | Kendu leaves |
| MoEF | Ministry of Environment and Forests |
| MFP | Minor Forest Product |
| MP | Madhya Pradesh |
| MPP | Minimum Procurement Price |
| NGO | Non Governmental Organisation |
| NSDP | Net State Domestic Product |
| NTFP | Non Timber Forest Product |
| ORMAS | Orissa Marketing Association |
| (P)CCF | (Principal) Chief Conservator of Forests |
| PDS | Public Distribution System |
| PESA | Provisions of the *Panchayat*s (Extension to the Scheduled Areas) Act, 1996 |
| PRI | *Panchayati Raj* Institution |
| PWG | Peoples' War Group (a militant organisation) |
| SD | Security deposit |
| SHG | Self Help Group |
| ST | Scheduled Tribe |
| TDCC | Tribal Development Co-operative Corporation |
| TRIFED | Tribal Cooperative Marketing Development Federation of India Ltd. |
| UFP | Utkal Forest Products Ltd |
| VSS | Van Samrakshan Samiti (Forest Protection Committee) |

# Summary


Rural poverty in India is generally considered to be linked with the lack of access to cultivable land, or with its low productivity. Changes in the collection of gathered items from common property resources such as forests go largely unnoticed, and are not even presented in the national accounts. However, about 100 million people living in and around forests in India derive their livelihood support from the collection and marketing of non-timber forest products (NTFPs). Thus the issue of rights and access to, and income from, NTFPs is basic to sustenance and livelihood for the forest dwellers.

This paper describes how government policies and institutions during the last thirty years in the eastern coastal state of Orissa have affected forest dwellers' livelihoods based on collection of NTFPs. It also suggests policy measures that will help in improving forest dwellers' access to and income from NTFPs.

Orissa is the poorest state in India, with 46% of people living below the poverty line in 1999–2000, as against 26% for the entire country. There has hardly been any improvement in the last ten years, and in many districts, foodgrain production has fallen below what was achieved in the early 1990s. The impact of economic stagnation has been felt on Orissa's forests too, and the State has lost more than a quarter of its forest cover in the last 25 years, though India's forest cover has more or less stabilised since 1985. The fact that, due to the heavy burden of interest payment, salaries, and pensions, the State has few funds for investment in forest rehabilitation, and has no significant externally aided forestry project since 1995, has further compounded the problem. The State also has serious governance problems discussed elsewhere (see Saxena and Farrington, 2003).

Forests are State property and all products growing in forests are owned by the State. The State's control extends even to the designated forest products (such as kendu or mango kernel) growing on private lands and non-forest common lands. Three of the most economically important NTFP items (kendu leaf, sal seeds and bamboo) are nationalised and brought by law under the direct control of the State parastatals. In addition, until March 2000, the State exercised control over many other NTFPs through administrative orders, generally to create public monopolies up to 1985, and after that the State encouraged private leases. Thus for about fifteen years (1985–2000) NTFP policy in Orissa was a source of political patronage rather than a support for people's livelihoods.

Until 2000, even the State agencies entrusted with the objective of giving a 'fair' price to gatherers exploited the poor. In principle, they worked with multiple objectives – to maximise their profits; to protect the interests of the gatherers as sellers; and to satisfy the conflicting demands by industry and other end users. In practice, a hierarchy of objectives developed – industry and other large end-users had the first charge on the product at low and subsidised rates; revenue was maximised subject to the first objective which implied that there was no consistent policy to encourage value addition at lower levels (local processing was in fact discouraged for many commodities, such as kendu and hill brooms; criminal cases were initiated against those who tried to process or store these NTFPs); and the interests of the poor gatherers was relegated to the third level.

Other Indian states have also passed similar laws and orders, but the number of items covered by state intervention up to March 2000 was particularly high in Orissa. Second, although many States supplied subsidised raw material to industry, Orissa went far ahead, and gave the industry monopoly rights of collection, especially during 1990–2000, amounting to a near-surrender of state control over forests.

We describe below policy changes for different categories of NTFPs, and its implication for the poor in Orissa.

## Kendu

Kendu leaves, used in making *bidi*s (Indian cigarettes) are the most important NTFP, both from the point of view of the poor as well as the State. It generates 150 million person days of employment during the agricultural lean season in Orissa and accounts for 75–80% of total revenue from the forests. Since 1973, kendu trade has been a State monopoly, and its parastatals control collection, bundling, storage and sale.

The share of government royalty in total sales has generally been around 40%, although year to year fluctuations have been wild due to uncertainties in production. On the other hand, the share of total payment to labour in the gross annual sales did not increase between 1973 and 1989, but since then has improved considerably, from about 11–14% in the mid-1970s to 25–30% in the late 1990s. However, about 30 to 40% of payment is to fictitious workers and is pocketed by the forest staff. The massive sums of money involved in the kendu business offer opportunities for patronage to both big and petty politicians and forest department officials.

About a million pluckers are engaged during the season, which lasts about 45 days in summer, at a rate fixed by the government (roughly 1 rupee for 100 leaves), but the usual practices of under-counting, rejection, under-payment, and over-invoicing, help government staff to pocket a significant amount of government funds, at the cost of peoples' livelihoods and extra revenues to government. Payments to workers are delayed for about three months, which amounts to the state borrowing at zero interest from the poor.

Although as per government decision, 50% of net government revenues should be transferred to the *Panchayat*s, actual transfer is only about 12%–15%. This is unlike Madhya Pradesh, where the entire net profit is passed on to the pluckers' cooperatives.

Suggestions to improve people's welfare through kendu trade are to:

- Pass on the enormous profits as bonus to the pluckers. If 50% of the royalties were shared with the pluckers, it would lead to an additional income of Rs 1000–Rs 1500 per annum, per household.
- Increase the collection price so that returns from plucking are at least equivalent to the minimum wages fixed for unskilled agricultural work by the GoO.
- Delayed payments should carry an interest of 15% per annum.
- All records of names of people employed and their period together with date of payment should be displayed on the district website for anyone to verify.
- An inter-departmental Study Commission should be set up to include members from the KL Union, representatives of KL pluckers and from NGOs and academic institutions to study the purchase operations every year and give its assessment on the extent it has furthered peoples' livelihoods and how the operations have improved as compared to previous years.

## Bamboo

Bamboo is a significant resource for forest dwellers, who use it in making baskets and other household tools. However, silvicultural techniques have been designed to maximise the production of industrial dry bamboo, whereas artisans require green bamboo. Many states supply subsidised bamboo to industry, but Orissa went far ahead, and gave the industry monopoly rights of collection, amounting to near-surrender of state control over forests. In 1989, several paper mills were assigned the best bamboo areas, under the guise of their being appointed first as 'labour contractors', and then as 'raw material procurers'.

The uncertainty of the availability of bamboo and government's efforts to increase royalties in the last few years forced two mills to close down, and the remaining two to gradually switch over from bamboo to hardwoods for paper production. As a consequence of this technology shift facilitated by cheaper imports and easy availability of hardwoods, such as eucalyptus from Andhra Pradesh, the functioning paper mills in Orissa were not critically dependent on bamboo. When in March 2000, Orissa's government decided to cancel the leases, and bring bamboo forests again under the control of the OFDC (Orissa Forest Development Corporation), the mills decided not to lift bamboo from the forests. Since government had all these years made no effort to develop an alternate market for bamboo, it suddenly found a collapse in its off-take. To avoid further stocking of bamboo in its *godown*s (warehouses), the government decided to stop the harvesting of bamboo from forests for the last two years. This has adversely affected the poor who were dependent on being hired for the harvesting, transport and storage of the crop, and thus have lost their livelihoods.

As already stated, policy relating to bamboo has so far been geared to the needs of industry, and not of artisans. Hence a fundamental change is required both in respect of silvicultural techniques and marketing strategies. Rather than producing short, dry and thin bamboo, the Forestry Department (FD) should shift to long, green and thick bamboos, for which there is demand both from artisans as well as the construction industry. Along with changing the technology to maximise the production of green bamboo, one would also have to streamline the procedure for making this available directly to the artisans.

## Sal seed

Sal seed was nationalised in 1983 in a bid to protect the interests of the primary gatherers and its collection was handed over to two government corporations, the OFDC and TDCC (Tribal Development Co-operative Corporation). However, between 1995 and 2000, several private leases were given to the oil mills. Average annual production during this period declined to less than 50% of what was procured by the official agencies before 1995. This may be due to deliberate under-reporting by the mills so as to avoid payment of royalty and other taxes, and actual collections may have gone down due to the indifferent financial condition of most of the oil mills that were given monopoly rights.

Since March 2000, sal seed is again under government monopoly of the two corporations, TDCC and OFDC. However, the price paid to the primary gatherer has remained stagnant at Rs 3 per kg for the last five years. As daily collection is not more than 6–8 kg per day, a person can earn only about 20–25 Rs a day, which is just 40–50% of the minimum prescribed wage.

## Leases for other NTFPs

Although *de jure* only three items, i.e. sal seeds, bamboo and kendu leaf, are specified as 'nationalised', through administrative orders, the state brought under its exclusive control almost all marketable NTFPs through monopoly leases. Until the mid-1980s, such leases were generally granted to the TDCC and OFDC, both government organisations. The performance of these parastatals was hardly satisfactory. They are confronted with growing liabilities and huge staff, and opted to limit their role by becoming rentiers. Thus the way the scheme worked in actual practice was that the poor were taxed to support an inefficient government organisation.

During the period 1985–2000, private parties and industries were increasingly brought into the picture and were leased forest produce. The orders creating private monopolies since 1985 were ad hoc, arbitrary, and acted against the principles of natural justice, as no tenders or offers were invited before bestowing monopolistic powers to private agencies. The orders smacked of favouritism, and a lack of probity and openness. The gatherers were required to sell NTFPs to the company's agents at preset prices. Although in theory a State- or district-level committee fixed the price for each item, in practice there was no check on the price paid by the monopolists to the gatherers. State monopoly provided room for private monopoly, and aided and abetted market imperfections, besides pouring money into the coffers of bribe takers at all levels.

A study (IFAD, 2000) revealed that the actual price received varied from 1/4 to 3/4 of the minimum price fixed by government. Monopoly and poor regulatory monitoring adds to overuse of resources in areas close to habitation. Because of the uncertainties created by law and the fear psychosis in the minds of gatherers, most NTFPs were sold by gatherers without any processing or value addition, even when the NTFPs concerned were not nationalised.

## Policy change in Orissa in March 2000

Orissa's policy of creating private monopolies attracted a great deal of criticism, both from the Government of India (GoI) and civil society. In December 1996, GoI passed a new law, according to which *Panchayat*s in tribal areas are the owners of NTFPs. These developments forced the GoO to review its lease-oriented policies. It passed a new order on 31st March 2000 vesting on the *Gram Panchayat*s (GPs) the authority to regulate the purchase, procurement and trade so that the primary gatherers get a 'fair price for the NTFPs gathered by them'. Although kendu, bamboo and sal seeds continue to be under government monopoly, 68 other NTFPs, such as tamarind, honey, myrabolans, etc, have been kept under the control of *Panchayat*s throughout the State. There would be no requirement of trade and transit permit, no levies and no royalties for these 68 items. The new policy abolished the 'leasing system' and *Panchayat*s were given the power to register the traders at local level and to monitor their function especially with regard to price.

Although three years have passed since the declaration of the policy vesting control with the GPs, the situation in the market has not changed for the better. Prices of most of the NTFPs have remained below the minimum procurement price fixed by the District Collectors. Most traders are still unregistered and *Panchayat*s make no efforts to enforce the price fixed by the District Magistrates.

According to NGOs, the returns to gatherers can be improved only through support price-based aggressive buying of NTFPs by state agencies, just as it is done for wheat and rice. This alone, according to them, can break the dominance of the traders and their linkages with the village level market. However, the experience of government purchases of foodgrains shows that it encourages and promotes inefficiency and corruption in the Food Corporation of India (FCI). In the case of the

NTFPs, it is doubtful whether assigning a bigger role to government institutions, which have been accused of inefficiency, collusion with traders, and a callous attitude towards forest gatherers, would work, unless there is an all-round improvement in governance and the efficiency of these government parastatals. Price support combined with aggressive buying from government can certainly improve gatherers' incomes, but it becomes difficult to sustain over a long period. Government corporations make huge losses, and therefore the entire operation requires continuous and increasing subsidies from government.

The price fixation by Magistrates has another practical problem. Often the price fixed is higher than what the market can bear, as no Magistrate would like to be criticised in the Legislative Assembly or the Press for fixing a low price. When the price fixed is unrealistic, not only are village councils unable to find buyers at that price, but government commercial agencies withdraw themselves from the market. This reduces the number of buyers, and thus acts against the interest of primary producer or gatherer.

## Suggestions for policy change

Several initiatives need to be taken, if the income of tribals and forest dwellers is to be maximised. A government agency such as the Forest or the Tribal Development Department, assisted by civil society, should be involved in informing tribals and gatherers about the prices prevailing in different markets, improve marketing practices, and act as a watchdog. It may be worthwhile to examine if promotional Marketing Boards, as distinct from commercial corporations (which are inefficient, and can only function as monopolies), should be set up with responsibility for dissemination of information about markets and prices to the gatherers.

The government should encourage bulk buyers and consumers such as exporters of herbal medicines to establish direct links with the villagers. It should also address issues such as creating proper marketing yards, market information systems, storage space and minimum processing facilities at local level. Simple processing activities, such as broom-making, leaf plate-making, tamarind processing, mat and rope-making, should be encouraged in the household/cottage sector.

For encouraging micro-enterprises at the village level, the following inputs would be required:

- *Marketing of primary commodities*
  - organise producers/gatherers into groups to improve their bargaining power;
  - inform them about prices in other locations and market channels;
  - help these groups to reach more profitable markets including giving access to working capital;
  - reduce the number of intermediaries;
  - reduce transport costs through bulk shipments;
  - develop infrastructure or services for transport.
- *Processing*
  - provide access to technology and finance for processing;
  - train the members of the processing unit;
  - improve quality control;
  - diversify the products processed;
  - reduce the environmental impacts in processing.

- *Marketing of processed products*
  - conduct a market assessment and prepare a marketing strategy;
  - train members about various markets;
  - link centres of production and marketing;
  - promote the purchase and use of sustainable produced products;
  - promote packaging and use of proper labels and brand names;
  - obtain premium price for environmentally sustainable products;
  - provide finance for marketing, storage and transport.

Clearly, *laissez faire* is not going to help the poor in all cases. Where government is the sole marketing agent, it is inefficient; and where it is left to private trade, it may still not provide sufficient returns to the gatherer on his labour. Thus de-nationalisation *per se* may not remove all market constraints which inhibit a gatherer in realising the full value of his labour.

To conclude, rather than being a monopoly buyer of NTFPs or trying to regulate price through *Panchayat*s, the government should adopt market friendly policies, facilitate private trade, and act as a watchdog rather than eliminate the trade. It should encourage local bulking, storage and processing, and bring large buyers in touch with the gatherers, so as to reduce the number of layers of intermediaries.

Low returns to gatherers in Orissa have generally been attributed to policy distortions leading to public and private monopolies, and to traders' hold over poor and ignorant forest dwellers, especially tribals. While the explanatory power of these two factors is not disputed, this paper argues that the very nature of dispersed and uncertain production combined with fluctuating demand and undeveloped markets (lack of local storage and processing, poor communications) may also explain why the freeing of market controls in March 2000 has not led to an increase in gatherers' incomes. Overcoming constraints of underdeveloped markets may require more and not less of government intervention, but of a different type than attempted so far in the last thirty years.

The paper ends with a brief discussion on two issues relating to NTFPs. First, government should reconcile the legal and administrative contradictions between the NTFP policy, Joint Forestry Management (JFM), and new GoI legislation in the form of the *Panchayat*s (Extension to the Scheduled Areas) Act, 1996 (PESA). JFM is based on the concept of people being co-managers, whereas nationalisation treats people as mere wage-earners. PESA bestows ownership rights on the entire *Gram Sabha*/*Panchayat* with no condition that the people need to protect forests before they enjoy the usufruct, whereas JFM is based on the principle of 'care and share'. PESA views people as the owners of NTFPs, but most important NTFPs are still owned by government, and this contradiction needs to be resolved.

Secondly, while developing markets may help the gatherers to obtain a better return on their labour, it may increase pressure on forest resources. In spite of the fact that the declining production of NTFP is a very serious problem for forest communities, as well as for maintaining biodiversity, the regeneration of NTFP has attracted very little official attention. This needs to be contrasted with the policy for agriculture where production issues have attracted a vast amount of funding for research and extension.

So far, the entire thrust of forestry has been towards growing timber, which calls for ruthless cutting back of all ground vegetation, except the species chosen for dominance. It results in the removal of much of the material which could serve people's needs. Therefore forests should now be used for mixtures and multiple use with timber as a by-product. This calls for a modification of the existing silvicultural practices, not so much to achieve high forest as to restore to the forests an admixture in which a sensible balanced level of vegetation would be available to meet gathering needs.

Policy change is also required in terms of the species which are planted in forests. Forestry programmes need to consider seriously how to regenerate tress that produce valuable NTFP. This could also be built into watershed programmes being taken up extensively by several bilateral and multilateral agencies. At the moment, forestry species taken up for plantation generally give preference to commercial species. If one could also plant improved varieties of tamarind, mahua, chaar, medicinal trees like aonla, karanj, etc. and ensure that watersheds promoted these in their plantation programmes, then it would help regenerate the forests, while providing support for the tribal economy in the long run.

# 1 Orissa's Declining Forests

Rural poverty in India is generally considered to be linked to a lack of access to cultivable land, or to its low productivity. Changes in the collection of gathered items from common property resources such as forests go largely unnoticed, and are not even accounted for in the national accounts and Gross National Product (GNP). However, about 100 million people living in and around forests in India[1] derive their livelihood support from the collection and marketing of non-timber forest products (NTFPs). These NTFPs provide subsistence and farm inputs, such as fuel, food, medicines, fruits, manure, and fodder. The collection of NTFPs is a source of cash income, especially during the slack seasons, because of their increasing commercial importance. Thus the issue of rights and access to NTFPs and incomes from NTFPs is basic to sustenance and livelihood for the forest dwellers.

This paper describes how in the eastern coastal state of Orissa, government policies and institutions have affected the collection of NTFPs by forest dwellers, and incomes therefrom, during the last thirty years. It also suggests policy measures that will help to improve forest dwellers access and income from NTFPs.

Little empirical and rigorous work has been done in India on the problems faced by forest dwellers. This paper is therefore based on the author's repeated visits to the State in the last ten years, and on discussions with stakeholders, forest dwellers, NGOs, traders, foresters and policy-makers. It also draws upon the author's previous work on Orissa, both published and unpublished, and on several notes and articles written by social activists.

The findings of this paper should be treated as tentative and exploratory. More serious and long-term research is needed to answer several vexatious questions relating to the interaction between policy, people and markets for NTFPs.

Orissa, with 4.7% of India's land mass and 36.7 million people (GoI, 2001), accounts for 3.6% of the population of the country. Out of the total area of the State,[2] 37.3% has been declared as forests, as against only 21% for the entire country. Orissa is the poorest state in India, with 46% of people living below the poverty line in 1999–2000, as against 26% for the entire country. Scheduled castes and scheduled tribes (SCs and STs), considered to be the most deprived ethnic groups throughout India, account for 16.2% and 22.2% respectively of the State's total population[3], and are most dependent on forest resources for their livelihoods. Such dependence is particularly significant for tribal groups who in some regions derive almost half of their sustenance and income from gathering from forests.

Between 1993–4 and 1999–2000, poverty levels improved only by 2% as opposed to 10% for India during the same period. Agricultural production remained stagnant in Orissa throughout the 1990s, and in many districts, foodgrain production has fallen below what was achieved in the early 1990s.

Orissa's forests have also felt the impact of economic stagnation. Actual forest cover of more than 10% tree density declined by 12% in Orissa during 1987–99 (see Table A4.1), compared to a decline of less than 0.4% for the entire country (Kumar and Saxena, 2002). During 1980–95, Orissa lost 9.4% of its dense cover whereas during the same period India as a whole improved the dense cover by 1.6%. If the longer period 1972–99 is considered, Orissa has lost more than a quarter of its

1 India's population in 2001 was about one billion.
2 In this paper the word 'state' is used in its juridical sense and the word 'State' denotes a constituent province of the Indian Union.
3 The share of these groups in the country's population was 14% and 7% respectively in 2001.

forest cover. The fact that the State has little plan funds for investment in forest rehabilitation,[4] and has no significant externally aided forestry project,[5] has further compounded the problem.

Forests in Orissa have one unique feature: roughly half of the total area under forests is not under the ownership of the Forest Department, as only the reserved forests are vested with them. The rest is with the Revenue Department, but it is *de facto* open access land, and not yet surveyed. Lack of settlement has also meant that peoples' rights over non-reserve forests are vague and undefined. The absence of the FD's control over these lands has one silver lining; in many parts of Orissa, people have themselves come forward to protect forests and derive usufructuary benefits from them. In fact, the number of self-initiated protection committees is higher in Orissa than in other States.

Forest degradation has affected poorer sections of the community (e.g. tribals, scheduled castes, women and other disadvantaged groups) in several ways:

1. The flow of forest products to poor households has reduced. This is not only because of deforestation, but also because of a lack of emphasis on planting usufruct-based trees (see Chapter 11) that are slow to grow and are often browsable, hence difficult to protect.
2. Degradation has resulted in decreasing employment opportunities. The rural poor's food and livelihood security have both thus been adversely affected.
3. Three, the collection of NTFP is primarily the occupation of women, and they are the ones who bear the burden of increasing deforestation.
4. As the prevailing forest technology has favoured commercial value crops over livelihood needs, the local population has become alienated from 'their' forests in many places and therefore do not identify themselves with these lands any longer.
5. As the burden of poverty becomes severe, the poor are forced to sell a greater proportion[6] of collected NTFPs rather than consuming them within the family. Thus there has been a perceptible shift from consumption to the sale of NTFPs by communities. Apart from affecting women's relative status (as sale is generally a man's prerogative), deforestation and greater dependence on sale have also caused health problems. For example, medicinal herbs which were easily available in the past in forest areas are becoming extinct and are being sold rather than consumed in the household. This leads to an increased incidence of night blindness, dental caries, anaemia, gum-bleeding and other diseases (Chambers et al, 1989).

Two factors about the political economy of Orissa are relevant to our discussion. First, the tribal regions are not very well represented in Orissa's political structure. Its politics and administration is dominated by the coastal districts, which are comparatively more prosperous and better educated. In fact, even at the lower levels, most government servants are from the coastal districts, and look down upon tribals. They regard their postings to the tribal districts as punishment, and try to come out of it as soon as possible. Second, Orissa, being rich in minerals, has a powerful lobby of traders in minerals. They have also been able to create an impression in the minds of the policy-makers that industrialisation through the exploitation of minerals is the only route to Orissa's development. Forced possession of tribal lands for mineral exploitation has often led to clashes, and even police firing in tribal districts. Even such blatant instances of injustice against the tribals does not evoke much sympathy from Orissa's administrators and politicians.

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4 Due to heavy burden of interest payment, salaries, and pensions.
5 The last externally aided forestry project by SIDA was wound up in 1995.
6 Several studies quoted in Warner (undated) show that forest communities in other countries too are increasingly using NTFPs to generate cash incomes.

Orissa's policy-makers have always believed in opening up their economy to the private sector. It tried to involve private sector in forest management in the 1980s, and later in the power sector in the 1990s – in fact Orissa was one of the first states to do so. It was also the only state which gave a note of dissent to a Planning Commission's report (1999) that opposed the leasing of forests to industry in 1998. This perspective should be kept in the background while appreciating the changes in NTFP policy in Orissa in the last thirty years.

# 2 Dependence on NTFPs

NTFP collection is undertaken by the poorest sections of villages as it is labour-intensive and the returns are quite low. Precise estimates of dependence on NTFPs for poor people's own consumption or sale are not available. However, a study conducted by the Indian Institute of Forest Management in 1996 (MoEF, 1998) gives a fair idea about the contribution of forests to the economy of three tribes (Kondhs, Mundas and Saoras) in Orissa. The study was conducted in 301 randomly selected households, spread over six districts of Orissa (Boudh, Pholbani, Keonjhar, Mayurbhanj, Sundargarh and Gajapati). It was observed that an average tribal family drew about half of its annual income from forests, 18% from agriculture, 13% from cattle and 18% from other employment.

A socio-economic survey (Singh, 1997) of 329 households, living in four villages on the fringes of forests in Sambalpur, Mayurbhanj and Ganjam districts, revealed that an average household draws as much as 49.2% of its total annual income/benefits from forests. Labour including wage labour contributes another 24.6% to the mean annual household income. Incomes from cultivation and cattle amount to about 18.6% and 7.6%, respectively. For about six months, from April to September, most households in the forested regions in western and southern Orissa subsist on nearby forests.

Due to the gender division of labour, it is primarily women who are the major gatherers of a wide range of NTFPs both for subsistence and income. It is estimated (Mallik, 2001) that in Orissa more than 45,000 tonnes of kendu leaves are gathered annually by 1.8 million women. According to another estimate, the total women labour engaged in the collection of forest produce in Orissa is as high as 300 million woman days. According to one all-India estimate, NTFP collection accounts for 1062.7 million person days of employment in India, while a similar figure applied to Madhya Pradesh would amount to 233.8 million person days (Khare, 1993: 17).

The collection of some NTFPs entails risks. For instance, in the case of hill brooms, there is a risk of snake bite, or falling into deep pits (IAMR, 1998). The collection of honey is also risky due to the danger of beestings.

# 3 Government Policy: Nationalised NTFPs

NTFPs, described in the past as minor forest products (MFPs) because of their small revenue value,[7] were generally used only by the forest dwellers. Their economic value started increasing after 1960 as new uses for NTFPs were found in several industries. Today in India, NTFPs provide approximately 40% of total official forest revenues, 55% of forest-based employment, and 70% of the total exports from forest products (Tewari and Campbell, 1997). Moreover, there is considerable scope for increasing exports further by exploiting untapped resources, such as medicinal plants.

In Orissa, revenues from NTFPs have been rising more sharply over the years and now account for more than 90% of the total forest revenues. The annual revenue from timber, which was more than Rs 200 million in 1990 in Orissa, has decreased [8] to a mere Rs 50 million, whereas the revenue from non-timber forest produce including bamboo and kendu leaves is in excess of Rs 900 million annually, as against Rs 250 million in 1985–6. Changes in the share of revenues from different forest commodities are shown in Table 1.

**Table 1 Percentage of revenue from NTFPs (including sal seed bamboo and kendu leaf) to total forest revenue and percentage of forest revenue to net NSDP of Orissa**

| Year | Timber revenue to forest revenue | Fuelwood revenue to forest revenue | Kendu leaf revenue to forest revenue | Bamboo revenue to forest revenue | Other NTFPs revenue to forest revenue | Revenue from forest products to NSDP |
|---|---|---|---|---|---|---|
| 1985–6 | 42.4 | 9.0 | 26.8 | 7.9 | 7.8 | 0.86 |
| 1986–7 | 38.4 | 9.4 | 31.4 | 5.8 | 9.1 | 0.84 |
| 1987–8 | 34.6 | 9.2 | 44.2 | 4.4 | 5.1 | 1.00 |
| 1988–9 | 34.3 | 7.8 | 39.9 | 9.1 | 4.0 | 0.70 |
| 1989–90 | 12.5 | 2.9 | 61.2 | 6.0 | 7.6 | 1.02 |
| 1990–1 | 15.3 | 4.1 | 70.5 | 5.9 | 4.3 | 1.13 |
| 1991–2 | 16.6 | 4.8 | 60.9 | 8.3 | 9.4 | 0.68 |
| 1992–3 | 8.8 | 1.2 | 75.3 | 9.6 | 5.1 | 0.78 |
| 1993–4 | 6.8 | 1.6 | 75.9 | 9.7 | 6.1 | 0.64 |
| 1994–5 | 14.2 | 0.5 | 70.9 | 7.5 | 6.8 | 0.63 |
| 1995–6 | 10.3 | 1.3 | 63.8 | 14.7 | 9.8 | 0.29 |
| 1996–7 | 12.9 | 1.9 | 62.5 | 11.4 | 10.8 | 0.27 |
| 1997–8 | 13.5 | 0.5 | 55.5 | 12.4 | 18.1 | 0.29 |
| 1998–9 | 7.0 | 0.4 | 73.2 | 9.8 | 9.6 | 0.32 |
| 1999–2000 | 5.2 | 0.2 | 78.1 | 5.1 | 3.0 | - |
| 2000–1 | 15.0 | 1.9 | 65.3 | 6.1 | - | - |
| 2001–2 | 9.6 | 0.4 | 79.1 | 2.3 | - | - |

*Source*: GoO (1999) and GoO (2002).

However, revenue alone is not a good indicator of a particular item's importance from people's point of view. Many NTFPs, such as mahua flowers, hill brooms and tamarind, are consumed or traded locally by the forest dwellers without contributing much to government revenues. Its collection and trade is not without harassment from field-level forest and police officials, because of the plethora of controls and restrictions on collection, storage and movement of NTFPs, some of which were removed in March 2000.

7 With the exception of kendu, which was important from a revenue point of view even in the colonial period.

8 This is only partly due to deforestation, and the main factor behind the fall in royalties is the government ban on green felling in many districts, and the legal ban on clear-felling imposed by GoI.

The policy environment relating to NTFPs in India is characterised by the underlying belief that forests are state property and thus all products growing in forests are owned by the state. The state's control even extends to designated forest products growing on private lands and non-forest common lands. Thus bamboo or kendu leaves on private lands are subject to the same control as if growing on forest lands. Even mango kernel is a controlled item, although most mango trees grow on private lands. So is mahua flower, although 80% of mahua trees are on lands that are not under the control of Forest Department.

The three most economically important NTFP items (i.e. kendu leaf, sal seeds and bamboo) are nationalised and brought by law under the direct control of the state parastatals. In addition, until March 2000, the state exercised up to control over many other NTFPs through administrative orders, generally to create public or private monopolies. NTFP policy was thus a source of political patronage rather than a support for people's livelihoods. Changes in government policy for different NTFPs in the last thirty years are summarised in Table 2.

**Table 2 Changes in government policies for different NTFPs[9]**

| | Before 1970 | 1970–90 | 1990–2000 | 2000 onwards |
|---|---|---|---|---|
| **Kendu** | Monopoly leases in favour of a few traders | Nationalised, and entirely under government control | | |
| **Bamboo** | Under management of a government corporation, OFDC, which supplied bamboo at a highly subsidised rate to paper mills | | OFDC has leased-out forests to paper mills. | Back to government management, but paper mills are shifting to hardwoods, and no longer interested in lifting bamboo. This is leading to congestion of bamboo clumps, and government is forced to reduce royalty. Artisans' needs are still ignored. |
| | Artisans got no priority, silviculture was evolved to suit production needs of industry. | | | |
| **Sal seeds** | Almost free for gatherers | OFDC has leased it out to private oil mills | | Back to government control |
| **Other tree-based oilseeds** | Under the monopoly of government corporations | | Leased out to a private party under the garb of a joint sector company | Back to the control of government corporations |
| **Other NTFPs** | Almost free | Monopoly of TDCC, a public sector company, but limited leases were given to private parties too; such as for tamarind in Koraput and Rayagada districts. | | Under *Panchayat* control, but by and large left to market forces. TDCC has withdrawn from the market in respect of most NTFPs, as it cannot compete with private trade. |

*Source*: Prepared by the author after studying changes in government policy for several NTFPs. These changes are described in detail in this paper.

Laws and policies leading to government control were justified ostensibly to protect the interests of the poor against exploitation by private traders and middlemen. Since the state could generate revenue (royalties) through exercising the monopoly right, it was steadily extended to cover a myriad of NTFPs. On paper, the state agencies worked with multiple objectives – to collect revenue; to protect the interests of the gatherers as sellers; and to satisfy the conflicting demands by industry and other end users. In practice, a hierarchy of objectives developed – industry and other large end-users had the first charge on the product at low and subsidised rates; revenue was maximised subject to the first objective which implied that there was no consistent policy to encourage value addition at lower levels (local processing was in fact discouraged for many

9 The years mentioned in the first row of the table are approximate, e.g. the kendu policy changed not in 1970, but 1973.

commodities, such as kendu and hill brooms; criminal cases were initiated against those who tried to process or store these NTFPs); and the poor gatherers' interests were relegated to third place.

Other Indian states have also passed similar laws and orders, but the number of items covered by state intervention in Orissa in March 2000 was one of the highest in India. Secondly, although many states supplied subsidised raw material to industry, Orissa went far ahead, and gave industry monopoly rights of collection, especially during 1990–2000, amounting to a near-surrender of state control over forests.

We describe below in detail government policy and its implication for the gatherers of some of the important NTFPs in Orissa.

## 3.1 Kendu leaves

Kendu[10] (*Diospyros melanoxylon*) leaves (KL) play a vital role in the economic life of central India. The tree is called Blackwood (Indian ebony), and is of less significance than its shrub, whose leaves are used for making *bidi*s (an indigenous cigarette, which uses the kendu leaf instead of paper). Kendu fruit, which is sweet, is also eaten but has little marketing value, rarely even making it to the local weekly markets in tribal areas. For the poor, plucking of kendu leaves represents a major source of income and employment especially since it coincides with the slack period of the agricultural cycle. Kendu leaves generate 150 million person days of employment during the agricultural lean season in Orissa, including the labour involved in making *bidi*s.

Kendu leaf is also the most valuable and most important NTFP from the State's revenue point of view. It now accounts for 75–80% of the total revenue from the forests. Orissa accounts for 13.0% of total kendu leaf production in the country and produces the best quality leaves.

In the pre-independence period, KL contracts were awarded on a long-term basis only to a few selected traders. In 1950, the government introduced an open tender system to enhance competition among traders and to generate higher revenues for the State. It is interesting that politicians of the opposition parties at that time criticised the tender system and advocated complete state trading, but when they themselves acquired political power, not only did they maintain the old system, but offered better terms of trade to the same traders. For instance, when the government changed in 1956, traders were given three-year leases in place of annual leases. Often, even after the lease period was over, the same trader was given extension for another year in lieu of 'political donation'.

Before KL nationalisation in 1973, politics in Orissa were dominated by KL traders. They were the most powerful pressure group in Orissa and actively interfered in State politics. They paid huge donations to leading politicians and political parties in exchange for favoured policies. They even influenced the compositions of State Cabinets. They often caused the rise and fall of many governments in an Orissa that witnessed serious political instability during the 1950s and 1960s. Many leading politicians were publicly accused of accepting bribes, some faced judicial enquiries and suffered political consequences.

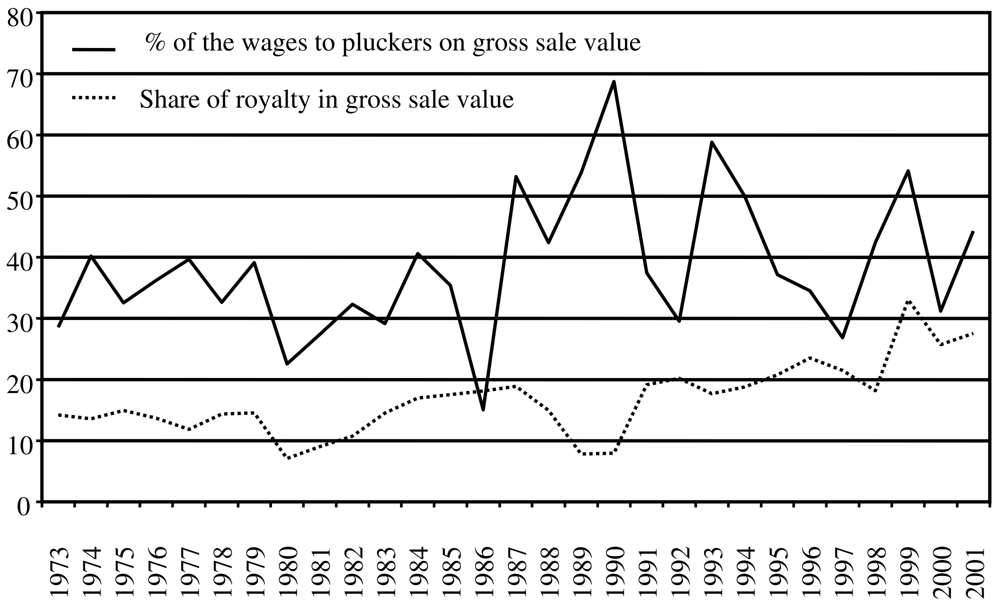
The early 1970s saw many 'socialist' reforms in India under its Prime Minister, Mrs Gandhi. Government nationalised banks, and introduced land ceilings on agricultural lands. It even tried to completely take over the grain trade. Orissa's Chief Minister, Mrs Satpathy, was a left-winger in politics, and took the radical step of nationalising KL trade in 1973, banning direct purchase by the traders from the pluckers. This was certainly a strong willed action by the government. The state monopoly replaced the private monopoly. A separate wing was created within FD to undertake KL

10 Known as tendu in neighbouring states

collection and processing responsibilities. The task of selling the processed leaves was assigned to the Orissa Forest Development Corporation (OFDC), a public undertaking, which had been created in 1962 as the first forest corporation in the country. Thus, FD was to deal with the pluckers and other workers involved in sorting and bundling, whereas the OFDC was assigned the responsibility to deal with private traders and the *bidi* trade. Under the new arrangements, the difference between established traders and new entrants did not exist. Anyone who wanted to remain in the trade had to buy KL in open auctions that were to be periodically conducted by the OFDC. The role of private KL traders in political manipulation was considerably reduced, and scandals around kendu leaves that used to rock the state legislature before were no longer heard after 1973.

The annual production of KL increased from an average of 26,000 tonnes during 1948–72 to an annual average of 41,000 tonnes during 1973–99. The net annual revenues to the state increased by almost five times at constant 1980–1 prices, from an average of Rs 58 million to Rs 315 million. This is primarily due to the higher market price of leaves. The share of government royalties in total sales has generally been around 40%, although year to year fluctuations have been wild due to uncertainties in production. The share of total payment to labour in the gross annual sales did not increase between 1973 and 1989, but since then has improved considerably, from about 11–14% in the mid-1970s to 25–30% in the late 1990s, as shown in the graph (Figure 1).

**Figure 1 Percentage share of wages and royalty in gross sale value of kendu leaves**




*Source*: Prepared by the author on the basis of several unpublished documents of the Forest Department

These figures should however be taken with a pinch a salt. Informal enquiries reveal that about 30–40% of labour payment is fictitious, i.e. people are shown to have worked, whereas no such collection or work takes place. This is supported by losses of leaves shown by the KL Division and the OFDC every year due to fire (lower-level staff engineer the burning of millions of non-existent leaves), poor storage, etc.

The massive sums of money involved in the kendu business offer opportunities for patronage to both big and petty politicians and forest department officials. In the former case, the money is to be made in the process of negotiating tenders in the disposal of KL leaves, while in the latter case, power and influence is exercised in selecting the agents who handle the purchasing centres. These agents get advances from the forest department to purchase kendu leaves or sal seeds and receive commission on the final amount. The purchasing agents are experts at under-weighing, wrong entries and sheer blustering, and for them, kendu and sal seed purchasing contracts can be very lucrative. At the local level then, there is a great deal of jockeying to get the contracts.

For field level forest staff, such as Rangers and Forest Guards, the collection of KL is a highly lucrative business. There are several sources through which they are able to enrich themselves. First, the appointment of fictitious seasonal staff to carry out government work: the FD engages about 40,000 seasonal workers and labourers, some of them are non-existent. This is in addition to about 8–12 lakh pluckers who are to be paid according to the fixed government rates. However, the usual practices of under-counting, rejection, under-payment, over-invoicing, etc. help government staff to pocket a significant amount of government funds, at the cost of peoples' livelihoods and extra revenues to government.

**Box 1 Kendu leaves and the poor**

One of the biggest paradoxes of the kendu leaf is that the largest KL growing areas are also the major food scarce zones in the State. Bolangir produces some of the best quality kendu leaves in the country, but it also has the greatest number of KL pluckers migrating to other States for work. The district presents a typical example of an ungrateful state which fills its exchequer with the sale proceeds of KL collected by its poor subjects, but does hardly anything to fill their empty stomachs.

*Source*: Agragamee (1997)

As the main objective of KL policy is to maximise revenues,[11] the poor are prohibited from selling leaves to anyone except government. They are also not permitted to process the leaves into *bidi*s. Raids are often organised against the people during the kendu season to ensure the compliance of these storage and sale restrictions. Although, according to law, if registered with the FD private growers can keep up to 3.5 quintals of KL, in actual practice not a single grower is registered, and thus even farmers cannot stock KL collected from their own farms.

The revenue interest of the State can be judged by the fact that during the period 1989–2001, the State Government earned revenues of Rs 7.52 billion from kendu leaves. The total wages earned by KL pluckers during the same period was only Rs 3.87 billion. The high incidence of royalties on KL needs to be contrasted with the royalties collected on a major mineral, where labour is organised, e.g. royalties are Rs 30 per tonne on bauxite, but a whopping Rs 12,000/tonne on KL!

Kendu is collected during the lean summer months when pluckers critically need the cash. Unfortunately, Orissa's record for quick payment is quite dismal, and pluckers often have to wait for more than three months to receive their payment. In many cases, KL pluckers mortgage their cards with local moneylenders or even to *phad*-agents (seasonal petty contractors who manage KL collection operations at the *phad*s. i.e. collection centres). By the time payment actually arrives, a substantial part of it is lost as interest on debts. Since no interest is paid to the poor on delayed payments, the state is in a way borrowing money from the poorest of the poor in Orissa at zero interest to improve its financial performance, or to hide its inefficiencies.

The *phad* agents also face several problems – the forest department does not always give the advances in time, which means that they have to turn away sellers. Their own commission is delayed by several months to a year. Both these factors which have accompanied the nationalisation of certain other items of minor forest produce in fact enable private traders (who offer instant payment, loans, etc.) to thrive and even undercut government prices for the produce. Primary gatherers get the worst end of the stick.

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11 The Orissa Forest Code (1977) still includes among the duties of Range Officers, 'producing the highest revenue from his Range consistent with the highest principles of forestry'. This is despite the National Policy (1980) that explicitly gives less importance to revenue and recognises environment and livelihoods as the main objectives of forest management.

Despite inefficiency and corruption, it is a fact that pluckers' payment has increased over the years. Between 1973–2000, the payment for 100 leaves increased 32-fold, whereas general prices went up 15-fold, and minimum wages as fixed by government increased 20-fold (Singh, 1997). Besides, workers and pluckers are entitled to subsidised food, provided by the World Food Programme.

Moreover, part of the revenues are transferred to local *Panchayat*s for village development. In the five years up to 1999–2000, Rs 10 crores was transferred every year to the *Panchayat*s. In 2000–01, Rs 20 crores was sent. Although as per a government decision, 50% of net government revenues should be transferred, actual transfer is just 12–15%. Although the *Panchayat*-wise distribution of such transfers is somewhat based on the actual collection in that *Panchayat*, a large portion of it goes to pay the salaries of the *Panchayat* office bearers and *Sarpanch*es, etc. It does not therefore act as an incentive for the pluckers to do their best to maximise sustainable collection. Pluckers, or bush cutters and binders of KL do not perceive getting any share from the *Panchayat* funds.

### *3.1.1 Suggestions*

Given the enormity of the scale of operation, KL has to continue under State nationalisation. Private trade would not be able to arrange for the Rs 1.5–2 billion required during the season every year for the entire operation in just 40–50 days. Although revenue generation has a higher priority for government, the entire operation has several elements of welfare and poverty alleviation too, because of its significance for local employment in the agriculturally slack season. Pluckers have lately been getting organised, and part of the explanation for the increase in their wages must be the pressure they are able to put on the political system. Both these objectives – revenue and employment – would suffer under a private regime. Further, bringing in private traders would again encourage political patronage and corruption, as was the experience before 1973.

The present system, however, has a large number of infirmities. The following suggestions would improve benefits to the pluckers.

- The State should pass on the enormous profits made in the kendu leaf trade as bonus to the KL pluckers. Even if 50% of the royalties (surplus) generated from the kendu leaves as of now is shared with the pluckers, it would, on an average lead to an additional income of Rs 1000 to Rs 1500/- per annum per household (HH). A detailed analysis for the Bolangir KL division shows that sharing of 50% of royalties would increase the total earnings of an average HH from KL plucking up to Rs 3000 per annum, more than what most of these HHs earn from agriculture (Vasundhara, 1998). Considering that almost all the families involved in KL collection are living below the poverty line, this additional income assumes great importance for their livelihood. The importance of this additional direct income (over Rs 300 million a year) for the rural poor can be understood by the fact that to generate the same amount of income through IRDP investment, an amount of approximately Rs 2000 million will have to be invested (assuming that all the investments are successful and there are no leakages of funds).
- The collection prices should be hiked so that returns from plucking are at least equivalent to the minimum wages fixed for unskilled agricultural work by the GoO. Even in Andhra Pradesh, where wages are higher by about 15% than Orissa, despite Orissa's leaves being superior in quality, a study (IAMR, 1998) showed that returns from leaf collection were only 55% of the minimum wages, and 87% of what they would get elsewhere in the market. Pluckers in MP get slightly less than in Orissa, but are compensated because the government there does not keep any profit with itself, and the entire profit is ploughed back to the pluckers. In Madhya Pradesh, gatherers share in profits through a bonus plan at the end of each season, whereas in Orissa, the gatherers get only wages for collection. The kendu collection policy of the three states is compared in the Table A2.

- Village-level KL pluckers' SHGs[12] and cooperatives should gradually be given the responsibility of managing collection centres, and their maintenance, etc. At present, these are managed by petty contractors, with long experience in this line. Mechanisms for linking quality of KL leaves with purchase prices should be explored. Possible local institutional arrangements to improve the quality of KL produced through various arrangements such as contracting-out bush cutting to KL pluckers' associations, forest committees etc., linking bonus to *phad*-wise realisation of sales, etc. should be explored.
- Uniform pricing of kendu leaves, irrespective of their quality, does not inspire the pluckers to procure leaves of better quality. Therefore payment should be related to the quality of leaves.
- Delayed payments should carry an interest of 15% per annum.
- All records pertaining to the names of people employed and their working period together with date of payment should be displayed on the district website for anyone to verify.
- The Group Insurance for KL pluckers as followed in MP should be adopted in Orissa.
- Part of the income from KL plucking can be saved by pluckers through forming SHGs – this would help them in avoiding credit from moneylenders at a high interest.
- The payments to pluckers should be made weekly with no delay. This will require procedural changes in the way funds flow to the *phad*.
- The OFDC has huge staff, and their salaries are booked to the KL revenues. It is estimated that approximately Rs 200–250 million, that would otherwise accrue to government as net annual receipt of kendu leaf trade, is consumed by the corporation in meeting the salary bills of unnecessary staff (Khare, 2002). Downsizing the Corporation will help in passing on more benefits to the pluckers.

The entire KL trade is the exclusive responsibility of the Forest Department, and there is no internal review of its limitations and failures by other sister departments of government. The Department of Rural Development, which is in charge of poverty alleviation, and the Department of Social Welfare, which is supposed to look after the interest of tribals and scheduled castes, take no interest in the kendu operation, although millions of their supposed target group who are the responsibility of these departments are affected by poor implementation of the KL procurement. Had these departments been more vigilant, there would have been pressure on the Forest Department to improve its performance.

It is unfortunate that there are no effective administrative mechanisms in Orissa for inter-departmental coordination to achieve the broader goal of welfare of the poor. The Indian administrative culture does not encourage one department to critically appraise and review other department's schemes.

We suggest that an inter-departmental study team/commission should be set up to look into our suggestions as well as the systems being followed by other States (especially MP). The commission could also suggest ways to achieve the objective of welfare maximisation for KL pluckers. The commission/committee should include members from the KL Union, representatives of KL pluckers and from NGOs and academic institutions. This independent Commission should study the purchase operations every year and give its assessment on the extent it has furthered peoples' livelihoods and how the operations have improved as compared to previous years' campaign. It should also suggest practical measures to improve transparency and reduce corruption in the purchase operations. Its suggestions should be considered by the Cabinet.

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12 Self-Help Groups – self-selected groups which start savings and credit using group-devised savings and credit modalities, and may move on to take up other joint income generating activities.

The Government of Orissa has to give primacy to the welfare aspects of KL production and trade and relegate revenue objectives to a secondary position. KL trade is one opportunity where by making certain easy policy changes, the GoO can ensure the direct welfare of millions of its poor citizens.

## 3.2 Bamboo

As well as in the states of MP, AP and Maharashtra, bamboo is also an important ground crop in Orissa. Once regarded as a weed, bamboo emerged in the last fifty years as an important raw material for India's huge paper industry. Silvicultural techniques have been designed to maximise the production of industrial bamboo,[13] regardless of the fact that bamboo is a significant resource for forest dwellers, who use it in making baskets and other household tools, in fashioning musical instruments, and in constructing houses. Although according to the policy prescription, only inferior-quality bamboo should be harvested for industry, so as to preserve the better growth for artisans, this stipulation is ignored in practice. Also, where annual harvesting of green bamboo would have encouraged higher productivity, industrial methods simply clear-fell, which reduces the actual production than if green bamboo was harvested. While the assault on India's bamboo forests through inappropriate silviculture and subsidy is nation-wide, it has been particularly savage in Orissa, where some observers believe there has been a 50% reduction in just ten years (Human and Pattnaik, 2001).

The total number of cane, bamboo and basket weavers in India in 1981 was about 8.2 lakhs, of whom 6.9 lakhs were located in rural areas, with the share of female artisans at 43%. The social situation of workers in this sector is quite bad as they are at the bottom of social hierarchy, and even other scheduled castes observe social taboos against them. These families have the expertise and skills of processing bamboo, and make hats, baskets, etc., but they are prevented from getting the full price for their labour, because the raw material has been diverted largely to the paper industry.

An official document published by the Indian Council of Forestry Research and Education (Singhal and Gangopadyaya, 1999) quotes a study done by the Vaikunthbhai Mehta Smarak Trust, Bombay, in Ratnagiri district (Maharashtra), according to which 80% of the bamboo stocks left the district for industrial purposes. Bamboo workers faced an acute shortage of bamboo. Artisans had to procure the raw material from outside by transporting it over long distances, thus adding to costs. The document further states that in Tamil Nadu, a paper mill cut off the raw material supply to artisans, which increased the prices five times per headload and lowered artisan's earnings.

In Gujarat, the industry pays only 25% of the market rate for bamboo. Subsidies exist in many other states, such as Maharashtra and Andhra Pradesh. Despite discouraging subsidies in the new Forest Policy, 1988 and the prescription in the new Policy that the needs of the forest dwellers will be the first charge on the forest produce, the poor in central Indian states have to meet their demand for bamboo by stealing, while the industry gets subsidised bamboo and has the first charge.

Further, in many States stocking bamboo and selling bamboo products requires permissions from the FD, which leads to the harassment of artisans.

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13 Artisans require green bamboo, the construction industry requires long and thick bamboo, and the industrial requirement is for thinner and shorter bamboos. Green bamboo is not produced officially, hence artisans fulfil their needs through stealing. The share of construction bamboo in overall production is only between 3–5%. For instance, the projected production capacity in 2002–3 from nine forest divisions for which Working Plans are available is 37,000 SU (1 SU= 1 MT approx) of industrial bamboo and 830 SU of long construction bamboo.

### *3.2.1 The situation in Orissa*

Although many states have supplied subsidised bamboo to industry, Orissa have gone further by giving industry monopoly rights of collection, amounting to a near-surrender of state control over forests. In 1989, several paper mills were assigned the best bamboo areas, under the guise of their being appointed first as 'labour contractors', and then as 'raw material procurers'. Of the 1.63 m ha of bamboo forests in Orissa, 1.30 m ha were leased out to the four paper mills in Orissa (Pradhan, 1994). There is no system by which artisans and the landless can get bamboo even at a price, and are thus forced to resort to illegal harvesting. A scheme for artisans should to a cooperative society for bamboo has remained a non-starter in Orissa.

Reporting on the Koya tribe of the Malkangiri district of Orissa, P. Sainath writes (Times of India, March 15, 1994):

> 'Bamboo is the socio-economic oxygen for the Koyas. An oxygen which is being denied to them, thanks to forest laws that have removed their access to that material – while granting access to major corporates seeking huge quantities of bamboo for paper (via the Orissa Forest Corporation). Ironically, Koyas are hired sometimes to do the felling on a casual basis, (but) seldom get the government rate of Rs 25 a day. With the denial of access, indebtedness – unlike the bamboo forests – appears to be growing in certain Koya pockets.'

Apart from causing hardship to the artisans, the scheme had two other major defects. Firstly, it was contrary to the Forest Conservation Act, GoI legislation introduced in 1980, according to which forests cannot be leased out to private parties without GoI permission. Section two of this Act provides that no State Government shall make, except with the prior approval of the Central Government, any order directing that any forest land or any portion thereof may be assigned by way of lease or otherwise to any private person or to any other authority, corporation, agency or any other organisation not owned, managed or controlled by government. As the permission of the GoI was not taken for the assignment of bamboo forests to industry, the arrangement of designating industry as 'raw material procurer' was unlawful.

Secondly, the entire scheme reeked of corruption and political patronage. In the late 1960s, the system of appointing labour contractors was abolished all over India, as it had led to corruption, theft, and the development of an unhealthy nexus between bureaucracy/politicians and contractors. The arrangement in Orissa between 1989 and 2000 not only revived the old contractor system, but was even worse. At least in the older system there was some transparency and fair play, as only the highest bidder could become a contractor. The government order appointing industry as 'raw material procurer' in Orissa went to the extent of stating that 'other terms and conditions may be settled in consultation with the industry.' This must be the only case in government where lessees are appointed first and then they are left free to lay down their own terms!

The staff of the OFDC, who were supposed to check malpractices by the industry, was also transferred to the paper industry, which resulted in the dilution of checks on the number of trucks taken out by the industry. It was also difficult to ensure whether proper harvesting precautions were being followed, or whether minimum wages were being paid to the workers. The industry had rights of harvesting but it made no efforts to follow the prescribed silvicultural practices to ensure adequate regeneration. Technically, it is obligatory that the party which is felling bamboo should simultaneously undertake cleaning and other silvicultural operations to ensure adequate regeneration, but under the prevailing agreement between industry and the government, industry was under no obligation to do so, thereby endangering further production of bamboo.

It is interesting that to satisfy the needs of the common people, GoO asked the paper industry to harvest 5000 tonnes of long bamboo. Local enquiries made by the author (Saxena, 1995) showed that industry did not meet the demands of the poor on the plea that the poor do not turn up to get subsidised bamboo!

### *3.2.2 The present imbroglio*

Several changes have taken place in the last few years, some gradual and some sudden. Although the Orissa government committed its entire bamboo produce to the paper mills, industry was not able to meet its full requirement from home production, especially due to falling bamboo production in the State. The industry therefore gradually switched over from bamboo to hardwoods for paper production. As a consequence of this technology shift facilitated by cheaper imports and easy availability of hardwoods, such as eucalyptus from Andhra Pradesh, the paper mills in Orissa critically were not dependent on bamboo. When in March 2000, the government of Orissa decided to cancel the leases and bring bamboo forests again under the control of the OFDC, the mills decided not to lift bamboo from the forests. Since government had all these years made no effort to develop an alternate market for bamboo, it suddenly found a collapse in its off-take, after 2000.

In September 2002, around 48,000 SU (1 SU= 1 metric tonne approx) of bamboo was rotting in the *godown*s of Orissa Forest Development Corporation, and only 7205 SU have been disposed of since 1st April, 2001. The harvesting of bamboo was stopped, citing a decline in demand by the paper and pulp industries from 2000 onwards. The non-harvesting for the last two years has adversely affected the poor who were dependent on being hired for harvesting, transport and storage of the crop.

Fearing huge losses due to a deterioration in quality of the standing crop, the government of Orissa decided in September 2002 to reduce the royalties from Rs 650 to Rs 350 per SU, and also authorised the OFDC to auction and sell at any price to buyers in or outside Orissa. However, there is no proposal to permit the harvesting of green bamboo, which would benefit artisans.

Some NGOs fear (DTE, 2002) that the non-harvesting of bamboo may lead to its flowering in Orissa. For the people of Orissa, already reeling under drought in 2002–3, this signifies further adversity as bamboo flowering heralds a food crisis. Although there may not be any silvicultural connection between the non-harvesting of bamboo and its flowering, the immediate consequence of the state’s failure to develop alternate markets has been the loss of bamboo cutters’ livelihoods, and the financial loss to the OFDC.

### *3.2.3 Suggestions*

As already stated, policy relating to bamboo has so far been geared to the needs of industry, and not of artisans. Hence a fundamental change is required both in respect of silvicultural techniques and marketing strategies.

Rather than produce short, dry and thin bamboo, the FD should shift to long, green and thick bamboos, for which there is demand both from artisans as well as the construction industry. The productivity and quality of bamboo has been so far below its potential due to the dense build up of dead leaves and other organic material. The abundance of litter within the clump has suppressed the growth of new shoots and poses additional fire hazards during the dry season. If the stands were routinely cleaned and thinned, the danger of fire would be reduced, productivity would increase several fold, and a regular flow of bamboo stands will be ensured to the bamboo artisans. However, budget for cleaning bamboo clumps and arrangement for its protection by the bamboo artisans must be simultaneous, as bamboo is a highly browsable crop. Artisans living close to forests should be involved in the management of bamboo forests, so that they extract bamboo themselves without damaging the clump.

Issues of technology are inter-linked with issues of management. Along with changing the technology to maximise the production of green bamboo, one would also have to streamline the procedure for making this available directly to the artisans.

The entire procedure of obtaining bamboo from forests is complicated, especially for artisans located outside the district, and can be completed only through involvement of contractors and agents in the whole scheme, which makes sale in the black market a good possibility. Even in States such as AP and Maharashtra, where artisans' cooperatives exist on paper at least, it is not easy for artisans to obtain bamboo from government depots. One of the ex-Chief Conservator of Forests (CCF) of Andhra Pradesh admitted to me that most bamboo societies in his State were run by contractors and politicians who make their profits through selling bamboo in the open market for the construction industry. Along with technology upgradation and improving procedures, one would also have to develop markets for bamboo workers by helping with designs and linking their products with up-markets. Unfortunately no government departments have taken the initiative in this direction.

## 3.3 Sal seeds

After kendu leaves and bamboo, sal seed is a major source of income not only for the government and the primary gatherers but also an important raw material for private oil mills.

Sal seed was nationalised in 1983 in a bid to protect the interests of the primary gatherers, and its collection was handed over to government corporations such the OFDC and Tribal Development Co-operative Corporation (TDCC). In the same year sal seed recorded a maximum production of 65,400 metric tonnes, which is the highest production in a year to date. During the phase of nationalisation in 1983–94, average annual production of sal was 32,220 MT, although the collection price stagnated at Rs 1.75 per kg for almost a decade until 1996.

But suddenly in 1995, [14] private leases were given to oil mills with a view to reviving the ailing extraction industry. They were allotted the cream of forest divisions and extended all possible facilities and protection including the minimisation of target procurement. The figures of collection as reported by the private mills were far below than what was being procured by the government corporation before 1995, and declined to less than 50% of what was procured by the official agencies' figures. This may be due to deliberate under-reporting by the mills so as to avoid paying royalties and other taxes, or actual collections may have also gone down due to the indifferent financial condition of most of the oil mills that were given monopoly rights.

In September 1995, when this author visited a few forest villages of Orissa, it was noticed that the new private industries could not make advance arrangements for appointing subagents and for reaching the cash to them, with the result that several primary gatherers could not find any ready buyer, and in the process government also lost revenue (Saxena, 1997). Often in such cases, the poor who desperately need cash are forced to sell it illegally to a third party at a throw-away price, who then later supplies to the authorised agent and gets the benefit of the higher price.

There was also adhocism in the selection of private parties. In 1999, Preeti Oil Mills, a private party, was denied renewal of its lease, but it went to court, which restored the status quo arrangement.

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14 Rumours in Orissa in 1995 linked it to a generous contribution by the oil mills to the coffers of the Congress Party which was voted to power in March 1995.

Since March 2000, sal seed is now again under government monopoly of the two corporations, TDCC and OFDC. However, the price paid to the primary gatherer has remained stagnant at Rs 3 per kg for the last five years. As daily collection is not more than 6–8 kg per day, a person can earn only about Rs 20–25 a day, which is just 40–50% of the minimum prescribed wages.

Since the flowering of sal takes place in early March, production targets and rates should be fixed well in advance to avoid confusion about the declared price and to attract more traders from outside the State. Experience shows that the collecting season starts from mid-May but the price is fixed only towards the end of that month.

Unless organisations such as the OFDC, TDCC, ORMAS and TRIFED start operating as market development and promotion bodies, no substantial gains can be achieved in the trade in sal seed. From the point of view of trade expansion, it is important that more and more traders are identified and involved in the process. More traders would mean greater demand and an increase in production and more people depending on sal seed procurement. State agencies and the Forest Department are extremely poor in product development research. Efforts should be made on a priority basis to initiate product development research and link them to the market.

# 4 Government Policy: Non-nationalised NTFPs

Although *de jure* only three items (i.e. sal seeds, bamboo and kendu leaf) are specified as 'nationalised', the state has, through administrative orders, brought under its exclusive control almost all marketable NTFPs through monopoly leases to government parastatals. As these organisations could not set up village-level buying arrangements, the role of village agent therefore hardly changed as a result of monopoly. Often the village agent dealt in a number of commodities, but the products entered separate marketing channels, depending upon the organisation that had obtained exclusive rights in that commodity.

Until the mid-1980s, such leases were granted generally to the TDCC and OFDC, both government organisations, but during 1985–2000, private parties and industries were increasingly brought into the picture and were leased forest produce. Thus the impact of government policy regarding non-nationalised items needs to be discussed separately for the two periods.

## 4.1 NTFPs under public sector monopoly

Before nationalisation, gatherers could sell NTFPs to anybody, but under the new system, designated products from both public and private lands had to be sold only to public sector agents. In almost all cases, the TDCC/OFDC appointed agents formally or informally (GoI, 1988), who purchased NTFPs from village traders. This put gatherers at the mercy of two different sets of people, the agent as well as the government department, and whatever payment that gatherers received had to be routed through both of them. In 50 out of 68 villages in Orissa, it was found that government agencies had not managed to eliminate middlemen (Fernandes et al, 1988:140). On the other hand, the same middlemen who until recently exploited the tribals as moneylenders and merchants, continued their work in the garb of agents of government bodies (Das, 1998).

The state institutions (OFDC, TDCC) are confronted with growing liabilities. They have a huge and redundant capital and man-power base. Even on variable cost basis, they need huge mark-ups to break even. Faced with this situation, they wish to pursue a completely risk-free policy. In the few commodities that the TDCC traded (e.g. hill brooms, see Box 2), purchase transactions were first finalised; these selling prices were down-marked to fix the procurement prices for the gatherers; because of the middlemen involved, the actual prices received by the gatherers could be lower still. More generally, the state institutions opted to limit their role by becoming rentiers.

**Box 2 Ban on processing by the poor**

According to Orissa's policy until 2000, the processing of hill brooms can only be done by the lease holder, TDCC and its traders. Gatherers can collect hill brooms, but cannot bind these into a broom, nor can they sell the collected item in the open market. Thus the poor are prevented from both, doing value addition through processing and the right to get the best price for their produce. In one particular case (Das, 1995; Saxena 1995), assurance was given by the Collector of Raygada to a women's cooperative society that it would be allowed to collect and market hill brooms, so that the primary gatherers, who are mostly poor tribal women, might get the benefit of higher prices in the market. The Society started functioning, but without a valid licence. After the Collector's transfer, rather than helping them with processing and finding the best price, the state government machinery decided to launch prosecution against the women and their organisation at the instance of TDCC. Their stocks were seized, and even after a court order for release, the full stock was not released, causing a huge financial loss to the women.
Thus even when cases of exploitation are brought to the state government's notice and publicised in newspapers, the traders and corrupt elements' hold on administration is so strong that no remedial action is taken for several months.

*Source*: Prasad and Saxena (1996)

Monopolies reduce the number of legal buyers, chokes the free-flow of goods, and delays payment to gatherers, as government agencies find it difficult to make prompt payments. This results in contractors entering from the back door, but they must now operate with higher margins required to cover uncertain and delayed payments by government agencies, as well as to make the police and other authorities ignore their illegal activities. This all reduces gatherers' collections and incomes.

Moreover, government culture does not encourage efficient business. Government sales are through tenders and decision-making is not fast. Often, field officers have to refer cases for decisions to their head office, resulting in delay. There are a large number of enquiries pending against many officials, hence everyone plays safe. This environment is not conducive to healthy sales practices.

### *4.1.1 Sal leaves*

In 1995, these were sold by primary gatherers to the TDCC (who had appointed traders as its agents) at Rs 3 for a bundle of 80 plates (information based on author's field work in 1995). The gatherers have absolutely no control of the prices they get. The trader would not often pay in cash and insist on barter payment in terms of grain, thus enjoying a double monopoly, as the gatherer had no choice, neither in terms of the dealer, price, nor terms of payment. In one particular case, a woman was returned and her plates were not bought by the agent (though according to government orders the trader has no authority to return the leaves). In another case, the agent came only for four days a month (Saxena, 1995). Thus the way the scheme worked in actual practice was that the poor were taxed to support an inefficient government organisation. The stated objective may have been to do away with 'middlemen', but the unstated objective appeared to be to create patronage by exploiting the poor, and help just a few traders (and those who have the powers to 'inspect' and grant licenses), rather than to allow a free market to operate (Saxena, 1997).

In September 2002, restrictions were imposed on the collection of sal leaves, with a view to preventing over-harvesting. Thus only two quintals of sal leaves can be collected from one hectare of well-stocked forests, and that being possible in certain seasons only. Persons intending to procure sal leaves have to be registered with the Divisional Forest Officer (DFO) concerned, and require a transit permit not only for leaves but also for plates and cups made out of such leaves. However, stock up to 5 kg is exempt from transit or storage restrictions. It is too early to comment on the impact of these restrictions.

## 4.2 Private monopolies

Apart from the fact that private parties could pay 'political donations' and hence were attractive to government in power, the public sector's disappointing performance also led the state to take monopoly powers away from them in favour of private parties. Thus from 1985 onwards, Orissa's government encouraged private parties to acquire monopoly rights over forest produce. The largest beneficiary was Utkal Forest Products Ltd (UFP), on paper a joint sector company but essentially controlled by just one private trader, which was given long-term lease for 29 items for ten years in 1989. Its control was even extended to the designated forest products growing on private lands and non-forest Government lands. This was despite emphasis in law as laid down in the Orissa Forest Code and Orissa Forest Produce (Control of Trade) Act, 1983 to encourage the Tribal/Labour Co-operative/*Gram Panchayat*s as procurement agents for NTFPs. However, up to March 2000, there was no involvement of grassroots-level *Gram Panchayat* in NTFP trade.

Private parties were often given rights to collect a particular NTFP from a few forest divisions, where that item occurred in abundance. Orders relating to new private leases for tamarind and siali leaves were issued until as late as January 2000.

Under these agreements, the gatherers are required to sell NTFPs to the company's agents at preset prices. Although in theory a State- or district-level committee fixed the price for each item, in practice the price paid by the monopolists to the gatherers is not checked (Prasad, 2000). Often NTFP policy would change suddenly, upsetting marketing arrangements in the field. Lease for the same item would sometimes be given to more than one party without clarity about jurisdiction.

These orders creating private monopolies were ad hoc, arbitrary, and acted against the principles of natural justice, as no tenders or offers were invited before bestowing monopolistic powers to private agencies. The orders smacked of favouritism, lack of probity and openness. State monopoly provided room for private monopoly, and aided and abetted market imperfections, besides pouring money into the coffers of bribe-takers at all levels.

**Box 3 Leasing of cashew plantations in Orissa to private parties**

With a view to arresting soil erosion in Orissa, cashew plantations have been cultivated by the Soil Conservation Department on 120,000 hectares of 'government wastelands' in Schedule V areas (these are primarily inhabited by tribals, and special provisions exist in the Constitution for their protection). Such lands in the past were under cultivation by tribals but their rights were not recorded. In many districts of Orissa, especially those that were part of the princely states until the 1950s, land records were generally in bad shape as land was of poor quality, and such lands did not have the potential of giving revenue income to the state. Even when government carried out settlement and record operations, because of their ignorance tribals were not in a position to get their possessions recorded, and thus land under their possession was recorded as government land and sometimes transferred to the Forest Department. Thus the poor tribals were described as encroachers even on lands which were cultivated by their ancestors. In such cases, when tribals were forcibly dispossessed of their lands for the cultivation of cashew trees, no compensation was given to them, because their land rights were not recorded.

These cashew plantations, cultivated on land that was supporting the livelihood needs of tribals, were handed over to the Orissa State Cashew Development Corporation and the OFDC for management. As the Corporations could not run profitably, they started giving annual leases for the harvesting of cashew crops to private parties through open auctions. Often such plantations are in a degraded condition because of a lack of maintenance.

Three years ago Orissa's government contemplated giving long-term leases to private parties to manage cashew plantations. One such advertisement appeared in the Economic Times dated 20/4/99. The leases would be given for a period of 35 years for a minimum area of 2000 ha.[15] Lands that were once with tribals would now thus be with private corporations, with the tribals receiving no compensation or rehabilitation. Many of them shifted to the hill slopes for cultivation, which resulted in more soil erosion, the prevention of which was the objective of the original scheme. It is ironic that these cashew plantations that deprived the tribals of their ancestral lands were funded by a scheme called, 'Economic Rehabilitation of the Rural Poor (ERRP).

*Source*: Planning Commission (2000); IFAD (2002).

15 Due to criticism by NGOs and the press, the idea of giving long-term leases was not pursued.

# 5 The Effects of Monopoly

There are several problems associated with government or private monopoly.

a) **Low returns to gatherers.** The collection price is determined by a district committee, but it is flouted and the primary gatherers and producers get low returns on their labour, amounting to not more than half of the minimum prescribed wages for unskilled work. A study (IFAD, 2000) revealed that the actual price received varied from 1/4 to 3/4 of the minimum price fixed by government, as shown in Table 3.

**Table 3 Minimum support price vs. price paid by *kuchia*s in Kandhamal (Orissa), 1997–8**

| NTFP | Minimum support price Rs/kg | Actual price paid by *kuchia*s | % of actual price compared to government announced price |
|---|---|---|---|
| Aonla | 3.0 | 1.0 | 33 |
| Harda | 3.5 | 1.0 | 29 |
| Marking nut | 2.5 | 0.8 | 32 |
| Sal leaf plates (80 plates) | 4.0 | 1.0 | 25 |
| Kusum seed | 4.0 | 3.0 | 75 |
| Mahua seed | 7.0 | 5.5 | 79 |
| Mango kernel | 2.0 | 1.0 | 50 |

Source: Mallik (2001)

b) **Loss of revenue.** Total annual royalties received by the State from non-nationalised NTFPs for all products were only around Rs 7–8 million in the mid-1990s (Vasundhara, 1998). These low royalties were primarily due to under-reporting on collection and smuggling of NTFPs across State borders. Moreover, paying low prices to gatherers gives them no incentive to collect NTFPs from the interior, and thus the full potential for both revenue maximisation and employment is not realised.

c) **Harm to forests.** Monopoly and poor regulatory monitoring adds to the overuse of resources in areas close to habitation. This is demonstrated by an example in Orissa where traders obtained monopoly rights for the *Oroxylon indicum* tree, the bark of which is used for making incense sticks. The traders not only removed the bark, but often cut the entire tree, thus causing great harm to the forest. Several cases of damage to forests caused by the traders' men were reported by the Forest Department itself. Agents and subagents of monopoly leaseholders were interested in quick returns and were unmindful of the long-term impact of destructive harvesting.

d) **Absence of local processing.** Because of the uncertainties created by law and the fear psychosis in the minds of gatherers, most NTFPs are sold by gatherers without any processing or value addition, even when NTFPs are not nationalised. Producers' access to consumers is limited to selling in local villages and weekly markets. Thus, although these products may finally reach a very large market, the market is geographically very limited as far as gatherers are concerned. This is more true for women gatherers. No value addition is done even by the TDCC at the primary level.

e) **Diversion to other states.** Another important feature of monopoly trade are the higher prices prevailing in the bordering states, which result in the diversion of products into alternate illegal channels. Evidently, the monopoly buyers within the state pay a lower price as compared to the alternative market in the neighbouring states for products such as tamarind, mahua flower, kendu leaves, char seed, etc.

According to a study (Mallik and Panigrahi, 1998), mahua flowers were bought by the TDCC at Rs 2 per kg in Keonjhar and Sundargarh districts of Orissa, while the same was sold at Rs 4.50 in the neighbouring state of Jharkhand. Huge amounts of mahua flowers are smuggled out of Orissa into Jharkhand. Similarly, in the case of Chironji (Char) in the district of Bolangir, the price paid by the traders in Madhya Pradesh was much higher than the price fixed by the district price fixation committee. A huge amount of tamarind goes from Gajapati district in Orissa to Andhra Pradesh, as the more efficient Girijan Co-operative Society of Andhra Pradesh is able to pay a better price than the TDCC. In the crop year 1997–8, the TDCC started purchasing in April when almost all the tamarind had already been smuggled out to AP (Mallik and Panigrahi, 1998).

f) **Restricted buying.** In order to maximise their margins, government agencies buy only better quality NTFPs, thus reducing official collections. In MP, the collection of tendu per year averaged over the period 1989–96 was 43% less than the period 1981–88 (Prasad et al., 1996). This implies large scale pilferage of not-so-good quality leaves by the poor gatherers for sale illegally, which often results in their harassment. Criminal cases are launched against the poor forest dwellers for storing such 'pilfered' leaves. Moreover, state agencies have limited funds for operations such as pruning, resulting in reduced productivity of tendu bushes.

g) **Industrial sickness:** monopolies and subsidies lead to the creation of over-capacity and inefficient use of material by industry. It increases sickness in the industry and prevents its technological upgradation. Most oil mills in Orissa, which were dependent on forest raw material, are now closed, as these mills never improved their technology. Even two paper mills have now shut down. The only surviving paper mills are those that upgraded their technology and shifted from bamboo to easily accessible hardwoods.

# 6 Policy Change in Orissa in March 2000

Orissa's policy of creating public and private monopolies attracted a great deal of criticism, not only from NGOs but also from GoI.

The Ministry of Rural Development and the Planning Commission requested Orissa's government on more than one occasion to do away with monopolies and create a more market-friendly and hassle-free environment for NTFP gatherers. The Ministry of Environment and Forests' Secretary to the GoI also wrote in 1998 to all state governments to reduce controls, do away with monopolies and subsidies, and allow the private market to develop. He however favoured control over trade to ensure that traders do not pay a lower price than that announced by the government. The full text of his letter is provided in Annex 5.

In other States (see Annex 1), government parastatals were inefficient and could not protect forest gatherers' interests, but at least no malafide intention could be attributed to the government's preference for state control over a free market. On the other hand, in Orissa the policy reeked of corruption at the Ministerial level, especially due to frequent changes in the leaseholders and their terms. The policy was difficult to justify even on paper, as it neither increased government revenue nor provided additional income to the poor gatherers.

In the meantime in December 1996 GoI passed a new law, the Provisions of the *Panchayat*s (Extension to the Scheduled Areas) Act, 1996 (known in short as PESA), for tribal areas of Central India (called Schedule V areas). According to this law, the *Gram Sabha*/*Panchayat*, and not the government, owns NTFPs. PESA applies to the tribal areas of eight States, namely Andhra Pradesh, Bihar, Gujarat, Himachal Pradesh, Maharashtra, Madhya Pradesh, Orissa and Rajasthan. It intends to enable tribal communities to assume control over their own destiny to preserve and conserve their traditional rights over natural resources. PESA is unprecedented in that it gives radical self-governance powers to the tribal community and recognises its traditional community rights over natural resources.[16] PESA provides that the tribal *Gram Sabha* would be empowered to approve all development plans, control all functionaries and institutions of all social sectors, as well as control all minor water bodies, minor minerals and minor forest products.[17] It would also have the authority to control land alienation, impose prohibition, manage village markets and resolve internal conflicts by traditional modes. In one stroke, the Act creates a space for people's empowerment, genuine popular political participation, convergent community action, sustainable people-oriented development and auto-generated emancipation.

GoO was already under considerable pressure to do away with private monopolies, even before the enactment of PESA. The hill broom case discussed in Box 1 in which women were prosecuted for storing brooms attracted a lot of media attention and showed GoO in bad light. Although their stocks were later released and women's groups were given leases, the very fact that tribal women had to fight for a right to sell broom grass freely and tie up brooms in this era of 'liberalisation' starkly exposed the hypocrisies and inconsistencies in the State government's policies and its insincerity in solving the poor peoples' issues. A series of protests, discussions and debates, pressure from various quarters and GoI legislation for ownership rights to *Gram Sabha*s in Scheduled Areas compelled the State to come out with a new policy in March 2000. The fact that

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16 In reality, however, since its passage it has almost been forgotten and has not become part of mainstream political or policy discourse. Many state governments have passed laws not fully in conformity with the central law. Academics, administrators, policy-makers and even parliamentarians remain unaware of it. When informed about the provisions of the law, tribal communities greeted with enthusiasm but found themselves progressively handicapped by the lack of actual preparedness to negotiate development and democratisation in the manner envisaged by the law.

17 This Act uses the term MFP in place of NTFP, without defining what all items are included in MFP. This has led to some confusion and difference of interpretation between the GoI Ministries.

during the formulation of this new policy the Chief Minister of Orissa was a tribal must have improved the acceptability of the new policy with bureaucracy.[18]

18 According to newspaper reports, after a high-level meeting on the 27 October 1999, the then Chief Minister Mr. Giridhar Gamang (who was himself a tribal) announced that the system of royalties and long-term leases in NTFP trade would be abolished and that NTFPs would be put to free trade. Actual orders were however issued after the elections when Naveen Patnaik took over as the new Chief Minister.

# 7 The New Policy

Orissa's government resolution dated 31 March 2000 vests on the *Gram Panchayat*s (GPs) the authority to regulate the purchase, procurement and trade of NTFPs so that primary gatherers get a 'fair price for the NTFPs gathered by them'. The government has identified altogether 85 NTFP items which are divided into three categories. The first category consists of kendu leaves, bamboo and sal seeds which will be under the Forest Department's complete control. The explanation provided for this is that since their exploitation requires skill, expertise, infrastructure and financial resources which the local bodies do not possess, it is not be possible to transfer them to the *Panchayat*s. All the tree born oil seeds (TBOSs), barks, resins, etc. will be in the second category. As per the new policy, these items will not be put to free trade or be kept under the control of the *Panchayat*s from the point of view of sustainable forest management. Only those parties/traders who will get themselves registered with the Divisional Forest Officers will get a trade and transit permit. Although nobody will enjoy monopoly rights over trade in these items, the state will reserve the right to charge royalties. Thus, control on the trade of important oil seeds, resins and bark will also lie with the Forest Department.

All the other NTFPs (around 68), such as tamarind, honey, hill brooms and myrabolans, which come under the third category have been put under the control of the *Panchayat*s, both in the scheduled and non-scheduled areas of Orissa. There would be no requirement for trade and transit permits, no levies and no royalties for these 68 items. The new policy abolished the 'leasing system' and *Panchayat*s were given the power to register the traders at local level and to monitor their function especially with regard to price. Any person interested in purchasing NTFPs from primary gatherers or trading in NTFPs will need to register with the *Gram Panchayat*s (GP) within the territory in which he does such business on payment of a registration fee of Rs 100. No person shall be entitled to procure or trade in NTFPs in any GP without being registered with the said *Gram Panchayat*. The *Gram Panchayat*s were also vested with the authority to cancel the registration of any trader who procured any NTFP from primary gatherers at a rate lower than the minimum procurement price fixed for that NTFP.

With a view to empowering the *Gram Panchayat*s to regulate the procurement and trade in NTFPs effectively and to fix the Minimum Procurement Prices within their local jurisdiction, the resolution added that the 'Government are in the process of making a set of rules under the Orissa *Gram Panchayat* Act as well as amending the existing Orissa Timber and other Forest Produce Transit Rules, 1980'. However, no such legislation has been introduced so far (March, 2003) as regards a change in the Forest Rules, but the *Panchayati Raj* Department issued notification on 15 November, 2002.

To achieve its objective of empowering the GPs to regulate the NTFP trade, the state-level price fixation committee was dissolved and instead a district-level system of price fixation has been introduced. The resolution says that the District Collector is empowered to fix the Minimum Procurement Prices (MPP) with respect to all the NTFP items including the 68 'freed' minor forest products. While fixing the minimum procurement prices the Collector must consult the Divisional Forest Officers (Territorial), the District *Panchayat* Officer, the District Welfare Officer, the local representative of the TDCC, the local representative of the TRIFED, the local representative of the OFDC, wherever present and a local representative of the Women and Child Development Department. He should also take into account the overall price and production trends in the country for each item.

## 7.1 The new policy in action

How has the new policy, now in operation for three years, affected NTFP trade, and particularly the livelihoods of gatherers? My interaction with forest officials, *Panchayati Raj* functionaries, primary gatherers, researchers, activists and local NGOs show a mixed bag. The new policy has certainly reduced harassment from forest officials in respect of the freed items. Open competition has improved prices for some items, but not for many others. For instance, the price for hill brooms has jumped from Rs 12 to 16 per kg, and the number of traders has also increased. But the price for tamarind continues to be extremely low, and liberalisation has failed to improve the price that gatherers/producers are paid.

Moreover, marketing infrastructure continues to be the same and surprisingly little has changed. In only a few *Panchayat*s have traders come forward to register themselves, and only for those products which have demand in the market. The village market is still dominated by unregistered buyers.

It was envisaged that the new policy would encourage competition, but the multiple buyers system has failed to come up at the village level. Thus in most situations the primary gatherers have little choice, and are still dealing with the same old village *kachua* (petty trader).

In the last two years, the prices of most NTFPs have remained below the minimum procurement price fixed by the District Collectors. As per the policy's provisions, *Panchayat*s should have cancelled the registration of the traders. The *Panchayat* bodies have failed to impose the provisions of registration due to the fear that the imposition may drive buyers away from the market. Infact, in most cases the buyers are part of the old network in the trade. *Panchayat*s do not have the resources to invest and buy from the primary gatherers. Thus, they do not interfere, or stop unregistered traders from entering the village and buying at a price lower than that fixed by the District Committee. The unethical practices of advance trading/distress selling, and malpractices in weighing still continue. Some GPs may be ignorant about the policy provisions, but even where aware, GPs have felt powerless take action against non-registration or under-payment by traders.

Thus, even after three years of vesting control with GPs, the situation in the market has not changed for the better. On the other hand, the reality is that the market continues to be a buyer's market; the prices in the village *haat* (village market) remain below the Minimum Procurement Price (MPP) declared by the Collectors, and most buyers have not bothered about the scheme's registration clause.

One positive effect of this policy is the slow but steady involvement of SHGs in trading NTFPs. To illustrate, in Ramgiri and Raygada blocks of Gajapati district 102 SHGs are involved in NTFP trading. This process is facilitated by a local NGO. They have been earning a good profit from this trading. One SHG from the village of S. Palam, Gandahati GP has earned a net profit of Rs 10,300 in a year (Seminar on MFP held at Orissa by TRIFED on 23rd June, 2000). Similar illustrations can be given from Mayurbhanj, Keonjhar, Ganjam, Koraput, Rayagada, Sambalpur and Sundergarh districts.

## 7.2 Why has the situation not changed in favour of gatherers?

Many NGOs and activists who had strongly supported liberalisation and the removal of controls are dismayed that so little has changed after the introduction of a new policy. They blame the state government for not relaxing controls on other items, such as kendu and bamboo, which earn most of the forest-based revenues. There are also other lacuna in the policy, which have been pointed out by civil society. At present there is no provision for the active and meaningful participation of representatives of gatherers, women's organisations, SHGs, Forest Protection Committees and PRIs in the price fixation mechanism. The present price fixation policy empowers the District Collectors to fix the price but does not spell out the economic rationale on the basis of which prices are to be fixed and hasn't specified the time within which this should be fixed. Often, prices are fixed too late, giving no time for its publicity. Most Collectors call only one meeting a year to fix the price of all NTFP items in one go, though the harvesting period varies from item to item, and often reliable production estimates are not available at the time of fixation of its price.

The most important suggestion made by NGOs is a support price-based aggressive buying of NTFPs by state agencies, just as it is done for wheat and rice, which alone, according to them, can break the dominance of wholesale traders and their linkages with the village level market. This was also recommended by the Ministry of Environment and Forests in 1998 (see Annex 5).

Whereas some of the suggestions are unexceptionable, it is doubtful whether assigning a bigger role to government institutions such as the TDCC, OFDC, TRIFED and ORMAS, which were earlier accused of inefficiency, over-staffing, collusion with traders, and callous attitudes towards forest gatherers, would work, unless there is all round improvement in governance and in the efficiency of these government parastatals. Price support combined with aggressive buying from government can certainly improve gatherers' incomes, but it becomes difficult to sustain over a long period. First, government corporations make huge losses, and therefore the entire operation requires continuous subsidy from the government. The past experience of buying of mahua in Orissa, at the insistance of the Chief Minister in 1991–2 (in which TDCC and OFDC lost about 25 crores in all, and to date have not been able to recover from this loss), or more recently buying of tamarind by TRIFED in Bastar (a tribal district of Chattisgarh that borders on Orissa) described in Annex 3 shows that government organisations cannot provide price support on a continual, long-term basis, and such an operation will require subsidies from the exchequer. While such subsidies can be easily justified as a part of poverty alleviation programme ('if government could find Rs 25,000 crores for food subsidy that benefits rich farmers or middle class urban consumers, then why not a few crores for tribal products?'), the problem is that continued subsidies often mean subsidising inefficiency and corruption of government organisations, just as food subsidy encourages inefficiency in the FCI. The FCI functions under a set of perverse incentives; the more inefficient it is, the higher the amount of subsidy. Secondly, it is not enough to announce a higher price its implementation requires excellent and committed administration. There have been individual exceptions when district Collectors have provided leadership, but the experiment collapses after they are transferred. Thirdly, as already stated, vigilance enquiries are pending against most senior officials in the purchase organisations, and hence they do not take the bold and quick decisions necessary in any entrepreneurial activity. TRIFED, a GoI corporation, lost about 14 crores, as it bought tamarind at Rs 7/kg in 1999–2000, but was not able to dispose of it in time when the market ruled high (see Annex 3).

One of the reasons for the non-registration of traders with *Panchayat*s is that there are no disincentives for traders if they do not register (Patnaik, 2002b). There is no punishment or legally enforceable requirement on the part of traders for getting registered. A strong *Panchayat* with 'empowered communities' can certainly ask the gatherers not to sell to the unregistered traders, but that will be reducing the number of buyers and may not be in the best interests of the gatherers. In any case, *Panchayat*s where the *Sarpanch* can enforce such an unpopular measure of banning a class of traders from trading in the village, and thereby hurt his own people, are almost non-existent, especially when the number of village traders in most villages is limited just to a handful. On the other hand, when a trader registers he can be subject to a lot of harassment by the *Panchayat*s. He has to pay fees of Rs 100 to register, has to maintain a record of monthly transactions and submit it to the DFO and the *Panchayat*, he must buy only at the price decided by the Collector's committee (which is often unrealistic and does not take into account the market conditions), and he can be reprimanded and his licence cancelled if found paying less than the procurement price. No such punitive action can be taken against a trader who does not obtain a license (Patnaik 2002a). Thus the system provides perverse incentives to traders as far as registration is concerned.

*Panchayat*s all over India have weak administrative capacity– in Orissa they are entirely dependent on government officials, as they cannot act on their own unless their action is supported and sanctioned by the block officials. It is also not very clear from the government orders whether control over trade is the responsibility of the *Panchayat* Secretary or of the *Sarpanch*.

The price fixing by Collectors has another practical problem. Often the price fixed is higher than the market can bear, as no Collector would like to be criticised in the Assembly or the Press for fixing a low price. When the price fixed is unrealistic, not only are *Panchayat*s unable to find buyers at that price, but government agencies such as the TDCC and ORMAS withdraw themselves from the market. This reduces the number of buyers, and thus acts against the interest of primary producer or gatherer. For example, the price fixed for tamarind in the 2002–3 season in Orissa is around Rs 6/kg, whereas the market price at the village level is between Rs 2–3/kg. The TDCC, which had bought 1033 tonnes of tamarind in 2000–1, has not purchased even one tonne in 2001–2 or 2002–3. In fact, after liberalisation, the TDCC has almost stopped buying 'free' NTFPs, and is mostly confining itself to the nationalised sal seed.

The issue is, can we think of a better way of developing markets to reduce poor gatherers' dependence on government parastatals altogether?

Before we suggest ways of making markets more responsive to the gatherers, it may be worth examining the nature of trade and its interaction with the sellers and buyers. We begin with a probe into the present trade margins.

# 8 The Nature of NTFP Trade in Orissa

## 8.1 How high are the trade margins?

Marketing channel structure varies depending upon the nature of the product. As expected, the greater the number of agencies involved in marketing, the greater the price spread. As an example, the marketing of non-nationalised products in Orissa may be as follows:

Primary gatherer → village merchant → agent/sub-agent → wholesaler → processor → consumer

Not enough is known about activities at the intermediate and wholesale level, as agents at these levels fudge records to save taxes and may therefore be unwilling to give any information to researchers. The only work done on trade margins is by Mullik, and we are reproducing two Tables from his papers, showing prices at various levels for two different years, as the NTFPs moved from the village to the wholesaler.

**Table 4 Trade of a few selected NTFPs (figures in Rs/kg)**

| NTFP items | Selling price by primary collector within the village | Selling price by primary collector at the village weekly market | Selling price by primary collector to village level sub-agent | Sale by sub-agent to commission agent | Sale by commission agent to TDCC/ OFDC | % appreciation by agents of OFDC/TDCC over the price paid by village sub-agent |
|---|---|---|---|---|---|---|
| **Harida** | 1.5 | 2.0 | 2.0 | 2.75 | 3.5 | 175 |
| **Khanda-khai** | 1.5 | 2.0 | 1.75 | 2.0 | 2.5 | 143 |
| **Patal garuda** | 3.0 | 4.0 | 3.5 | 3.75 | 4.5 | 129 |
| **Padma chakra*** | 2.2 | 2.5 | 2.5 | 2.75 | 3.0 | 120 |
| **Char seed** | 120.0 | 150.0 | 150.0 | 200.0 | 220.0 | 150 |
| **Mahua flower** | 3.0 | 4.0 | 4.0 | 4.25 | 4.5 | 113 |
| **Amba sadha** | 8.0 | 12.0 | 14.0 | 16.0 | 18.0 | 130 |

*Source*: Mallik and Panigrahi (1998). *Note*: * Rate per bundles

**Table 5 Trade of a few selected NTFPs (value in Rs per kg/bundle/unit)**

| Items | Primary gatherers disposal to consumer at: | | Sale by sub agent to wholesaler | Sale by wholesaler | Government price (1998–9) |
|---|---|---|---|---|---|
| | *village level* | *local weekly market level* | | | |
| **Char seed** | 130.0 | 140.0 | 160.0 | 180.0 | 100.0 |
| **Mahua flower** | 4.0 | 5.0 | 5.5 | 6.0 | 10.0 |
| **Mahua seed (Tolo)** | 5.0 | 7.0 | 7.5 | 8.0 | 15.5 |
| **Sal leaves (80 pieces)*** | 4.5 | 5.0 | 5.25 | 5.5 | 4.0 |
| **Mango karnel** | 1.0 | 2.0 | 3.0 | 3.5 | 5.0 |
| **Mango** | 2.0 | 3.0 | 3.5 | 5.0 | - |
| **Broom stick*** | 4.0 | 6.0 | - | - | 10.0 |
| **Sal seed** | 2.5 | 3.0 | 3.5 | 4.0 | 3.0 |
| **Tamarind** | 2.0 | 2.5 | - | 3.0 | 5.90–6.60 |

*Source*: Mullik (2001). *Note*: * Quantity in bundles; other items are in kilograms. The last column refers to the price of NTFPs fixed by the Government of Orissa. Prices of sal seed and tamarind refer to 1999–2000.

It is difficult to compare trade margins at different levels from these tables, and pass value judgement, as different value additions and activities are done at each level. The trader arranges for transport, bundling, weighing, pottering, and storage. He also takes the risk of market fluctuation. He has to 'deal' with government functionaries, in an environment of uncertain laws, capable of multiple interpretations.

Margins for various actors involved in the trade are determined by a number of parameters such as (Mullik, 2001):

- area of coverage
- types of product dealt with
- harvesting prices fixed by the government
- the bargaining strength of the parties associated in exchange
- storage facilities and holding capacity
- perishability of the products
- marketing infrastructure
- forest laws and regulations
- NTFP potential in the forests
- NTFP policy of the government

Thus it would be simplistic to entirely blame the 'villiany' of the traders. It also appears from these Tables that a vast gap existed between government declared prices and the actual prices prevailing at the market. Thus government purchase has been ineffective in bringing the market price up to the level of government price.

Another study done by an NGO looks at the margins for trade when inter-state movement took place. Mahua flowers procured in Orissa are generally sold at Ranchi. A study (Vasundhara, 2001) found that the margin was Rs 300 per quintal, i.e. a lot purchased at Rs 800 from Orissa was sold at Ranchi for Rs 1100 per quintal. After accounting for Rs 100 per quintal for transport, Rs 35 for storage losses and sales commission, Rs 40 for government levies and Rs 25 as sleaze money, about Rs 100 is left as the sum total of storage charges, interest payments and profits, which cannot be said to be excessive.

The wholesale purchaser procures from small businessmen, who in turn purchase from village-level wandering procurers who directly collect from the villagers. It is the multiplicity of agents, and small amounts collected at village-level that increases the costs at wholesale levels. Moreover, given the situation of indebtedness and liquidity problems, the villagers' capacity to hold on to their stocks is very limited, and they may thus be unable to bargain for the price.

## 8.2 Is trade exploitative?

Although as shown in Table 2, government policy has changed quite radically in the last thirty years, from state monopoly to private monopoly to *Panchayat* control, there is a common thread of assumption about private trade being unscrupulous, and therefore even the new scheme provided for an elaborate system of regulation and checks by *Panchayat*s. Government officials and NGOs have identical views on this issue: they think controlling trade a progressive step, no matter whether done by government or *Panchayat*s, as in their perception open and uncontrolled markets cannot deliver justice to gatherers.

However, this perception may be based on impressions gained through hurried visits to the villages, and it is likely that the bias which generally exists against middlemen may have prejudiced the findings. More detailed research may perhaps show that the picture is more complex, and the complicity of the traders, though not wholly untrue, is not a major cause of low prices at village-level.

Although NTFP markets have not been studied rigorously, agricultural markets and their role in rural welfare have been widely discussed. These empirical studies reveal the diversity and complexity of agricultural commodity marketing systems in India such that they do not fit easily into the analytical framework of trade margins being excessively high. Many researchers have held that agricultural trade in developing countries is not as exploitative as is generally believed by government officials and NGOs.

Discussing evidence in support and against the two viewpoints in the context of farm production, Harriss (1989) concluded that markets can perform both functions, allocative and exploitative. To the extent that markets facilitate commodity production, and integrate producing regions with consuming regions, they help farmers in choosing the most profitable cropping pattern. Farmers allocate their resources in commodity production on the basis of signals they receive from markets. But markets may also play a retrogressive role by coercing producers to sell at a low price through monopsony, interlocked contracts, fraud, credit and withholding of information. In such a case, commercialisation may take place either without an increase in production or the consumption/income of producers.

The government of India had commissioned a set of studies[19] specific to crops and provinces in the 1930s, 40s and 50s which showed how complex markets were, and revealed quite commonly occurring instances of exploitative behaviour through monopoly, interlocked contracts, fraud and chicanery. However, several empirical studies done in the 1960s and 1970s and based on price behaviour challenged the traditional view, and concluded that markets were competitive, sensitive to the laws of supply and demand, and giving the undistorted stimuli to farmers and consumers (Jasdanwala, 1966; Cummings, 1967; Mellor, 1968; Lele, 1971). By implication, markets were regarded as securing optimal welfare, but for trivial aberrations which could be corrected through improvements in infrastructure. This view was challenged by many (e.g. Sarkar, 1981; Rudra, 1982), who held markets to be imperfect, and more so for small farmers. Since then, there have been several studies in support of both view points.

Alagh (1991: 66–7) demonstrates the existence of backward exchange relations in many districts of eastern UP, where farmers from villages remote from the main roads did not get the correct procurement price for their grain, which was collected by traders at lower prices and sold to the procurement agencies. On the other hand, after reviewing the market research that has been carried out in developing countries, Stevens and Jabara (1988) conclude that there were very few empirical studies to confirm the stereotyped beliefs about traders: 'much of what passes as analysis in the marketing literature represents little more than a repetition of the conventional wisdom about middlemen behaviour with little or no empirical content'.

A few studies support the above point of view even for NTFPs. According to Gregory (1997: 145), the widespread idea that *kochiya*s (village traders) cheat is a myth. Based on his research around Kondagaon, a tribal village in Bastar (Chattisgarh) he argues that *kochiya*s are part of the farming community, not separate from them, the range of prices is too narrow to make much profit from cheating, the quantities offered by an individual customer are too small, and profit really depends

19 These studies are all called, 'Agricultural Marketing in India'. There are in all about 100 series of these studies, all issued by the Agricultural Marketing Adviser to the Government of India, and published by the Manager of Publications, Government of India, Delhi.

on quantity. 'Competition between *kochiya* is fierce; the market is closer to the pure competitive ideal type rather than the monopolistic type.' (Gregory 1997: 146). Sundar (2001) reports from her field work in Bastar that 'by now several of the women have become confident enough to have their goods weighed by traders and if they don't like the price, to walk on'.

# 9 Structure, Conduct and Performance of NTFP markets

Before jumping to conclusions about the exploitation by traders, it may be worth analysing the peculiar features of interaction of the forest dwellers with trade, and how this trade is different from marketing food grains in agriculturally surplus regions of India. In the specific context of NTFP gatherers, there are several factors why they are in a weak bargaining position *vis-à-vis* the traders, even for those products which are not nationalised. For instance, in Madhya Pradesh very few products are under government control, and several collected products are sold by tribals and others from forest lands directly to traders, without government intervention, but the terms of such transactions are severely to the disadvantage of the sellers. The reasons are located in the nature of the product, its peculiar supply and demand features, and in the interaction between the gatherers and buyers. These are briefly discussed below.

## 9.1 The nature of the product

a) **Fluctuation in production.** Annual fluctuations of most NTFP commodities in production vary by a margin of 300–400%, leading to a wide variation in supply. This is in sharp contrast to agricultural commodities, where variation in production rarely exceeds 20% of the normal.

b) **Lack of uniformity.** Being nature-based, NTFPs can never be totally uniform in their characteristics. The size, shape, colour and other physical properties depend upon factors like rainfall, temperature, moisture, etc., and it varies from year to year and from location to location. It is one of the major disadvantages in marketing as the consumers want a steady supply and uniform quality. This is particularly relevant for the industrial user, as he has to decide about the formulation of other inputs so as to make the final product uniform.

c) **Seasonal collection.** Most NTFPs are collected seasonally, though may be in demand throughout the year. Selling them locally during the flush season creates an excess of supply over local demand, thus depressing prices. The short season becomes an even bigger constraint when it coincides with the monsoon in India, as drying and transporting of products becomes a serious problem due to a lack of proper drying facilities and roads. It sometimes results in an increase in moisture in the product, which affects its quality and results in low sale value.

d) **Low volumes.** The NTFPs in the forest are found in a scattered form and the quantity available from one place is often an uneconomic lot involving high transport costs. The low volume of NTFP reduces the bargaining power of the producers, resulting in lower realisation.

e) **Fluctuating demand.** The demand for these products fluctuates widely, as much depends on the production of its substitutes and the changing export scenario. Sometimes it is to the advantage of primary gatherers, e.g. hill brooms are greatly in demand in 2002–3, leading to many traders from AP camping in the villages of Orissa and even paying a high price of Rs 15–6/kg, but often a combination of uncertain production and equally uncertain demand works to the disadvantage of the gatherers.

f) **Competition with synthetic substitutes.** With the development of synthetics for various commodities, many of the traditional NTFPs have lost their market or have to face stiff competition from them and domesticated species. For example, as compared to non-edible oils such as mahua/sal available within the country, palm fatty imported from Malaysia is cheaper because it has been planted extensively in Malaysia and Indonesia and has the advantage of economy of scale.

g) **Exports.** Some NTFPs that are primarily exported are highly susceptible to international demand and prices. This may lead to over-harvesting or a price crash as a result of boom and bust syndrome. Indian shellac and rubber went through this cycle in recent times.

## 9.2 The nature of the actors involved

a) **Poverty of gatherers.** Most forest extractors are poor, chronically indebted to middlemen or landowners, and are thus not in control over their labour or other terms of exchange. They would stagnate at the subsistence level, and not benefit from high prices, unless they get out of their serfdom. Thus, underdeveloped rural credit markets and extreme poverty influence the disposal of NTFPs at a low price (Mott, 1998).

b) **Gender dimension.** The above mentioned problems become more acute for women entrepreneurs. Burdened with other roles traditionally assigned to women within the family, their ability to look for far-off markets is restricted. The small sizes of production further aggravates the problem forcing them into a vicious cycle of small markets, low production and (leading to) small surplus (Agarwal, 1989).

c) **Too many intermediaries.** There is a long chain between primary gatherers and end-users. There are village level traders who work for market-based commission agents or wholesalers, who would then supply to other wholesalers outside the state. For medicinal herbs, the share of the gatherers in the final price in most of the cases is less than 33%, and often as low as 10% (Subrat et al., 2001; xvi). In these species there is little scope for value addition other than cleaning and grading. Despite the number of middlemen between the producers and consumers being large, gatherers do not have the choice of many intermediaries. This may be due to interlocking of credit and output markets forcing the gatherer to sell to the moneylender. In a competitive and efficient system there should be a choice of several buyers.

d) **Nature of buyers.** The intermediaries are capable of maintaining a stronghold in the marketing network due to their ability to meet the immediate needs of the primary gatherers. They offer quick and timely credit, make quick payment and also have a good network of procurement at the door step of the producers. A combination of factors, such as gatherers' lack of knowledge of market price, poor marketing structure, poverty and impoverishment and the ineffective state-agencies also strengthen the middlemen's hold. Further, poor communication and transportation facilities, highly segregated markets and unequal bargaining powers between buyers and sellers make the field more profitable for middlemen (FAO, 1995). Thus, middlemen can and often do exploit the producers' weak bargaining power due to latter's ignorance of the market factors, and thereby retain a disproportionate share of producers' earnings.

## 9.3 The nature of the market and marketing operations

a) **Restrictions related to storage, transportation, processing and marketing.** The laws relating to the amount of NTFP that can be stored whether by gatherers or growers vary from item to item. The law also requires the registration of growers of specified forest products whose production is in excess of the specified quantity. Similarly, for transporting NTFPs, transit permits issued by the forest department are still required for most products for their movements within and outside the State. Restrictions for primary level value addition may also exist, for instance sal plates made of sal leaves need a transit permit. Traders for items in the B list, such as kusum, char and mahua seeds have to register themselves with the FD and obtain transit permits. Higher level processing requires permission through registration from the Forest Department. The processor/manufacturer is supposed to submit prescribed declaration, accounts and returns. The Forest Department is the enforcing authority for these laws. These restrictions and permits mean that the traders are at the mercy of FD all the time. Sometimes government officials harass traders and producers even when they are on the right side of law. For example, a household can legally store up to 2 quintals of mahua flowers for its own consumption, but villagers have often faced harassment by the local excise officials and the licensed liquor brewers for being in possession of much lesser quantities. There is no publicity regarding lifting of restrictions for fear of over-harvesting.

Transit Rules are often changed, and it is difficult for farmers to keep themselves up-to-date about the latest rules. For instance, eucalyptus and *Acacia auriculaeformis* were free from transit rules throughout the state, but in March 2000 this facility was withdrawn for the districts of Malkangiri, Nawarangpur, and Koraput. No reason was assigned in the government order justifying the new restriction.

The March 2000 resolution says that changes should be brought about in the existing Orissa Timber and other Forest Produce Transit Rules, 1980. But no such change in law has taken place. Moreover, necessary amendments are required in the Orissa Excise (Mohua Flower) Rules, 1976, the Board's Excise (Fixation of Fees on Mohua Flower) Rules, 1976 and also in the Sales Tax Act for achieving the objectives of the March 2000 NTFP policy. For 'de-nationalised' NTFPs, transit formalities should be completely relaxed to ensure free trade.

Laws restricting free movement of NTFPs, even when these are not nationalised, bring uncertainty in market operations, and inhibit gatherers from maximising returns to production. Government controls lead not only to corruption but also imply greater hold of existing players on the market rendering it difficult for new players to enter the market.

b) **Harvesting.** Sometimes, in order to increase their immediate income, the tribals tend to collect the produce when it is not fully ripe for marketing or use methods of extraction that are not scientific and have the potential of destroying the trees. The present access rights give tribals the freedom to collect any forest produce, but do not encourage him to develop a long term commitment for developing the forests. Similarly, little attention is paid to post-harvest techniques to which the substantial losses in terms of quantity and quality are due.

c) **Quality, grading and storage.** Tribal gatherers are often illiterate and ignorant about the quality of the produce. They do not generally get any extra price for higher quality produce. Some attempts have been made to make them aware about the quality by giving incremental price for different grades for gum karaya in Andhra Pradesh (see Annex 4), where grading is based on the colour and purity of the gum that is easy to distinguish visually, but Orissa's government has not replicated this. The gatherers bring produce in mixed form and it is then graded at the pooling point, which results in extra costs. The ungraded goods fetch lower prices. Generally, the price applicable for the lowest quality is paid for the mixed product. Storage in thatched roof *godown*s where goods remain to be transported for a number of days, affects the quality of goods. Goods sometimes become infested by insects, lost to rodents or the moisture content increases, resulting in a deterioration of quality, particularly during the monsoon period. Returns on NTFPs such as tamarind, mahua, and aonla can be doubled if stocked in a cold storage for 5–6 months.

d) **Market information.** Gatherers' information and awareness about buyers, the prevailing market price, and government rules is inadequate. Gatherers hardly know what the consumers want or need. The longer the marketing chain, the less likely that this information will be available to the producer/gatherer. Lack of fit between what the final consumer wants and the actual product results in wastage and low prices.

In a competitive and efficient market, information should circulate freely. Even in AP (Mott, 1998), where the GCC works more efficiently than the TDCC or OFDC in Orissa, NTFP gatherers tend to be unresponsive to price differentials quality because of a lack of knowledge or confidence.

e) **Lack of infrastructure facilities.** Infrastructure facilities, such as roads, transportation, communications, etc. are not developed in forest areas, making them even more inaccessible. Due to a lack of these infrastructure facilities, the product costs increase as it requires extra cost to transport the goods from the interior areas. Moreover, it leaves the inner forest inaccessible and therefore full potential of the forest is not tapped. As a result presently the NTFP is collected only from the periphery forests.

f) **Market access.** Gatherers' contact is generally limited to the village buyer alone, whereas in a competitive and efficient system there should be a large number of buyers and sellers. Gatherers seldom ever bring their produce to the town. They are uncertain about the price they would get in the town for their produce in relation to the costs and risks of transporting NTFPs. Thus, although these products ultimately reach a very large market, the market is geographically limited as far as gatherers are concerned.

## 9.4 Suggestions

### *9.4.1 Processing and micro-enterprise development*

Some NTFPs require simple and easily-handled processing and packaging technologies and usually they have a longer shelf life, and so can withstand small variations in market demand. However, to achieve these advantages, there should be local storage, and complete security of tenure over collected items. In actual practice, the sale of most NTFPs is done without any processing or value addition, due to a fear that their houses would be raided if they store NTFPs. Freeing the artisans from such constraints can itself lead to widening the base of entrepreneurial activities in the village, as these value-added activities can very well be undertaken in their own cottages. Many NTFPs can be pre-processed through relatively simple and available technology, which has the potential of increasing the per unit income of the gatherer but the same is not known to the gatherers. Pre-processing includes quality grading, storage and preparation of a product for sale to processors or intermediaries.

Thus support for micro-enterprise development should be a crucial part of the Government's NTFP policy. To encourage micro-enterprises, the following inputs would be required:

1. social inputs to facilitate the organisation of women and men forest gatherers into user groups/ cooperatives;
2. working capital, as credit is a critical input needed for these enterprises;
3. skill upgradation programmes for value addition, packaging, stocking, accounts and other management skills;
4. storage and transport infrastructure;
5. market information and access.

Industrial processing: Some products would require small-scale units with modern technology for processing, but the general climate for industrial growth in Orissa is quite bad, with poor infrastructure, high rates and uncertain power, and weak governance being the main factors. Even several existing plants for oilseeds have been closed down in the last ten years. They depended too much on state support and subsidies, and unlike similar plants in AP did not diversify by shifting a part of their raw material requirement to groundnut, rice husk, and other easily available agricultural products. Two paper mills are also lying closed.

Clearly, a *laissez faire* approach is not going to help the poor in all cases. Where government alone deals with marketing it is inefficient; and where it is left to private trade, it may still not provide sufficient returns to the gatherer on his labour. Thus de-nationalisation per se may not remove all the market constraints which inhibit a gatherer in realising the full value of his labour. Scrapping government controls and *laissez faire* will produce positive results in regions where gatherers and producers are quite vocal and organised, with low levels of poverty and long experience of marketing. An obvious example is freeing farm eucalyptus from controls on harvesting and transport in Gujarat or the Punjab. But farming systems and production conditions vary a great deal from region to region in India, and so does the level of information among the peasantry, their political clout, and infrastructure for marketing. Markets in central regions, which are subsistence-oriented and where most forests are located, are relatively underdeveloped as compared to markets in the commercialised wheat or cash crop growing regions (Kahlon and Tyagi, 1983). Here, in addition to government monopolies, there are several other sources of market imperfections which need to be addressed. In such regions, denationalisation may be necessary but not sufficient in itself, at least not for all NTFPs (Kumar et al., 2000: 83).

At a few places in this paper we have said that government controls reduce the price that the gatherer could have got from the free market. One hypothesis that requires testing is that government restrictions tend to slow down supplies in the market, and hence create artificial shortages, thereby pushing the market price up. Thus the gap between consumer price and what gatherers receive is widened. This creates an impression that the removal of controls will enormously benefit the gatherers. But with the lifting of restrictions, supply improves and the market price falls. This may be one of the factors why lifting controls did not produce miraculous results. However, one needs to collect data in order to test this hypothesis.

Thus the NTFP issue is more complex than simply lifting government controls. In such a case the solution is not to supplant them with government marketing by eliminating traders (such a step remains only on paper, as the same traders come back as agents of government, but now they have to work at higher margins to keep officers ‘happy’), but to recognise the exploitative elements of the marketing environment and attack these through policy interventions.

Several initiatives need to be taken, if the incomes of tribals and forest dwellers are to be maximised. A government agency like the Forest or the Tribal Development Department, assisted by civil society should be involved in informing tribals and gatherers about the prices prevailing in different markets, improve marketing practices, and act as a watchdog. It may be worthwhile to examine whether promotional marketing boards, as distinct from commercial corporations (which are inefficient, and hence demand monopoly and nationalisation), should be set up with responsibility for dissemination of information about markets and prices to the gatherers. The boards should have the mandate of reducing market imperfections by looking at several constraints, and bridge the gap between what the consumers pay and what gatherers get. Free purchase by all and sundry would also be in tune with the current liberalisation and open market climate. We would be quite happy if government organisations could compete in the open market, as in the wheat purchase scheme in north India, but government should not acquire a monopoly. Such an operation though may lead to short term success, as in the case of tamarind in Bastar, but is difficult to sustain without subsidies or improvement in governance.

Government should encourage bulk buyers and consumers such as exporters of herbal medicines to establish direct links with the villagers. This has happened in a few locations where manufacturers of herbal medicines such as Dabar have bought aonla directly from producers, but not on a scale significant enough to boost its production or price. Thus the present policy reflects the good intentions of the government, but needs to be strengthened in several ways.

The government should also address issues such as creating proper marketing yards, market information systems, storage space and minimum processing facilities at the local level. Simple processing activities such as broom-making, leaf plate-making, tamarind processing, mat and rope-making should be encouraged in the household/cottage sector. These are not attended to in the policy. This can go a long way in terms of promoting the NTFP market.

In some cases, NGOs run programmes to develop non-timber forest products, which make processing more efficient and improve market access, which can enhance the income of forest communities. In Southwest Bengal, the presence of an NGO which provided improved sal plate processing and marketing support allowed village producers improved income. Sal leaf plate producers working with the Chingra NGO, who made large, better quality plates were able to receive Rs 11–12 for an eight hour day equivalent versus Rs 5–6 for other communities dependent on middlemen (Poffenberger and McGean, 1996).

Direct management of the supply of raw materials may also give producers an incentive to improve management and increase productivity in terms of quantity and quality. There remains a need to break the dependency of forest communities on moneylenders, which often provide unfair prices for forest products due to their loan-based leverage. Access to reliable sources of credit would help to achieve this. In some areas, local NGOs have assisted communities and these experiences should be documented and extended in joint forest management programme areas. Other NGOs have explored ways to improve processing systems to increase income through enhancing value added.

Finally, the bulk of the NTFP business is a low-stake-high-hassle proposition, for gatherers as well as traders; insufficient marketisation keeps gatherers' wages depressed; and NTFP collection is done largely for self-consumption. Where marketisation has already occurred, issues of market structure, and its impact on returns to gatherers become important. In the case of some NTFPs, growing marketisation and the development of high value uses has created massive opportunities for livelihood promotion for forest dwelling communities. Marketisation has however also created serious threats of unsustainable and irresponsible NTFP harvesting. The challenge for the FD is to devise policies that strike a correct balance between the livelihoods of gatherers and the sustainability of NTFP harvesting. Some of the production issues are taken up in Chapter 11.

# 10 NTFP and Joint Forest Management

The March 2000 Guidelines have not resolved the three sets of contradictions between:

- JFM and the 'nationalised' NTFPs
- JFM and PESA
- PESA and the March 2000 Guidelines

Joint Forest Management (JFM) is based on the concept of people being co-managers, whereas nationalisation treats people as mere wage-earners. PESA bestows ownership rights on the entire *Gram Sabha*/*Panchayat* with no condition that the people need to protect forests before they enjoy the usufruct, whereas JFM is based on the principle of 'care and share'. According to PESA, people are the owners of NTFPs, but most important NTFPs are still owned by the government. It may be mentioned here that PESA is riddled with ambiguities, making it equally vulnerable to the politics of contradictory interpretations (Sarin et al., 2003). These issues are discussed below.

The government of Orissa has been encouraging villagers to protect forests (including reserved ones) since 1988. The revised resolution in 1993 stated that the VSS (Van Samrakshan Samiti, i.e. Forest Protection Committee), with whom the Forest Department enters into a Joint Forest Management arrangement, would get 100% of all intermediate produce from the jointly managed forests. However, this had no meaning with respect to almost all NTFPs up to 2000, as monopolies created over NTFPs did not permit any sharing in JFM areas with the co-managers. Thus, instead of the promised 100% of the intermediate produce, members of VSS only receive wages for collecting NTFPs from forest lands of which they are supposed to be managers. This contradiction has continued in respect of 'nationalised' NTFPs even after March 2000.

According to PESA, *Panchayat*s and *Gram Sabha*s are the owners of NTFPs, but the Forest Department contends that villages do not have control over reserved forests, as these are outside village boundaries, and therefore PESA is not applicable to reserved forests. This is a legal issue, and even the two Ministries in GoI (Rural Development and Environment and Forests) hold different views[20] about the applicability of PESA over reserved forests, about the inclusion of kendu and bamboo in the NTFPs to be controlled by the *Panchayat*s.

Secondly, there are also contradictions between JFM and PESA, as JFM encouraged small community-based informal groups (MoEF 1990), whereas PESA recognises formal *Panchayat*s and *Gram Sabha*s. Even the revised JFM guidelines issued by the Ministry of Environment and Forests in 2000 do not mention PESA, indicating the low importance given to its provisions and their potential bearing on the JFM framework in Schedule V areas by the central Ministry.

The number of villages per *Panchayat* is quite high in Orissa, ranging between five and fifteen, with an average of about ten. Since the *Panchayat*s are involved for the first time ever in the collection and trade of NTFPs, they do not have the organisational experience or infrastructure to collect and market it. JFM committees have been protecting and managing the forest for almost a decade. Now, in the changed circumstances, issues such as benefit-sharing among JFM members and non-members of the village/*Panchayat* have arisen. In particular, when non-forest villages comprise a part of the *Panchayat*, the issue of benefit sharing becomes complicated, as those distant villages who do not protect demand a share in the produce on the basis of their being part of the same *Panchayat*. Further, the protection and management of forests is affected, due to the varying

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20 The Secretary to the Ministry of Environment and Forests tried to reconcile the differences (see his circular, Annex 5), but it had little effect in the field.

interests of the constituent villages/hamlets. Several NGOs working on JFM have preferred JFM committees over *Panchayat*s as the organisational unit for managing the resource and sharing benefits. It is undoubtedly easier for them (and also for the Forest Department) to deal with new and informal organisations that they create and fund rather than to contend with the rough-and-tumble of 'political' and statutory *Panchayat*s. Operationalising the provisions of the Act has thus several practical problems, and no definitive answers have yet been obtained to the question of ownership of NTFP by *Gram Sabha*s.

A third set of problems has arisen because GoO has tried to dilute the provisions of PESA, though it had no legal jurisdiction to do so, as PESA is a Central Act.

Following the Central PESA Act, the GoO has enacted the Orissa Act for the State. However, the Orissa Act has tried to circumscribe the constitutional provisions of the Central Act by adding a clause 'consistent with relevant laws in force', while incorporating the constitutional provision concerning the competence of the *Gram Sabha* to manage community resources and dispute resolution as per the customs and traditions of the people. [21] Thus, tribals can have ownership rights over Minor Forest Produce, but only if the relevant laws in force allow that. This is a clear violation of the Constitutional Provision of the Central Act, since in the case of any inconsistency the relevant state laws have to be changed instead of negating the rights granted to *Gram Sabha*, as per the Central Act in this regard.

Section 4 (m) (ii) of this Act provides that:

> 'while endowing *Panchayat*s in the Scheduled Areas with such powers and authority as may be necessary to enable them to function as institutions of self-government, a State legislature shall ensure that the *Panchayat*s at the appropriate level and the *Gram Sabha* are endowed specifically with the ownership of minor forest produce.'

Further, PESA required that state government would change its existing laws wherever these were not in consistent with the central legislation. However, Orissa government has done just the opposite. Despite the fact that the Central Act clearly provides ownership (not just control) of MFPs to *Gram Sabha*s, the Ministry of Environment and Forests set up an 'expert committee' to consider what comprises MFP and what 'ownership' means. The expert committee recommended that ownership meant revenue from the sale of usufructory rights, i.e. the right to net revenues from MFP, after retaining the administrative expenses of the department, and not right of control. The committee also argued that bamboo and cane, two important products for the poor, are not MFPs.

Another problem with the Orissa legislation is that instead of giving clear rights to *Gram Sabha*, space has been kept in the state law for the involvement of higher order *Panchayati Raj* institutions instead. This has been done because it is easier for local politicians and bureaucracy to manipulate the Chairperson of district- or block-level *Panchayat*s, but not that easy to do so with the *Gram Sabha*. Thus, the spirit of the GoI Act with its focus on empowerment of the *Gram Sabha* has not been followed in Orissa. This is again a violation of the Central Act which explicitly forbids the usurpation of powers of a lower level *Panchayat* by a higher level *Panchayat*.

Such indifference to PESA can be seen in many other states too. The irony is that while PESA remains unimplemented, GoI has proposed amending Schedule V of the Constitution itself to open up tribal areas for commercial exploitation by national and multi-national corporate interests (Sarin et al., 2003).

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21 Many other states have also diluted the GoI Act. Both the Gujarat and Maharashtra Acts make ownership subject to the relevant state acts on NTFPs. The Maharashtra state Act leaves bamboo and cane out of the list of NTFPs over which ownership is granted to the *Panchayat*s.

# 11 Production and Sustainability Issues: Forest Policy Vs Agricultural Policy

While developing markets may help gatherers to obtain better returns on their labour, it may increase pressure on forest resources. Without external markets, utilisation is limited to household consumption, but when marketing opportunities appear, harvesting may be pushed beyond what the forests can sustain.

Unsustainable extraction practices may occur for many reasons. Increased market demand can lead people to disregard traditional harvesting techniques. For example, given the rapidly increasing demand for medicinal plants, there is tremendous pressure on the supply base, and many species have already become extinct. The price of chironji seeds *(Buchanania lanzan, B. latifolia)* or Cuddapah almond, used as a substitute for almond in various delicacies, has increased several times within a span of five years in India. Many tribal people prematurely harvest chironji fruits and overexploit them to the extent that natural regeneration is now being hampered, especially in Madhya Pradesh. Short term solutions to the supply crisis appear limited.

In West Bengal, faulty techniques of collecting mahua flowers (the collectors break the apical twigs which affects flowering in the following year) were found to do considerable damage to the natural stock (information gathered personally in 1992 from the team working with the Rama Krishna Mission Lokashiksha Parishad, Midnapore, West Bengal). In Central India, mahua forests are burnt repeatedly to simplify the collection of the yellow flowers from the forest floor, damaging regeneration. As a result, young mahua trees are becoming scarce.

In spite of the fact that the declining production of NTFP is a very serious problem for both forest communities, as well as for maintaining biodiversity, the regeneration of NTFP has attracted very little official attention. It even had little or no priority in the one place where one would have expected, that is, in the Social Forestry Programme. In Orissa, where the dependence of tribal communities on NTFP is high, only 4% of the trees planted in 1986–7 were NTFP species (Saxena, 1997), according to the State government. One reason given for this lack of interest is that many NTFP species require a relatively long period at the seedling stage, compared with fast-growing timber species, such as eucalyptus, which can be planted out after only a few months. They also mature much more slowly. Social Forestry staff, who have ambitious targets to meet, were not inclined, therefore, to spend time either on growing their seedlings or on planting them.

It is unfortunate that little attention has been given to increasing the production of NTFPs, which sustain the livelihoods of millions. This needs to be contrasted with policy in agriculture, where production issues have attracted a vast amount of funding for research and extension. There are other differences too, between the two sets of policies, as detailed in Table 6.

**Table 6 Government policy towards agricultural and forest produce: a comparison**

| | Agricultural produce | NTFPs |
|---|---|---|
| Annual fluctuation in production | Generally within 20% of the normal | Could be more than 200% |
| Who is concerned with increasing productivity | Farmers, seed, fertiliser and pesticide industry, agricultural universities and government. | Almost no-one, it is left to nature. On the other hand, government policies reduced diversity and consequently hurt NTFP production. |
| Government subsidy in procurement and distribution | Food subsidy was Rs 250 billion in 2002–3. This generally benefits surplus farmers and urban consumers. In addition, other inputs such as fertilisers, water and power are highly subsidised. | There is no system of minimum support price. Inefficient government corporations do get some budget support to write off their losses, but the scale is miniscule compared to food subsidy, and benefits do not percolate down to producers or gatherers. |
| Producers' political influence | Four states: Punjab, Haryana, Uttar Pradesh, and Andhra Pradesh; have always exercised a great deal of influence over central government. In general, surplus farmers have a strong pressure lobby in all political parties. | Forest dwellers and tribals are politically least important in Indian politics, and are exploited by bureaucracy, moneylenders and traders. These groups control local power, and benefit from the schemes meant for tribal welfare. Tribals are confined to the sidelines in the state's political life; while they carry heavy weights in their daily lives, they carry little or no weight in the offices, agencies and Assemblies where, without their active or informed consent, their lives are often shaped. |
| Regions producing marketed surplus | Agricultural surplus regions, with least poverty and high degree of awareness. | Agriculturally deficit regions with dispersed population and a high degree of poverty. |
| Insurance against loss in production due to natural calamities, such as drought or floods | Postponement of collection of government dues, and often remission. | Despite extreme fluctuation in production, declaration of famine and drought conditions or starting of relief works is not linked to low production of NTFPs, though in many places almost half of forest dwellers' income is derived from forest produce. |
| Tenure on producing lands | Land under private ownership, with security of access and operation. | NTFPs mainly come from CPRs, including forest lands, where peoples' rights of access are vague and subject to many formal and informal controls. |
| Controls on movement and storage | No such control on movement within state, and no license required for farmers for storage. Controls on inter-state movement have been lifted in February 2002. | Apart from controls on collection, there are several controls on movement, storage and sale, even within a district. The general impression is that all NTFPs, even occurring on private lands, belong to government and gatherers are only entitled to wages from collection to sale. |

*Source*: Prepared by the author on the basis of his understanding of the policy towards agricultural and forest produce in India

These changes between the two sets of policies have persisted despite the declaration in the Forest Policy of 1988 that the domestic requirements of fuelwood, fodder, minor forest produce, and construction timber of tribals should be the first charge on forest produce.[22]

Forests have traditionally been looked upon as a source of revenue and not for meeting the genuine needs of the people. That is why the entire thrust of forestry has been towards the high forest, which

22 With a low productivity of 0.7 cubic meters per ha, India's forests are not good enough to satisfy both the commercial and livelihood needs of the people, and hence it was necessary to give primacy to subsistence needs.

calls for clear felling and ruthless cutting back of all growth, except of the species chosen for dominance. This has the major defect of creating a bias in favour of coppice origin timber plantations which, in the long run, are more amenable to biotic and climatic factors, and secondly, it results in the removal of all the material which could serve gathering needs. The high forest system, which neglects the understorey so vital for the prevention of run-off as well as for biodiversity, has resulted in pure forests being created, but with NTFPs production falling casualty to the process. It is in this context that a major policy change is required.

While some distant forests may continue to produce high value timber as one but not the only output (provided these could be saved from smugglers), most FD lands should be used for mixtures and multiple use with timber as a by-product. A start could be made by deciding that gathering is a legitimate and genuine expectation of the people and that if they are not allowed to gather, they will treat the forests with hostility. What is now termed as 'biotic interference', i.e. foraging for fuel and fodder, grazing, removal of bamboo and other NTFPs, should be looked upon as a logical and appropriate working of the forests. This calls for a modification of existing silvicultural practices, not so much to achieve high forest as to restore to the forests an admixture in which a sensible balanced level of vegetation would be available to meet gathering needs.

Only over-mature, malformed, dead or dying trees should be removed, with no particular reservation by species. Ground flora and the understorey should be largely left undisturbed, except for the improvement of hygiene of the forest flora through the removal of noxious weeds (Buch, 1992). Plant manipulation methods, such as the opening of canopy, tending, pruning, lopping, pollarding, and thinning etc. should be so adjusted as to optimise gatherable produce, and increase the productivity of foliage, small stems, fruits, etc. The crop would be representative of all age groups because no attempt would be made to achieve an uniform crop in terms of variety or age. In those areas where teak and sal are the naturally dominant species, they would continue to predominate even without silvicultural intervention to achieve a uniform crop. However, because of the mixture of age and species, the forests would be able to maintain a continuous supply of miscellaneous small timber and fuelwood for use in gathering. Thinning, cleaning, soil and water conservation, enrichment planting, and timing harvests should all be used to facilitate growth of gatherable biomass, and increase and stagger productivity flows. Our approach is to try and exploit forest architecture to maximise the production of different canopy layers. Commercial working would taper off because clear felling by blocks would be totally abandoned, but there would be some production of timber from the over mature trees that would be felled.

Timber is a product of the dead tree, whereas NTFPs come from living trees allowing the stem to perform its various environmental functions. Moreover, gathering is more labour-intensive than mechanised clear-felling. Local people living in the forests possess the necessary knowledge and skills for sustainable harvesting. Finally, NTFPs generate recurrent and seasonal as opposed to one-time incomes, making its extraction more attractive to the poor. Thus if access to NTFPs can be assured, standing trees can generate more income and employment than the same areas cleared for timber, whilst also maintaining the land's natural biodiversity.

From the people's point of view, crown-based trees are important for usufruct, but forests still remain largely stem-based. The traditional Indian way of looking at trees has, however, been different. As opposed to trees for timber, Indian villagers for centuries have depended on trees for livelihoods. There has been little felling. Instead, trees have been valued for the intermediate products they provide. To the extent that trees provided subsistence goods with little market value, and trees were abundant, questions of share or ownership did not much arise. Trees were valued for the diversity of their products and the many ways in which they helped to sustain and secure the livelihoods of the people.

The working plan of the forest department needs to be suitably modified to allow the plantation of fruit bearing trees and medicinal plants in large numbers. Experience shows that fruit bearing trees have less chance of being illegally felled as they provide direct benefits to the people. Medicinal plants should be promoted in herbal gardens in the vicinity of forest or in the forest area itself. Herbal gardens should be promoted with community effort so that encroached forest land could also be reclaimed. Continuous activity in the base of the forest by the community will aid forest protection.

Policy change is also required in terms of the species which are planted in forests. Forestry programmes need to consider seriously how to regenerate tress that produce valuable NTFPs. This could also be built into watershed programmes being taken up extensively by several bi-lateral and multilateral agencies. At the moment, forestry species taken up for plantation generally give preference to commercial species. If one could also plant improved varieties of tamarind, mahua, char, medicinal trees like aonla, karanj, etc. and ensure that watersheds promoted these in their plantation programmes, then, it would help regenerate the forests, while providing a support for the tribal economy in the long run.

## 11.1 Summing up

In the process of the commercialisation of NTFPs, various modes of exploitation and deprivation arise owing to situations where an exchange takes place between illiterate, poverty-stricken, ignorant, impoverished and unorganised gatherer forest dwellers (also large number of other disadvantaged group of rural poor) in the remote areas of forests on the one hand, and a group of non-tribal, organised/unorganised vested interests, traders/businessmen on the other. Apart from this, in the absence of effective, vibrant and procurer-friendly institutions in the commercial network (despite a host of government-sponsored organisations), a number of non-tribal intermediaries, namely middlemen, businessmen and traders, seems to have infiltrated into tribal hinterlands in the guise of traders, shopkeepers and medicine men to take advantage of poverty, ignorance and spendthriftness. These intermediaries indeed work tooth and nail with much vigour, and their social and economic contracts are very wide. However, though forest products in India are traded in a variety of formal and informal ways, the public sector predominates in the marketing of forest produce. Unlike agricultural marketing, the marketing of forest products has not developed through the private sector, mainly due to the varieties of government controls and stringent measures.

The NTFP Policy has given many responsibilities to GPs in terms of monitoring and regulating the NTFP trade. This is a newfound role of the *Panchayat*s. Given their earlier experiences they have little knowledge of NTFP market and trade. Thus measures should be taken urgently to enhance their capacity to regulate and monitor the trade so that they can discharge their responsibilities and the primary gatherers benefit. Their involvement in the price fixating system can be a first step towards this. Similarly, proper coordination and cooperation between the *Gram Panchayat*, Forest Department and other concerned departments involved in the process need to be stressed.

Processing is another area that needs to be looked into. If markets can be provided for simple processed items which can be done in households, then subsidies for effective training for processing can help gatherers value add and improve income. For example, broom grass can be bound into broomsticks with simple training by women and men in their own houses. The same can be said for products like tamarind, which can be processed and packed as a household/cottage industry. The market is quite extensive for these items, and household producers can have the choice of either selling in the open market, or through government outlets, depending on the pricing.

This is also true in the case of bamboo. The art of bamboo processing is a fast dying art in the tribal regions of Orissa, due to the wrong policies of the Government, which has denied access to the local artisans. However, a sizeable demand for bamboo products still exists, as the tribal economy and livelihood has a variety of uses for it. A two-pronged effort needs to be made here to regenerate bamboo forests, along with support for once again reviving the art of bamboo weaving. This would help several tribal communities to have a better income.

Rather than be a monopoly buyer of NTFPs or try to regulate price through administrative mechanisms, government should adopt market-friendly policies, facilitate private trade, and act as a watchdog rather than eliminate the trade. It should encourage local bulking, storage and processing, and bring large buyers in touch with gatherers, so as to reduce the number of layers of intermediaries. Government should encourage the formation of self-help groups among the forest dwellers so that such groups are able to bargain better with the trade. Finally, a more effective implementation of credit-oriented and poverty alleviation programmes will help the poor in recovering from debt bondage, which is the single most important factor for their dependence on traders and depresses the price that forest dwellers are able to negotiate with them.

# Annex 1 Policy in Other States

The degree of control varies from state to state, and so does the number of nationalised items. For instance, tamarind is a free item in Bihar and MP, but not in AP, where GCC has legal monopoly over its purchase and disposal. The right to the procurement of tamarind was leased in Orissa to both the TDCC and some private traders, but unauthorised traders also operate freely. Since March 2000, tamarind is under *Panchayat* control in Orissa.

In AP, trade in NTFPs is a State monopoly by law, irrespective of land where they occur. GCC has been designated to procure all NTFPs and trade in them. All items other than timber are included. In Maharashtra, the Tribal Development Corporation has a monopoly of purchase in respect of 32 NTFP items. In Madhya Pradesh, sal seeds, gums, harra seeds and tendu are nationalised, and the rest are free. Resin, which is the main output from pine forests of the Uttaranchal hills, is also nationalised.

The Government of Kerala has created a monopoly for 120 notified NTFPs items. The Scheduled Tribes and forest dwellers have no right to make any direct sale to outside parties. They have to sell these to cooperative societies which auction the products gathered by the tribals. The open market price was much higher than the government price. Thus in Kerala, government monopoly was not only inefficient but also exploiting the tribals.[23]

The Rajasthan Scheduled Tribe Area Development Cooperative Corporation Ltd. Udaipur has a monopoly over designated NTFPs. It buys tholi musli, a medicinal herb, at Rs 250–400 per kg, although tribals could easily get from Rs 500–1000 in the open market. Similarly, the Corporation pays only Rs 18 per kg for honey as against the market price of Rs 50 per kg. Thus nationalisation has not been of any help to the gatherers.

The women living in desert area of Santalpur Taluka of Banaskantha district, Gujarat survive mainly on gathering gum from the Babul trees planted by the Forest department. The Forest Department insists on licenses for gum collection, and since the women had no licenses, they were in the past collecting gum 'illegally' and selling to private traders. After joining SEWA, a voluntary agency of international repute, they formed self help groups and demanded licenses, so that they could 'legally' sell the gum to the Forest Corporation. The rates for gum are fixed by the Forest Corporation, and to the women's dismay, their legality has resulted in getting poorer rates from the Forest Corporation than what they could get from the open market. The tragedy is that the women can get a better rate for gum in the open market, but the Forest Corporation will not allow the gum pickers to enter the open market, and they have to sell their gum for 1/2–2/3 of the market price.

Despite peoples' enthusiasm for JFM in West Bengal, almost nothing was done to improve the marketing framework for NTFPs. The World Bank Implementation Completion Report (1998a) observed, 'Unfortunately, no specific, clearly stated comprehensive objectives for strengthening and development of forest products marketing to contribute to the overall objectives of the project were presented. The outcome of the project in terms of the development and strengthening of forest product marketing remained meagre'.

Some of the regulations in the states are summarised in Table 4.

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23 The Kerala World Bank PAD (1998b) recommended phasing out controlled marketing of NTFPs, and allowing village forest protection societies to have freedom to market products freely. So far government has not made any changes in the monopoly rights given to state parastatals.

**Table A1.1 State trading regulations promulgated by state governments**

| State | Regulations | Implications |
|---|---|---|
| Andhra Pradesh | Andhra Pradesh Minor Forest Produce (Regulation of Trade) Act, 1971 and the AP Scheduled Areas NTFP (Regulation of Trade) Act | Trade in NTFPs is declared state monopoly whether ownership is with government or not |
| Bihar | Bihar Kendu Leaves (Control of Trade) Act, 1973;<br>Bihar Forest Produce (Regulation of Trade) Act, 1984 | Bihar State Forest Development Corporation operates as state government agent for the collection and marketing of kendu leaves, sal seed, mahua (*Madhuca latifolia*) and harra |
| Gujarat | Gujarat Minor Forest Produce (Regulation of Trade) Act, 1979 | Minor forest products identified include tendu leaves, mahua flowers, fruits, seeds and gum |
| Himachal Pradesh | Himachal Pradesh Resin and Resin Produce (Regulation of Trade) Act, 1981 | Resin, bamboo and *Acacia catechu* (khair) collection through Himachal Pradesh Forest Development Corporation Ltd |
| Madhya Pradesh | Madhya Pradesh Vanopaj (Vyapar Viniyam) Adhiniyam, 1969 | Items under monopoly include tendu leaves, sal seed, harra and gums; Madhya Pradesh Minor Forest Produce (Trade and Development) Federation acts as agent of state government |
| Rajasthan | Rajasthan Tendu Leaves Act, 1974 | Rajasthan Tribal Area Development Federation collects and markets NTFPs |

*Source:* MoEF (1998).

# Annex 2 Tendu Leaf Trade: Comparison across Madhya Pradesh, Andhra Pradesh and Orissa

The table below compares the salient features of the tendu leaf trade in three States.

**Table A2.1 Comparison of salient features of the tendu leaf trade in three States**

| Salient feature | Orissa | Andhra Pradesh | Madhya Pradesh and Chhattisgarh |
|---|---|---|---|
| *Local names* | Kendu patra | Tendu pata/*bidi* pata/abnus | Tendu/kendu/tembu |
| *Procurement* | Directly by Forest Department of Government of Orissa | Though approved agents. Payments made to pluckers by the agent to be reimbursed by Government of AP | Through a cooperative society controlled by Apex Federation |
| *Collection charge* | One paisa (Rs 0.50 per 50 leaves) per leaf collected by the pluckers (however there are delays in payment of up to five months leading to interest costs and underpayment through undercounting the leaves) | Rs 0.54–0.59 per 50 leaves collected by pluckers as declared by Government of AP, additional Rs 0.20–0.40 per 50 leaves paid by the agents to the pluckers as directed by PWG (Peoples' War Group, a militant organisation), wherever they are active | Rs 0.30–0.45 per 50 leaves collected by pluckers |
| *Time limit for payment to pluckers* | Pluckers are issued a card, the daily collection is entered in the card, settlement made 4–6 months from the season of procurement | Pluckers are issued a card, the daily collection is entered in the card, and settlement is made on a weekly basis | Cards issued to pluckers, on which the daily collection is entered. Settlement is usually made on a daily basis, with instances of delay up to one month |
| *Bush cutting* | Bush cutting is undertaken by Forest Department, the expenditure is borne by Government of Orissa, | Bush cutting is undertaken by the prospective purchaser who gets the contract for collection of KL | Bush cutting undertaken by local cooperative societies and the expenditure is pre allocated by the Apex Federation. |
| *Seasonal employees* | 18,000 seasonal workers, additional checkers/*munshi*/ *chaparasi*/watchman, etc. | No seasonal employment, checking, payment, etc are monitored by the DFO | *Phad munshi* and others are employees of the Cooperative Societies. |
| *Storage* | Temporary storage in a *phadi*, with post processing storage at the warehouses of the Forest Department | Post collection storage in an open field called *kallam* with later storage at the warehouses of Forest Department | Collected at the *phad* house which is later shifted to the warehouses of the Apex Federation. |
| *Sales tax* | Sales tax: 12%, surcharge 15% up to May 2001 currently 10% | Sales tax: 10%, surcharge on sales tax 6.25% | Sales tax: 20%, surcharge on sales tax 15%,Van Vikash Upkar (Forest Development tax) 3% |
| *Sale unit* | In quintals | In standard bags with one standard bag containing 1000 bundles of leaves, one bundle containing 50 leaves (approx. 50kg) | In standard bag; one standard bag containing 1000 bundles of leaves, One bundle containing 50 leaves (approx. 50kg) |
| *Sale lot* | One lot is 100 bags of 60kg each, i.e. 60 quintals | Whole area under production is divided into small divisions; one division considered a lot | Collection of each society is considered as one lot |

| | | | |
|---|---|---|---|
| *Production quantity* | Around 5.3 lakh quintals | Around 6.73 lakh standard bags in a crop year (approx. 3.35 lakh quintals) | Around 15.20 lakh standard bags in crop year 2001 (approx. 7.6 lakh quintals) of Chattisgarh and 21.27 lakh standard bags in crop year 2001 of MP (approx. 10.63 lakh quintals) |
| *Sales system* | Tender/auction/negotiation by FDC | Advance sale system by Forest Department acting on behalf of FDC | Tender/action/negotiation by Apex Federation |
| *Sales commission etc.* | 4% regular commission; 1% additional commission paid to FDC | No commission paid to FDC, all sale proceeds transferred to AP government, demand of 2% commission by FDC not yet finalised | Variable commissions are paid to societies. Apex Federation only reimburses its initial working expenses |
| *Employee strength* | FDC: 422 Forest Department: about 2000 | N/A | Apex Federation: MP : 250; Chhattisgarh: 100 |
| *Realisation of sale proceeds* | Auction: security deposit (SD) 15% within 15 days. Balance in 75 days tender: SD 25% within 15 days. 50% in 30 days balance in 75 days | 1$^{st}$ instalment: 15$^{th}$ Oct. 2$^{nd}$ instalment: 30$^{th}$ November 3$^{rd}$ instalment: 31$^{st}$ December | 8% paid as SD balance in 4 instalments |
| *Local bidi industry* | Small local manufacturers and others who do sub-contracted work | Numerous units including national brands and big exporters. | A reasonably large number of units and high local consumption |
| *Pre harvest activities* | Coppicing is contracted out. Results unsatisfactory | Activity carried out by successful bidders | Done by local cooperatives |
| *Role of Forest Department* | Entire control of the production process and joint responsibility for storage | Monitoring to prevent unlawful exploitation of forest resources | Monitoring to prevent unlawful exploitation of forest resources |
| *Quality inspection* | While accepting delivery at *phadi*, inspection at central *godown* | No. of leaves in a bundle cross-checked by forest department during storage | By cooperatives while accepting leaves. |

*Source*: Collected by the author on the basis of several unpublished government documents and discussion with the Forest officials

# Summary

- Payments to pluckers: the payments made in Andhra are the most attractive, ranging from Rs 1.1–1.4 per 100 leaves, whereas Orissa pays Rs 1 and MP pays Rs 0.6–0.9 per 100 leaves.
- Tax structures: sales tax is lowest in AP and highest in MP with Orissa in between.
- Role of corporation: only as sales agent in all cases.
- Presence of *bidi* industry: small numbers of manufacturers are present in Orissa, though much larger production takes place in AP and MP. This suggests that there is an opportunity available for *bidi* manufacture in Orissa as KL production in Orissa is higher than in AP.
- Finance facilities: the credit arrangements in Orissa are not very market-friendly and lead to large defaults. The systems in AP and MP are more progressive and flexible.
- Employee strength: the number of staff involved in this process is very high in Orissa compared to AP and MP, which suggests that there is a great need for downsizing.

# Annex 3 Tamarind Procurement by TRIFED in Bastar

Bastar is one of the 16 districts of the new state Chattisgarh, with about 60% of its area under forests. The annual yield of tamarind in the district is estimated to be 25,000 MT (Sahu, 2002), worth about 250 million Rs in the terminal markets. It is a free item, but returns to primary gatherers have been meagre. Almost the entire quantity of tamarind is sold as unseeded at the village or village market. Even in tribal villages, almost 40% of tamarind is collected by non-tribals from trees pledged to them by the tribals (GoI, 1988).

In 1998–9, the district Collector decided to encourage a GoI undertaking, TRIFED, to organise buying tamarind directly from the gatherers. SHGs were formed at the village level and were advanced funds by TRIFED to buy tamarind from the individual producers/gatherers. They in turn handed over the produce at the TRIFED *godown*s. A number of new cold storage facilities were established in the district, so that the produce could be stored for a longer period.

In order to ensure a good price for the gatherer, a strategy evolved whereby the Collector would discourage the sale of tamarind to the private traders. Since it is a free commodity, such a restriction could only be imposed administratively, and only in a limited way. This was achieved by strictly enforcing the Krishi Upaj Mandi (Agricultural Produce Marketing) Act, which forbids traders from buying outside the marketing yards (where produce is auctioned). The setting up of co-operatives of village youth to purchase NTFPs was facilitated by GoI legislation, the Provisions of the *Panchayat*s (Extension to the Scheduled Areas) Act, 1996 (PESA), which gives the *Gram Sabha* ownership of NTFPs (see Chapter 10). The Collector got the *Gram Sabha*s to pass resolutions creating tribal SHGs and village co-operatives, which no longer had to compete with traders in an open market. By forcing traders to purchase tamarind at auctions, the government also ensured that there were no private deals to keep the prices low and that the government received the full market tax as well as income tax on profits made by the traders.

The second important innovation was ensuring sufficient capital for the co-operatives from TRIFED, so that it could buy about 50 NTFPs including gum karaya, niger seed, sal seed, myrobalans, mahua, tora, tamarind etc. In addition to TRIFED, the Collector also mobilised SILKFED and OILFED, state level parastatals, to buy kosa cocoons and oil seeds respectively (RGDM, 1999). By ensuring that the co-operatives had sufficient financial backing and would not be bought out by traders, TRIFED had evened out the field.

About 8,000 unemployed tribal youths received salaries to work as SHG Secretaries. The purchase by GoI parastatal coincided with a high market price, and therefore gatherers and producers greatly benefited (India Today, 11th Sept 2000 internet edition). In the three financial years 1998–2001, TRIFED purchased tamarind worth Rs 500 million. Due to their active buying, traders also had to pay a higher price.

However, TRIFED was not able to sell its produce at a profit after 2000. Having bought at Rs 4–5 per kg from the tribal SHGs, it would break even if it could sell at Rs 7–8. But prices fell in 2000, TRIFED could not dispose of its accumulated stocks, and had to suspend its operations in May 2001, as it ran out of cash. This resulted in a further decline in prices and panic selling by the tribals. Prices fell to Rs 1.5 per kg in 2001, as opposed to Rs 6–8 in the 1999 season. Meanwhile, the district Collector who had provided leadership to the entire movement was transferred out of the district. The situation in Bastar today has returned to the pre-1998 situation.

**Table A3.1 Purchase and sale of tamarind by TRIFED from Bastar district in Rs (million)**

| Year | Purchase | Sale |
|---|---|---|
| 1997–8 | 5.55 | 9.16 |
| 1998–9 | 42.70 | 0.30 |
| 1999–2000 | 153.70 | 171.80 |
| 2000–1 | 264.30 | 0.75 |
| 2001–2 | 46.80 | 89.40 |

*Source*: Collected by the author from unpublished reports of TRIFED

TRIFED did not develop market linkages outside the district, as it sold most of its produce to the wholesalers operating within the district. Though it was able to reduce the role of village buyer in Bastar, it was not able to break the hold of wholesalers, as they control storage and contacts with the outside markets. Traders from Orissa also benefited as they were able to buy tamarind from tribals of Orissa at Rs 2 a kg and sell to TRIFED in 1999–2000 at Rs 6 to 8 a kg.

Part of the produce is exported illegally to traders of Pakistan and Afghanistan for consumption in the Middle East. With deterioration in relations between India and Pakistan and troubled conditions in Afghanistan, this route for disposal suffered heavily. Authentic figures relating to the fall in exports are not available, as most exports are transported by road and are not recorded.

Should the government have advanced capital to continue the market intervention? Past experience (mahua in Orissa in 1991–2) shows that this is hardly a viable solution.

# Annex 4 Sustainable Interventions for Poverty Alleviation: a Best Practice Case of Gum Karaya in Andhra Pradesh, India

This case study documents a process that started with the search for marketing solutions to the problem of large and increasing inventories of gum karaya with a government corporation, and led to sustainable solutions that significantly increased the incomes of thousands of tribals. The immediate problem was the existence of 1200 tonnes of unsold gum karaya stocks with the Girijan Cooperative Corporation (GCC) of Andhra Pradesh.

The conventional solution would have been to decrease the price at which gum would be procured from the tribals, thereby ensuring a decrease in supply. But with a Managing Director unwilling to cause distress to the tribals, the search began for marketing options.

The GCC, established in 1956, is an undertaking of the State Government of Andhra Pradesh, set up for the procurement of NTFPs and agricultural produce from the tribals and marketing of these products to their best advantage. It also runs Public Distribution System (PDS) shops and provides credit to the tribals for seasonal agricultural operations.

The Corporation employs 2,433 people, spread over a network of one Regional Office, twelve Divisional Offices, 45 Girijan Primary Cooperative Marketing societies and 850 Depots, working in close coordination with the nine State Integrated Tribal Development Agencies. The Corporation has a vast network of *godown* points and a sizeable transport fleet, facilitating smooth operations in the remote and hilly areas.

The GCC has monopoly procurement rights for 35 items of NTFPs. Gum karaya accounts for approximately 70% of NTFP purchases by the GCC.

Karaya gum is a commercial gum found in abundance in the forests of Madhya Pradesh, Maharashtra, Andhra Pradesh, Tamil Nadu and Gujarat. The commercial production of gum entails blazing/injuring the trunk of the tree, a practice that affects the tree’s health and long-term gum production.

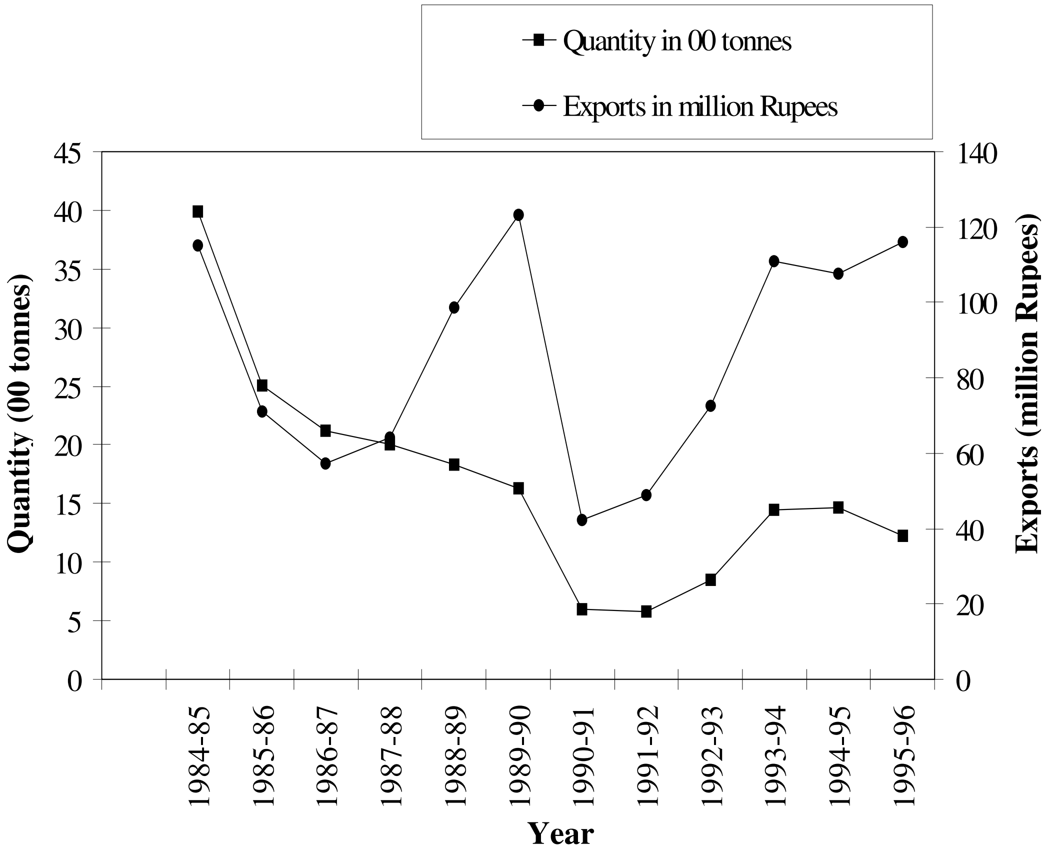
The grading and processing/purification is done both manually and mechanically. Gum processing/purification involves the removal of bark, wood, sand, etc. After the removal of as many impurities as possible, the gum is graded into different categories based on colour and impurities.

More than 30% of the total collection is unacceptable to the consumer and for exports because of the dark colour and high level of impurities. Several thousand tonnes of this low graded gum is sold at throwaway prices.

During the decade from 1985–6 to 1995–6, India’s foreign exchange earnings from aggregate gum exports fluctuated between a low of $6.3 million in 1986–7 and a high of $23.5 million in 1993–4. Gum karaya contributed between half to over 90% of the foreign exchange earned from gum exports between 1985–6 to 1995–6.

In the past, when the price offered by traders for gum karaya decreased, the procurement price was reduced, and collection and supply by the tribals would decline in turn. As can be seen from FigureA4.1, exports fell sharply in 1990–1. In the early 1990s the GCC had an inventory of over 1,200 tonnes of gum. Despite the high level of inventory, the Managing Director, Shri Vijay Kumar was unwilling to decrease the procurement price of gum as this would cause hardship for the tribals and he did not want them to pay the penalty for fluctuations in offtake. He searched for scientific solutions to improve the quality of production.

**Figure A4.1 Gum karaya exports**




*Source*: Mehta (1998)

Scientific and technical knowledge were used to solve the problems faced by buyers with regard to poor quality of gum. Expertise in the fields of bio-chemistry and botany was used to develop scientific methods for tapping, collection, transportation, handling, storage, cleaning, sorting, grading and drying of gum. Extensive extension work and training were undertaken to ensure that quality was maintained at all levels of handling gum – from the stage of tapping to the stage of auctioning the final product. As a result, within five years all 8,500 tribal families, consisting of men and women gum pickers, received the training and implements required to ensure quality. There was awareness of the correct method of tapping and handling gum, and of the cause and effect relationship between the adoption of scientific practices, grades of gum and prices. The tribals shared the benefit of the major improvement in quality. As quality improved, exporters were willing to pay higher prices to the Corporation. Therefore, the price at which gum karaya was procured from the tribals increased from Rs 30 per kg in September 1989 to Rs 40 in May 1992, Rs 60 in April 1993, Rs 80 in November 1993, Rs 90 in May 1994, and Rs 100 in April 1996. The tribals benefited, as did the GCC and exporters. In addition, the life of the tree was extended by 20 to 25 years. A one time expenditure in training and extension of about Rs 3.5 million yielded a recurring annual increase in returns to the tribals of Rs 7.5 million annually and a similar annual amount to the GCC.

This all happened because of the commitment of one single individual, Vijay Kumar, who headed the GCC at that time. It is not known whether or not better payment to tribals continued after he was transferred out of the GCC.

**Table A4.1 The state of forests in Orissa and India, 1987–99**

| Forest type | Orissa | | India | |
|---|---|---|---|---|
| | % share in the total forests | | | |
| | *1987* | *1999* | *1987* | *1999* |
| Dense | 47.98 | 45.59 | 55.15 | 54.75 |
| Open | 40.96 | 36.28 | 35.8 | 37.01 |
| Mangrove | 0.33 | 0.38 | 0.61 | 0.71 |
| Scrub | 10.73 | 17.75 | 8.44 | 7.53 |
| Total (%) | 100.00 | 100.00 | 100.00 | 100.00 |
| Total area (M ha) | 5.96 | 5.72 | 69.81 | 68.92 |
| Area under dense and open forests | 5.30 | 4.68 | 63.49 | 63.24 |
| % decline during 1987–99 | 11.66 | | 0.40 | |

*Source*: FSI (2000).

**Table A4.2 Forest produce in quantity in Orissa**

| Produce | Unit | Production of forest produce in the year | | | | | |
|---|---|---|---|---|---|---|---|
| | | *1992–3* | *1993–4* | *1994–5* | *1995–6* | *1996–7* | *1997–8* |
| Timber | Cum | 30393 | 36098 | 24478 | 24375 | 20844 | 20205 |
| Bamboo | SU | 241451 | 238357 | 237343 | 217802 | 245734 | 206182 |
| KL | 000 tonnes | 50.9 | 49.8 | 49.1 | 38.6 | 51.5 | 49.6 |
| Tamarind | MT | 8518 | 9762 | 18717 | 7017 | 10124 | 8424 |
| Neem seeds | MT | 408 | 382 | 20 | 261 | 49 | 41 |
| Chakunda | MT | 774 | 308 | 1641 | 83 | 799 | 265 |
| Mahua seed | MT | 4544 | 1892 | 3988 | 15820 | 117 | 216 |
| Mango kernel | MT | 191 | 4869 | 4572 | 663 | 11099 | 20621 |
| Mahua flower | MT | 23646 | 57002 | 49692 | 39358 | 33481 | 45735 |
| Sal leaves | MT | 1257 | 1562 | 318 | 29876 | 31792 | 31098 |

*Source*: Government of Orissa (1999).

# Annex 5 Excerpts from a Letter from the Secretary, Ministry of Environment and Forests, Government of India, to all State Governments (June 1998)

'In some State Governments, federations/corporations continue as agencies involved in the trade of MFPs, which is not in tune with the spirit of the Central legislation. In some other States, MFPs are diverted to industry for maximising revenues and in some States the MFPs are being supplied to industry into long-term agreements at a low price against the provisions of the National Forest Policy, 1988. The result of these practices is that tribals have not been able to derive benefits from MFPs. The price of MFPs falling in the jurisdiction of *Panchayat*s should not be unilaterally decided by the State Government.

I will suggest that Government federations should be asked to compete with other traders in the open market purchase of MFPs from *Panchayat*s/*Gram Sabha*s. Just as in the case of procurement of wheat and paddy the FCI provides support price, but farmers are not forced to sell to the FCI alone, similarly, the role of Forest Corporations in the marketing of MFPs may be to provide a floor price, but allow the private market to develop. Vigilance should be exercised to ensure that traders do not pay a price less than announced by the Government.

In Para 4, 5 and 6 of my letter dated 16 March 1998, I had requested the State Governments to gradually transfer rights of ownership to *Panchayat*s/*Gram Sabha*s. This has been interpreted by some State Governments as reducing the access of tribals to MFPs to an absolute minimum. This interpretation is not correct. The MoEF believes that the needs of the people and environmental conservation are mutually compatible and can be harmonized through enlightened policies. If policies suggested in this letter are implemented with empathy for the tribals, a sense of ownership and responsibility towards forests among tribal communities will be strengthened. Consequently, implementation of joint forest management will also improve.

I suggest that the Forest Department should educate the public in the Schedule-V areas that ownership of MFPs has now been transferred to the *Panchayat* and *Gram Sabha*s. This should be combined with officers holding regular meetings with *Gram Sabha*s and *Panchayat*s and educating them on how to regulate over-exploitation and how to scientifically manage MFPs, so that the income of the collectors and *Panchayat* is maximised.'

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