## Making JFM Work Towards Forest Conservation in Orissa: Some Conceptual, Institutional and Participatory Issues

## R. M. Mallik

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## RESEARCH TEAM

#### PRINCIPAL INVESTIGATOR

Prof. R. M. Mallik

## RESEARCH SUPERVISOR

Sri Chita Ranjan Das

#### FIELD STAFF

Sri Prafulla Kumar Sahoo Sri Arakhita Patra Sri Ashok Kumar Nayak

## **COMPUTER ASSISTANCE**

Mrs. Sujata Manjari Pani Ms. Minati Dey Sri Prafulla Kumar Sahoo

## **FOREWORD**

The New Forest Policy 1988, that recognized the symbiotic relationship (unlike the preceding forest policies) between the forest and the tribals in late 1980s persuaded the policy makers and planners to bring spectacular policy changes in forest management through the idea of Joint Forest Management (JFM) all over the country. In the light of such new policy initiatives, JFM was thought to be the right intervention for ensuring livelihood improvement of the forest dependant poor due to involvement of local communities through regeneration of forests and their rehabilitation, who are primarily the very poor stakeholders under the JFM regime. They are unrecognized and underprivileged due to their poverty, ignorance and impoverishment – thus, are increasingly vulnerable. These people in fact are principally focused on JFM concept, bringing into play the principle of equity and empowerment. This is how JFM distinctly distinguishes itself from other participatory management practices, and has now become the central focus of future forest development programme in the state of Orissa.

However, the emerging JFM programme, a three way partnership between the Community, Forest Department and the NGO, was effected in Orissa in 1993 to protect, conserve and regenerate degraded forestland. In such a situation, a critical examination/evaluation of its performance and the conceptual, institutional and participatory issues emerged there from needs careful consideration and systematic enquiry. In pursuance of his discussion with Dr. N. C. Saxena, Prof R. M. Mallik submitted a research proposal entitled "Making JFM Work Towards Forest Conservation in Orissa: Some Conceptual, Institutional and Participatory Issues", to the Planning Commission, New Delhi in 2003, which was finally approved for funding in February 2005. It is a matter of great pleasure to note that Prof. Mallik completed the draft report within the prescribed time limit, despite a lot of problems and inconveniences caused to the research staff at the field level, besides his pressing unavoidable personal preoccupations.

I believe and sincerely hope that the research findings and action-oriented policy options prescribed in the research report will be useful to the government in further formulating/revising some of the policy strategies not only for the socio-economic upliftment of forest dependent poor and tribals in particular, but also in initiating fresh strategies for an effective, scientific and people-centred management of the precious forest resource for ensuring inter-generational equity and sustainability. This work, I am sure, will inform policy reforms in this key area and I congratulate Professor Mallik for undertaking such a useful and painstaking study.

Professor Sakti Padhi Director I/C

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The respondents of 16 villages (8 blocks and 4 districts) associated with VSS activities in the JFM villages and so also, respondents of 8 villages in the NJFM villages for their excellent co-operation in data collection work, and unhesitatingly, for providing relevant information, and holding useful discussions in the PRAs on JFM Programme.

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#### LIST OF ABBREVIATIONS

ACF - Assistant Conservator of Forest ANR - Aided Natural Regeneration.

CF - Conservator of Forest

CFM - Community Forest Management
CPR - Common Property Resources
DFO - Divisional Forest Officer

EDC - Divisional Forest Office Eco-Development Club

F.D.A - Forest Development Agency

FD - Forest Department

FPC - Forest Protection Committee

GoI - Government of India GoO - Government of Orissa

GP - Gram Panchayat

HHs - Households

IAY - Indira Awas Jojana

ISED - Institute of Socio-Economic Development

JFM - Joint Forest Management

LAMPs - Larged Sized Multipurpose Co-operative Societies.

MFP - Minor Forest Produce

MoU - Memorandum of Understanding
NCA - National Commission on Agriculture

NFP - New Forest Policy

NGO - Non-Governmental Organizations
NJFM - Non-Joint Forest Management
NTFP - Non-Timber Forest Products

OBC - Other Backward Caste

OC - Other Caste

OFDC - Orissa Forest Development Corporation PESA - Panchayat Extension in Scheduled Areas

PFM - Participatory Forest Management

PRIs - Panchayati Raj Institutions

SC - Scheduled Caste SHGs - Self - Helf Groups

SHSY - Swarna Gramya Swarojagar Yojana

SIDA - Swedish International Development Agency

ST - Scheduled Tribe

TDCC - Tribal Development Co-operative Corporation

VFC - Village Forest Committee

VFPC - Village Forest Protection Committee

VSS - Vana Samrakshana Samiti

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#### **EXECUTIVE SUMMARY**

- Of late, the New Forest Policy (NFP) 1988 recognised that active involvement and participation of communities in the management of local forest resource is imperative for regeneration, protection, conservation and development of degraded forests. Accordingly, in a major shift from the traditional systems of forest management the JFM model emerged in many Indian States in 1990 (including Orissa) consistent with NFP 1988, and is now considered to be a revolutionary programme in the forestry sector to make effective involvement of local communities in establishing sustainable Forest Management (SFM). Besides, it is now being looked upon as the only alternative to problems of deforestation and land degradation. It is believed that with the JFM model introduced in Orissa since 1993 (with the supporting involvement of village communities and NGOs), the State F.D jointly with the concerned village community must have realised effective association of the local people and their participation in the management of local forest resource (during little more than one decade or so) through various institutional, training, research and policy mechanisms. Because, the basic philosophy underlying the JFM model is to link the economic interests of the forest-dependent poor living in and around forests with sustainable management of these areas and environmental security for ensuring sustainable source of livelihood. However, the present research study is merely a limited attempt to critically examine the legal, institutional, conceptual and participatory issues emerged in the JFM model in the process of governance of the local forest resource through formation of VSSs to forge an effective partnership between the F.D on the one hand and the village community on the other, and also to explore the scope/opportunities (if any) not only to strengthen the socio-economic capabilities of the forest-dependent poor, but also to alleviate their poverty as well as livelihood risks.
- ♦ The study is based on field-survey research conducted in two-scheduled districts: Rayagada and Mayurbhanj and two partially-scheduled districts: Kandhamal and Keonjhar covering 08 blocks, 16 villages from the JFM areas and 08 villages from the NJFM areas selected from different agro-climatic zones of Orissa. Accordingly, 321 households from the sample JFM villages and 80 households from NJFM villages were exclusively interviewed and studied in-depth having a few selected objectives and hypotheses in mind (the details are in Chapter VII).

#### Major Research Findings:

♦ Apart from food subsistence collected from the local forests (including protected forest) to meet daily consumption needs of the forest-dwelling households, while as much as one-third (28.3%) of total per household annual income is derived from sale of NTFPs, distinct variation of such income across the sample districts from 43.8% in Mayurbhanj (Rs.5173/-) to 23.6% in Rayagada shows their degree of dependence on forest sources (Table- 7.3 (a)) for livelihood. In contrast, 36%

of the total annual income per household is derived from sale of NTFPs in the NJFM villages. Evidently, of total, bulk of the (83.4%) income (from sale of varieties of forest produces) is derived from the protected/ VSS assigned area. This precisely suggests success of protection and conservation measures undertaken in the VSS assigned areas in the JFM study villages.

- ♦ Further, while assessing the degree of dependence of the forest dwelling population on forests (of the JFM sample villages) for their food subsistence and livelihood, both the imputed value of consumption of NTFPs (by the forest dwelling households) and the sales value of NTFPs constitute as much as one-half (49.0%). Of the annual per household total income, distinct variation across the sample districts from 60.3% in Mayurbhanj to 38.0% in Rayagada (full scheduled districts) is glaringly visible. This indeed is a major positive impact of protective measures on the livelihood of forest-dependent population under the JFM model introduced in the State since 1993.
- However, while comparing success of JFM (through protective measures) and its positive effects on food sustenance and livelihood under the JFM model of management with the NJFM villages, no spectacular change in the economic wellbeing of the JFM beneficiaries (in terms of income) is noticed excepting greater dependence on the protected/VSS assigned area, the study reveals.
- ♠ In terms of person days of employment in forestry activities (collection, processing, marketing), as much as 240 days of employment is generated in JFM villages per annum to a forest –dwelling household compared to 275 person days in the NJFM village. More strikingly, while income per person day employment in the forestry sector generates only Rs. 17.31(in terms of sale of NTFPs) compared prevailing market wage rate of landless labourer of Rs. 38.75, (in both JFM and NJFM areas) it suggests very depressed income (Table 7.4 a& b) to the primary gatherers due to distress sale, limited market, restricted value addition to NTFPs etc. resulting in vulnerability of the primary gatherers.
- ♦ Forestry activities are largely performed by female members, and as expected, while per household female person days of employment is 147 days compared to their male counterparts of 91 days, an average person secures only 80 days of employment per annum in forestry activities despite depressed income in terms of sale. However, person days of employment in collection (for food subsistence and sale) of forest produces per annum is 72 days (in comparison to 20 and 8 days in marketing and processing activities) in the JFM villages in comparison to 167 female person days of employment and 49 male person days in the NJFM study villages. Of all seasons, however, summer season provides comparatively larger person days of employment in both the JFM and NJFM villages possibly due to harvest of large number of NTFPs (during this season) to meet food subsistence and livelihood.
- ♦ Of total collection of NTFPs in the JFM villages, while sales on an average constitute 51.0%, the rest 49.0% is meant for consumption, and across the

districts, no distinct variation on sale is noticed (Table 7.5 a). However, the percentage value of total forest collection to total income from all sources of income is 49.2%, with greater variation across the districts from 60.3% in Mayurbhanj to 37.9% in Rayagada (53.6% in Kandhamal and 42.6% in Keonjhar).

- Marketing of NTFPs is very crucial to the household subsistence economy of the forest-dwelling families, and consequent upon the introduction of JFM, in different parts of the State of Orissa, the VSS assigned area has been providing a great deal of livelihood support to the poor forest - dwelling population. Evidently, sale value of varieties of forest produces collected from the NJFM area however fetches lower income to a forest-dwelling family compared to income earned from VSS assigned area in the JFM study villages.
- ◆ Of various agencies, sales to middlemen/traders/businessmen in local haat/sadar markets constitute 52.0% (of total sales value) followed by disposal at the doorsteps to middlemen/ businessmen against instant payments (32.3%) and only 12.6% to the government agencies. In the sales network, the middlemen/traders play the dominant role, and such sales are of the highest proportion of 76.2% in the district of Rayagada, Kandhmal, 62.0%, Keonjhar 46.3% and only 31.3% in Mayurbhanj (Table 7.7), the study reveals.
- In the process of commercialisation, a great deal of exploitation in price (besides weights and measurement) is noticed in the study districts. As a result, the price differences between what the primary gatherers receive for disposal of his/her products; such as: sal leaves, mahua flower, mahuaseed, sal seed, charseed, mango, myrabolan etc, and what the sub-agents receive at the upper hierarchy is very wide. In other words, there is a fair degree of price variation in the procurement and sales price resulting in 183.3% higher in case of mango, 166.7% in charseed, mushroom, 143.8% in sal leaves, 141.7% in mahua flower (Table 7.8). Such exploitation arises owing to absence of organised markets for NTFPs, untimely fixation of procurement prices by the government, non-dissemination of price information to the grass roots, lack of adequate number of co-operatives, formal/registered agencies to buy at the grass roots level and that too against instant payments.
- The nature of participation of VSS member-beneficiaries suggest very fair and cent percent participation of the male members in the day-to-day management activities (only 70.0% in case of 'santal' tribes). But, the overall performance of male members in terms of participation (in various forestry activities) has an edge over female members in watch and ward, and so also, in safeguarding food security, plantation, conservation as well as preservation of bio-diversity. Across the districts, however, the performance of both male and female (VSS) members in Keonjhar and Mayurbhanj in activities; such as: conservation, plantation, participation in discussions and deliberations is dismal.

- ♦ The major constraints in effective participation in the JFM programme in all the sample districts are illiteracy, ignorance, poverty, vulnerability economic backwardness, weak political affiliation, low caste and minority group status of the VSS members, the study reveals.
- ♦ As regards the degree of co-operation /co-ordination of local GP with the VSS Executive Committee, for ensuring effective forest management, though 75.0 per cent of the member-beneficiaries responded negatively, there has never been any interference of the GP in the resource management affairs of JFM. However, a great deal of interferences of the elite groups (in the local GP) reported to have caused hindrances to the management of forest resource at the local level in varieties of ways.
- ♦ Consequent upon the implementation of NTFP policy 2000, in the State of Orissa the registered traders of NTFPs (with the local GP) reported not to have traded with the local VSS members, and the primary collectors in any manner for their forest produces collected from the protected area or from the outside. The major cause of such non-response is inordinate delay in payment, low price and faulty weight and measurement etc.
- ♦ However, about the suggestive possible relations of VSS members with the GP, at the local level, majority of the forest-dwelling JFM member-beneficiaries suggest active support of GP for ensuring qualitative management, effective complementarily between these two grass roots level institutions, instead of becoming competitive though, the VSS members need to generate some links with the GP to benefit from overall rural developmental activities. Similarly, the VSSs should be granted some legal powers to deal with forest offenders, thefts and ensuring effective resource management, the study suggests.
- ♦ Apart from suggestive co-operation/co-ordination of GP with the local VSS, and complementarity in strengthening various developmental activities, as much as 87.5% of the total JFM-beneficiary respondents reported to have suggested joint ownership, (community and government) control and management of the local forest resource assigned to the VSS for ensuring sustainable management.
- One of the very positive responses of the sample VSS members in the study districts relates to hindrances/obstructions of JFM activities on the culture, traditions, conservations, ethos, heritage etc of the communities due to government's participation in governance of local forest resource in the JFM model. To this, majority (99.1%) of the total respondents reported these to have remain unaltered/unhindered and rather, the JFM model reported to have honoured their traditions, culture, heritage etc. in a big way.
- ♦ Of three principal stakeholders in the JFM programme; such as: the FD, the Community and the local NGO, quite evidently, no NGO in the study regions was reported to have actively participated in governance of the local resource. Instead, while the local community members have begun to stake claim over the rights and concessions over the protected forest area, 78.1% of them reported to

have threats of apprehensions from the neighbouring villages owing to lack of their access to the same forest area and its management for some reason or the other.

- ♦ The customary use pattern of local forest resources reported not to have been mapped and studied earlier to the introduction of JFM model in the sample villages resulting in some amount intra-village conflicts in some JFM villages. But, these however reported to have been resolved amicably at the village level amongst the community members in which the FD/NGO reported to have demonstrated a very passive role the study reveals.
- ♦ The customary rights over the passage through the forestland, traditional collection of leaves, roots, firewood, small timber, fuelwood etc reported to have remained unaffected to meet consumption needs and ritual activities of the communities in the JFM areas enjoyed from the time immemorial.
- ◆ Full support of the forest officials in the initial stage in encroachment of land for demarcating protected forest area was made available as per the plan strategy and so also, in preparing and signing MoU with the community, the study reveals. However, the respondents reported to have understood details of major sharing of benefits; (a) usufruct rights over collection, processing and marketing, (b) consultation with the VSS members in plantation; and (c) 50.0% benefit sharing from timber at the time of final harvesting. But, in the event of violation of the terms and conditions of MoU, the community members reported to resort to possible violent means in terms of non-participation in conservation, protection and management, destruction as well as legal measures, besides non-corporation in the developmental activities, they respond very bravely.
- As regards accountability, the VSS members reported to have remained more accountable to the Executive Body in matters of protection and conservation compared to NGO and FD. But, in the matter of involvement of VSS members in commercial activities, heavy pecuniary punishment, social boycotting and prevention of entry in to VSS assigned area etc were reported to have been effected by the community in which the FD remains indifferent, the study reveals.
- Another positive outcome of the functioning of JFM in the study regions of Orissa relate to congenial/pleasant environment in which the VSSs function without adversely affecting the lower caste communities and forest-dependent poor and also, without the exercise of any authority of any kind. Further, 93.4% of forest-dwelling respondents reported to have clear-cut understanding on the perceptions on JFM philosophy that aims at transforming open access forest resource to a Common Property Resource (CPR). This precisely reflects on their awareness and consciousness about the programme that aims at their welfare and better economic welbeing.
- ♦ More importantly, while 93.8% of the total respondents reported absence of groupism in protection and conservation activities (due to their free access to the protected area) and 87.5% reported no discrimination in sharing of benefits.

- Instead, one of the major developments in the governance of local forest resource under the JFM regime in the study areas is creation of a great deal of specific opportunities for the forest dwellers with respect to sharing of ownership and usufruct rights over the NTFPs.
- ◆ Though, apprehensions over JFM activities and the consequent sharing of benefits in future are reported by majority of the VSS members in all the sample districts, it was suggested to pursue some confidence-building measures; such as: (a) consideration of major stake to the VSS members, (b) considering government as facilitator not regulator; (c) application of greater value addition activities; (d) desired changes in the forest rules, Laws, Acts to make it more people-friendly and result oriented.
- ♠ Instead of development of nexus amongst the politicians, bureaucrats and the contractors in governance of natural resource like forest in the study districts, majority (63.0%) of the respondents reported nexus amongst the FD, contractors and traders (including government-sponsored agencies), though politicians, middlemen and money lenders, reported to have played very active role in commercial activities of the forest products.
- ♦ The study reveals that the major causes of resource use and management conflicts relate to: (a) competitive demands of the stakeholders; (b) inequities in benefit sharing; (c) poor implementation and monitoring of polices and programmes; (d) uncoordinated planning and sectoral approaches with limited co-ordination; (e) least effective mechanism to counter to intra-village conflicts; (f) poor information sharing in policies, laws and legal procedures; (g) inadequate dissemination of information and programmes.
- As much as 54% of the respondents reported that community members are not adequately consulted in forestation/artificial regeneration activities in the JFM villages, but are often consulted over types of plantation in the degraded areas. However, little more than one-third of the respondents reported about dominance/imposition of FD in plantation of Akasia/Eucalyptus trees not only to meet fuelwood needs of the villagers, but more importantly, for ensuring greater protection to the nearby government timber forests from destruction and thefts.
- ◆ Majority (88.0%) of the respondents reported to have resolved issues of conflicts in forest management (if any) through development of participatory and consensus-building strategies exclusively on the basis of grass roots level realities at the right time for ensuring sustainable natural resource management. Interestingly, the strategies/methods they resort to resolve conflicting issues are:

  (a) through community endeavour, group spirit and homogeneity in caste factor (80.0%); (b) on the basis of consciousness on conservation and protection (100.0%); (c) on the basis of thrust on community for action towards common good (80.0%); (d) on the basis of an element of optimism (90.0%).
- Regarding marketing of NTFPs collected from the protected (VSS assigned area)
   and non-protected areas, more than one-third of the respondents admitted

encountering obstacles/preventions/restrictions in varieties of ways, besides, (a) low and distressing price; (b) preventions of access to forest resource by emerging local level institutions like JFM/CFM/GPs /Registered groups; (c) non-dissemination of procurement price of NTFPs at the right time, (d) inadequate value addition activities causing lower demand; (e) absence of registered cooperatives, and approved market agencies.

- ♦ The study reveals that the JFM programme does not have any adverse effects on the aesthetic and religious feelings of the forest dwellers, rather these have immensely enriched their traditions, culture and ethos.
- More than two-thirds of the sample VSS households suggested stringent actions and risk-resistance measures by the F.D with full support from the community to do away with timber smugglers. However, they reported to have expressed their utmost dissatisfaction over the FD, police department, law and order authorities, G.P and the government for their gross failure to extend desired support and also to initiate suitable measures in time for effective management of the local resource.
- ♦ More than two-thirds (69.0%) of the respondents reported to have been unaware of NTFP policy 2000 of the GoO, but the rest, who are aware of it, do not sell their NTFPs to the registered traders with the GPs. While 78.2% reported not to have secured genuine price to their products majority of them (97.2%) responded to have resorted to 'distress sales' due to: (a) ready buyers are not available against instant payments; (b) middlemen buy at door steps against instant payments, but at low prices; (c) procurement prices are not disseminated at the right time; (d) perishable nature of NTFPs and inadequate storage facilities; (e) to meet immediate cash needs of pressing expenditures by the forest-dwelling households.
- ♠ Majority of the female members (74.0%) exhibit dismal performance in nourishment of plants and trees. However, in particular, their role in reforestation activities, creation of awareness on environmental security, prevention of over use of forest resources, conservation of flora and fauna is dismal, the study reveals. The females are also far behind their male counterparts as office bearers, in decision making, deliberating in management issues, though across the districts, a great deal of variation is also noticed.
- ♦ The Study observes that the inter-village conflicts arise due to traditional usufruct rights enjoyed/exercised by the adjacent villagers over the JFM assigned forest area from the time immemorial. But, this legal issue of membership in VSS could be resolved only at the grass roots level by the concerned VSS members with support from the F.D and NGO involved in the joint management of the local resource, the study reveals.
- ♦ The JFM model of management in the study districts is very positive on the livelihood interests and food security issues, but its detrimental interests relate to

- preventions/restrictions on collection and trading of precious species, forest fire and cattle rearing etc.
- However, the Government intervention/role in the JFM with respect to protection, conservation and benefit sharing issues is not people-friendly, conservation-friendly, but bureaucratic though it is very positive about the JFM programme in the context of long term livelihood perspectives of the VSS beneficiaries;
- ♦ Growing apprehensions/conflicts over benefit sharing in the final harvesting of timber need regular and continuous appraisal in the VSS meetings with periodical clarifications from the F.D (if any) and the components of expenditures in the growth process and final harvest be made transparent for ensuring trust and confidence of the VSS members.
- ♦ Similarly, the F.D needs to involve community people in decision making process in a big way, besides introducing a lot capacity-building/skill upgradation training programmes to make VSS members aware/conscious about their rights and responsibilities for ensuring sustainable forest management as well as sustainable source of livelihood from the VSS assigned forest area.
- ♦ It is revealed that though the F.D enjoys the ownership over forest land, the NGOs having strong bonds with the local people (due to their specialised skills for motivation, co-operation/Co-ordination) do not actively involve themselves in reality in many JFM villages in Orissa. Also, there is no mutual trust and respect between the F.D and the NGOs as the latter believes in the detrimental role of the former with respect to the livelihood and food security of the community. Such a very critical issue needs to be addressed in the governance process, since the coordination between the F.D and the NGO at the grass roots level is very conducive for progress of JFM.
- Realisation of collective responsibility amongst all the three stakeholders and grant of greater autonomy to the village level institutions like JFM could make participation more effective, transparent and greater success in the governance process. But, ground realities suggest that the F.D is inactive, slow, indifferent and stereotyped in monitoring as well as implementing the JFM programme in Orissa. Such an issue needs to be addressed with care by the appropriate authorities on priority.
- ♦ The major objective of institutionalisation of an integrated forestry development programme under the JFM model (with support from NGOs) has not been realised due to the isolated role of the NGOs. Therefore, such an important institutional issue and participatory role of the NGOs need to be addressed on priority, and this calls for institutionalisation of programme procedures; such as, registration, membership, conflict arbitration and benefit sharing.
- The user groups under the JFM regime have failed to exercise management authority in the process of governance due to policy lapses and conceptual contradictions. Further, there is no alternative mechanism / institution to enable

- people to exercise their rights to claim their entitlements resulting in various conflicts in the process of management control and governance.
- ♦ The issues involved in ensuring equity in sharing of benefits, empowerment of the user groups and women in particular, and devolution of functions have not been adequately addressed in the JFM model in Orissa resulting in decision making process non-participatory and sometimes, unilateral. Thus, there is need for reorientation in institution building, organisational responsibilities and decision making process, the study suggests.
- ♦ In the JFM model, gender issues need extra care and cautions. Therefore, formulation and implementation of some specific gender sensitive strategies to enhance their entitlements, empowerment, participation and capabilities are of crucial significance besides restoration of traditional use rights over forest produces. Similarly, State controls and regulations need to be replaced by development welfare and strategy towards better livelihood prospects.

#### **ACTION-ORIENTED POLICY OPTIONS**

- Strengthening forest rights of the poor/marginalized forest dwellers for securing long-term access and control rights over the forest resource.
- Empowering capabilities of tribal poor in terms of capacity-building, skill building training programmes especially in disseminating knowledge about the forest resources, scientific harvesting and sustainable forest management.
- Recognizing and linking forestry activities with local level governance in a big way
- Granting full access to forest resources for creation of safety nets for reducing vulnerability through availability of subsistence goods; such as, fuel wood, medicines, wood for building, rope, fodder, mushrooms, honey, edible leaves, roots, fruits from the VSS assigned areas.
- Reducing/preventing regulatory burden on the poor by making Rules,
   Regulations, Forest laws, Acts more affordable.
- Making market entry barriers free and also, through permissions creating enabling accessible conditions to benefit the poor.
- Ensuring markets to be environmental-friendly-reversing destructive dependence to constructive dependence on precious forest resource.
- Simplifying forest Laws, Acts, Policies etc and strengthening participatory processes in forest management.
- Enabling greater participation of NGOs at the grass roots level in JFM programme for strengthening a people-centred approach and removal of barriers to livelihoods of the poor as well as support for emerging opportunities.
- Seeking support of NGOs, which could spearhead the effort of forestry in reducing poverty through specialized training services.
- Implementing people-centred forestry activities to tackle poverty as well as to improve poor peoples' livelihoods and eliminating barriers to support emerging opportunities.
- Improving governance through sensitisation of effective local institutions to support the poor person's own decision-making power.
- Reducing vulnerability not only through grant of access to forest resources, but also by means of political empowerment.
- Increasing access to forests to secure greater income from forest goods and services.
- Strengthening capabilities and governance for enabling local people to participate in decision-making concerning forest management, - inadequate rights to manage natural resources however make them to stay poor.
- Improving poor people's use and control of the forest resource for facilitating good governance in terms of representation, transparency, accountability etc.
- Regulating more powerful vested interests instead of limiting use of the resource by the poor.

- Encouraging initiatives on sustainable local forest management as part of rural development, so that sustainable livelihood strategies could support good governance and increasing benefits to the poor.
- Monitoring policy strategy in protecting forest and wild life as the habitat of forests for ensuring rich-biodiversity and healthy environment.
- Granting legal powers to VSSs in the State for ensuring effective resource management and to keep the protected areas free form forest offenders, timber mafias, thefts and preservation of precious flora and fauna.
- Enlarging deployment of adequate number of trained forest personnels to intensively participate in the JFM programme and forest protection with peoplefriendly and environment-friendly policy options.
- Improving VSS-GP interface at the grass roots level and making local level institutions more complementary, welfare-friendly and participatory.
- Defining powers of FPCs /VSS elaborately and converting these to statutory bodies.
- Creating a separate cell for JFM in the Department of Forest and Environment for better monitoring, administering, co-ordinating sister departments and local institutions in implementing JFM programme better at the grass roots.
- Making forest polices and procedures more compatible commensurate with JFM philosophy objectives and existing internal culture of the beneficiaries.
- Reconciling traditional and legal use rights more simple, affordable and useful by making appropriate changes in the forest rules and appropriate changes in the forest rule and regulations for enabling the forest-dependent poor to benefit from the programme.
- Formulating policy to distinguish between strategies that provides resources and livelihood to people and encourages them to protect trees on the one hand and a strategy that encourages buildings social capital at the grass roots level for protection and conservation.
- Envisaging a positive and direct role for the forest dwellers in resource management of CPR like forest by minimising the role of government, which has been unhesitatingly well addressed therein the MoU.
- Linking equity with management for ensuring effective benefit sharing since there is no linkage between sharing of benefits and management responsibility at the grass roots level under the JFM model of management. Thus, the issue of linkage between equity and management needs to be further operationalised and strengthened.
- Working out modalities on forest-related activities between the GPs and VSSs/ VFCs to minimise the emerging conflicts in local level forest resource management.
- Reducing multiplicity of ownership and control agencies/organisations to do away with complexities in administering precious forest resource in the State.

- Replacing top-down policy approach to deforestation problems/issues by downtop oriented people-centred policy strategies.
- Developing workable linkages between micro-plan and working plan for funding and implementation while micro-plans must reflect the priorities and preferences about the site, species and planting stock.
- Prioritising crucial role of women in JFM model and the necessity of taking serious and effective steps to ensure their meaningful involvement as well as participation in the programme.
- Emphasising the process of institution building through meetings, trainings, interactions etc. for creating some self-reliant, village level institutions at the village level.
- Conducting case studies on successful JFMs and research on wide range of institutional, legal, economic, silvicultural, ecological and management issues and problems (emerging during implementation of JFM programmes) for evolving viable and sustainable management options/models applicable to varied set of conditions prevailing in the region.
- Preparing suitable training materials, aids and manuals to cater to the needs of different target groups.
- Acquainting the communities with the JFM rules, their privileges, duties and responsibilities in clear terms, especially their responsibilities for benefit sharing with the weaker sections of the society and use of society funds for development of forest resources.
- Undertaking baseline survey of resources in the JFM areas on top priority and periodic monitoring, analysis of resource – condition in subsequent years for developing suitable management strategies/models.

## Introduction

- 1
- 1.1. Unquestionably, for a majority of rural people - especially the very poor safeguarding the 'safety net' role of forests will remain paramount. It is believed that forestry also can play a much more meaningful role in enhancing household income of the forest-dependent poor, besides, providing food sustenance during very critical time of the year. In point of fact, the critical role of forests in the livelihoods of the poor has been widely recognised, since chronic poverty is concentrated in many areas of India's most threatened forest biodiversity (so also, in Orissa). In recent years, a debate is intensifying amongst the planners, policy makers, conservationists, foresters, researchers, environmentalists in India (and elsewhere in the world) as to how to reconcile the seemingly incompatible goals of conserving forests, meeting market demand, and promoting broad-based sustainable development that reduces rural poverty. Because, even today, while on the one hand, the government continues to claim ownership over the forests - extensively depriving the poor communities for securing their traditional benefits of food subsistence, and some income from forests, on the other, the government has begun to involve forest-dependant communities in the forested regions in protection, conservation and regeneration activities. A recent realisation that has emerged in the development paradigm in the forestry sector suggests that mere policing by the Forest Department (FD) is not the answer to India's deforestation crisis. Therefore, there is urgent need to bring reconciliations between the conflicts of interests of conservation, protection, regeneration and livelihood interests of forest-dependant communities. Because, forestry plays an important role in the livelihoods of hundreds of millions of rural people - not only as a subsistence safety net, but also as a source of cash income, a capital asset, and a source of employment.
- 1.2. The New Forest Policy (NFP) 1988 in India that aims at combining the objectives of environmental stability and biodiversity conservation for achieving ecological balance and meeting the subsistence needs from forests seems to have caused a spectacular change in the forest management all over the country. Because, NFP 1988 in India, for the first time, recognised the symbiotic relationship between the forest on the one hand, and the tribals (as well as other forest dwelling population) on the other. Thus, emerged a resurgence of grassroots level community initiatives for regenerating degraded forests to deal with the hardships caused by resource scarcities. As a result, we find today, thousands of self-initiated forest protection groups engaged in protecting thousands hectares of state-owned forests in many parts of the country including Orissa. Though such community resource management traditions in many occasions were eroded by the State interventions, many of these groups have managed to gain recognition in recent years under the emerging Joint Forest Management (JFM).
- **1.3.** Now, the JFM, a three way partnership between the people/communities, the FD and Non-Governmental Organisations (NGOs) has been effected in Orissa since 1993 to protect, conserve and regenerate degraded forest land in lieu of benefit-sharing and

concessions. Needless to say that forest protection by communities in Orissa is historically evident since the early 1951's (prior to the introduction of recent JFM) where people had to struggle very hard to regenerate and save forests entirely on their own having no external interventions from any external agency. Such, grassroots level initiatives at the early stage offered indeed a great deal of valuable insights into the priorities around which the forest-dependent villagers were organised in their own, and succeeded indeed to guide State agencies later on in making the JFM framework more relevant for meeting their needs. But, how far, the conflicting objectives of revenue interest of the government, livelihood dependence of the forest users, and the ecological sustainability as well as sustainability of the precious forest resources could be reconciled under the so-called JFM regime is a moot point.

- However, JFM refers to sharing of products, responsibilities, control, and decision making, authority over forest lands between the F.D and local users group. It involves a contract specifying the distribution of authority, responsibilities and benefits between the village community and the FD with respect to lands allocated for JFM. Precisely, the primary purpose of JFM has been to create conditions at the local level which enable improvements in forest conditions and productivity. A second goal is to support a more equitable distribution of forest products than is currently the case in most forest regions. Precisely, JFM gives incentives to the villagers to care for the forests through increasing access to and control over local forest resources on which the programme is founded. The idea is to trade increased access to resources for increased management responsibilities and authority. Thus, the goal of JFM is to institutionalise an integrated F.D programme in which the FD serves as a nodal agency, supported by NGOs and other outside organisations. In some areas, NGOs seem to have taken a relatively isolated lead role as programme implementers. Thus, - the need for an attitudinal shift to involve NGOs (to help the F.D. and encourage a 'new breed' of sensitized foresters) is of crucial significance.
- **1.5.** JFM is however commonly perceived to be a means for restoring not only the health of country's/state's forests, but also, self-respect and dignity of the impoverished forest dwellers, which could effectively improve their economic wellbeing and livelihood. It is contended that JFM could not only provide livelihood sustenance, but also, offer immense opportunities for empowering the forest-dependant communities and marginalised women and men in particular to gain increased access to, and control over the use and management of common-pool forest resources.
- 1.6. But, in reality, the communities participating in JFM are not homogeneous. They consist of diverse groups differentiated by caste, class and religion/ethnicity, and within and between each of these groups by gender and age. It is normally the poorest, and the most disadvantaged constituent groups within communities and households, who actually depend more on forest resources for survival. But, due to dynamic hierarchy of social and power relations, it is very often powerful, non forest-dependant groups, who have the greatest visibility and voice and in reality, enjoy the fruits of management. These differences also exist due to gender differences. Such gender differences are structured by unequal gender relations perpetuated through diverse social institutions. In point of fact, the indigenous people, and the poor women in particular are the major and often, the most disempowered forest resource users. Further, the schematic

approach to JFM in Orissa by the State government with a formal and strictly regimental organisational structure seems to have been the major cause of its limited success. In such approach, it appears that while the state is placed as a donor, the people are considered as the recipients. Such type of relations in practice rarely makes 'equality' and 'trust' between the two stakeholders to yield any success.

- 1.7. Imposition of uniform access and controls on all the existing users with diverse levels and types of dependence on forest, inherently implies differential distribution of opportunity costs, and benefits among them. Thus, inclusions and exclusion in decision making, and articulation of priorities will tend to determine, who gains and who loses within and between the communities as well as households. Further, as the local institutions formally agree with the state agencies under the JFM, their (Government) rules also represent a new regime of property rights to common-pool forest resources. These indeed overlap with the existing regime of customary rights to forests. But, it is believed that the commitment for promoting gender equality, equal access to women and entitlements to public forests could institutionally be ensured under the JFM.
- 1.8. Besides, JFM can be viewed as one component of a larger transformation in the current discourse on sustainable rural development. Failures of past government interventions as well as success based on experiences, such as, in West Bengal, have forced re-thinking of development goals and strategies. The new approach seems to involve a move away from the perception of development as a process of industrialisation and urbanisation, towards a view of developing a sustainable stream of rural natural resources to support the basic needs of the majority poor. This focus implies a distinct shift from intensive capital investment and technological hardware to human resource development, organisational capacity building and re-orientation and training to affect institutional change. Indeed, JFM, by this, may serve as a mobilising device to ultimately achieve a more participatory and democratic system of equitable resource allocation and governance.
- 1.9. Further, JFM is a management model wherein the State wants peoples' participation and active cooperation in lieu of sharing some benefits and concessions. By this, peoples' collective endeavour at the local level and their self motivated institutions succeed to gain some amount of empowerment in the process of participation in the state sponsored JFM. During the last one decade or so the notion of participation has gained a great deal of support in empowering rural people to strengthen JFM, since their participation has enabled them to gain some control over forest resource, decision making process and institutions. Historically, however though JFM has been an unequal association of several actors, the JFM approach seems to have urged the need for creating a stake for the local communities, who could participate in forest protection and conservation. Because, the policy (NFP 1988) envisages that the communities should have the first charge of the forest produce to meet their bonafide needs from the local forests. Thus, JFM is a paradigm shift that makes a departure from the historical policing approach seeking community support for forest conservation. Accordingly, it calls for a radical change in the attitude of the staff towards local communities.
- **1.10.** Admittedly, large chunks of forest land (12 lakh hectares approximately) in the Orissa province have been rendered degraded, and unproductive. Degradation has set

in on account of over-use as well as unscientific harvesting practices, mindless exploitation of exhaustible mineral resources in the forest-based regions, mega irrigation as well as hydroelectricity projects, mineral-based steel/alumina industries, reckless export drive of minerals from the forested regions, and also, due to ever-increasing pressure of human and animal population on forests. In such an emerging situation, forests basically being local resource, the task of regeneration and rehabilitation of degraded forests was thought to be effectively tackled with the involvement and participation of the local communities. Accordingly, the forest management was re-oriented/re-designated to forge an effective partnership between the Government and the respective village community in different parts of the State of Orissa. There, as per NFP 1988 and the Government Resolution 1990, the peripheral forests and protected forests were brought under the Village Forest Protection Committees (FPCs) in lieu of grant of small timber, fuel wood, fodder, leaves, twigs, other minor forest products etc as their bonafide requirements free of cost.

- 1.11. Of late, however, it seems a renewed emphasis has now emerged for directly benefiting the forest dwelling communities, and the rural poor in particular on sustainable basis, though its success lies with the kind of policy intervention and strategies, cost effectiveness, community participation etc. In this context, what is perhaps more crucial is a set of policy options in the forest management relevant to livelihood issues that could effectively sustain and widen the scope for capacity building of forest-dependent communities on sustainable basis. This precisely relates to Sustainable Forest Management (SFM) that involves continuous provision of wood and non-wood products. Because, the future human needs for food, water, health, energy and settlements to a large extent depend upon, how the forest are managed. Therefore, the sustainability of forest resource requires that the productive potential of the asset base in no case needs to be reduced, despite meeting its current needs, leaving a great deal of opportunities open to future generation. Thus, sustainability subsumes productivity (growth) and equity (World Bank 1992).
- 1.12. In recent years, participatory management strategies through protection of forests for meeting local subsistence and also, for preservation/conservation of biodiversity are increasingly gaining attention of the policy makers and planners in the Government. In this context, JFM provides opportunity for restoration of forests, pasture land along with significant socio-economic gains and biodiversity conservation. But, a self-sustaining, self-regenerating forest management system at the grassroots level itself needs peoples' organisations and meaningful involvement of local communities, which could not only help in increasing productivity of degraded forests, but also, could manage in a manner conducive to the peculiarities of the region. In this context, 'sustainable management', 'sustainable use' and 'bio-diversity conservation' are the key issues in forest development for ensuring food security.
- 1.13. However, NFP 1988 seems to have taken a radical step by setting up one of its main objectives as meeting the basic needs of the local people, essentially fuel wood, fodder and small timber for the rural and tribal people in particular. Accordingly, 1990 notification on JFM recognises this philosophy and the beneficiaries are entitled to secure a share in usufructs. Of all, the viability of JFM heavily depends on villagers' agreement (MoU) with regard to benefit-sharing arrangements in lieu of their

participatory role in managing as well as protecting community forests. Besides, the benefits of some usufructs and, the state sharing the benefits as well from the protection and management activities carried out by the people lead to improve forest condition and productivity. Thus, benefit sharing assumes significance in the context of JFM, because of the promise of improved forest productivity in the wake of greater protection. **1.14.** The basic strategy of JFM is to strengthen the management of degraded forests with the principal objectives: (a) to enlarge participation of the rural community; and (b) to make the management mechanism more scientific and meaningful in all matters concerning production, protection, collection, processing and ultimately marketing of timber and NTFPs. Therefore, the central focus is on the concept of 'management' which will initiate an integrated approach so as to realise the full value of the growing stock. Precisely, the basic objective is to follow a wise, judicious and efficient management of degraded forests and utilisation of the precious resource, so as to benefit all, particularly the forest dwellers, the tribals and rural poor. It is believed that a rapid and sustainable forestry development could possibly be the severest way of improving the living standards of the forest-dependent poor, and that is why JFM was chosen in course of history to enhance the socio-economic capabilities of such people for securing atleast minimum food and nutrition for their survival. Though JFM has been introduced for sharing benefits, responsibilities and to win control over the community forest resource base, besides participating in the decision making process, a cursory review of some literature suggests that a number over-arching questions relating to JFM have still remained unresolved. Preliminary survey on JFM activities in the forested regions of Orissa shows that it is being prevented in variety of ways to function in its own as an independent, autonomous and vibrant institution at the grassroots level thus, it seems neither it has succeeded in empowering forest dwellers, and raising their socio-economic skill as well as capabilities nor in conserving rich bio-diversity.

1.15. At this background, a modest attempt is made in this research report to address to the emerging organisational, conceptual, institutional, and participatory management issues generated in JFM (operating in Orissa, since 1993) for suitable policy interventions. Besides, efforts would be made to examine and explore further scopes (if any) in the JFM model of management in the State of Orissa in the context of improving the state of forestry status for enhancing the socio-economic wellbeing of the local communities. Accordingly, the study proposes to examine issues concerning capacity/capability of the villagers, their empowerment, other requirements for motivating the communities towards conservation through effective management of the local forest resource. In the light of the existing community institutions, NGOs, it is also proposed to examine not only the forestry development programmes, but also, other sectoral developmental activities to explore possibilities of their integration for activating community developmental activities to benefit the rural people in general and forest-dependent poor in particular.

2

## JFM in Orissa: Retrospect and Prospect

- **2.1.** In the light of the NFP 1988, JFM has been considered to be the right policy intervention for ensuring livelihood improvement of the forest-dependent poor in Orissa, who are unorganised and under-privileged due to their poverty, ignorance, and impoverishment. Therefore, the poor forest-dependent communities are found increasingly vulnerable in the forest-based regions of Orissa. These people indeed are principally focussed in the emerging JFM concept, bringing into play the principle of equity and empowerment. This is how JFM distinctly distinguishes itself from other participatory management practices.
- **2.2.** Further, it was realised that the F.D., who is the custodian of much Orissa's forests, is ill-equipped to withstand the onslaught of human and livestock populations, and therefore, faces overwhelming odds to deny or even regulate access of the rural communities. In this context, JFM has emerged as a new approach to forest management. It is based on participatory processes and recognition of peoples' livelihood as well as developmental needs. Besides, it establishes forest management within the wider context of natural resource management, and encourages communities to take a decisive role in forest management, not only based on the concern for the environment, but also for food security and employment.
- 2.3. Though, there are evidences of peoples' participation in forest protection and management in Orissa in the recent past, the Government of Orissa (GoO) recognised these attempts in 1988 vide GoO Resolution 1988. Accordingly, the villagers were assigned some specific roles in the protection and conservation of Reserve Forests (RF) adjoining their villages, and in turn, were granted certain concessions in the matter of meeting bonafide requirements of fuelwood, fodder, bamboo and small timber. Forest Protection Committees (FPCs) were constituted in each assigned village. Following the Government of India's (Gol's) JFM guidelines issued on June 01, 1990 (Gol 1990), the GoO modified the earlier circular to provide representation to women and minorities in the FPCs (GoO 1990). However, the JFM programme has now become the central point of future forest development programme in the forestry sector of the state of Orissa where local protection to state-owned natural forest to promote regeneration has emerged as a form of forest management through participation of local communities.
- 2.4. In point of fact, participatory forest management system in Orissa was very much in existence in the past, and now, continues to be of crucial significance due to substantial dependence on wood fuel as an energy source. A wood balance study conducted in 1989 suggests that RFs and PFs together continue to account for the lion's share of domestic fuel, of which 76.0 per cent is fuelwood and 49.0 per cent consists of brushwood and twigs (Saxena 1996). But, as forest resources dwindle, forest dwelling communities are forced to resort to poor quality fuels, such as; cow dung cakes, palm frouds, stalks of pulses, dry leaves, non-wood residues of rice and maize etc. The extreme shortage of forest produce and fuelwood (besides inferior fuelwood) make local communities aware of the need for forest regeneration and also, forest protection activities.

- 2.5. Evidently, Orissa is one of the pioneering states in the Indian Republic for Participatory Forest Management (PFM) systems, many of which seem to have in existence prior to JFM initiatives in 1993. Such PFMs and a number of such Community Management Forest (CMF) systems have spontaneously emerged across the districts of the State of Orissa. The factors which attribute to such emerging forest management systems are aesthetic and religious feelings of the forest-dependent communities, besides the positive response to increasing forest degradation and a consequent upheaval in the livelihood strategies of forest-dependent communities. However, such management systems are essentially different from JFM, since these are self-initiated and carried out without the assistance of the F.D. Further, many of these community management initiatives devise their own rules to regulate extraction of forest resource and to carry out protective as well as conservative measures. A study (Ravindranath et al (1998)) reports that the spread of CFM in Orissa is extremely significant and there are thousands of such in the forest-based regions.
- 2.6. Historically, the JFM model of management seems to have emerged in Orissa much before the formulation of Guidelines in June 1990. Similarly, Community Forest Management (CFM) seems to have begun as early as in 1940s, though community efforts for protecting forests were fully recognised in 1985 by way of its incorporation in Village Forest Rules 1985, which were framed on the basis of powers conferred under section 31,32 (d) of the Orissa Forest Act, 1972. The rules may be weak, but they provide statutory status to forests demarcated exclusively for use of villagers (Sarin and Rai 1998). Following this, several resolutions have been effected in 1988, 1990, 1993 and finally, in 1996 dealing with Village Forest Management (VFM). However, as per the Resolution of the Forest, Fisheries and Animal Husbandry Department in the Government of Orissa on 1<sup>st</sup> August 1988, the villages adjacent to R.F were assigned some specific roles in the protection of R.F adjoining their villages in lieu of some concessions in the matter of meeting their bonafide requirements of firewood, fodder, small timber, (bamboo, leaves, etc.
- 2.7. Accordingly, the concerned DFO is to assign peripheral RF to the adjoining villages and constitute a Forest Protection Committee (FPC) in each assigned village. The above Resolution was further amended on 13.10.1988, giving effect from 'Gandhi Jayanti' of 1988 by the Departments of Forest, Fisheries and Animal Husbandry, GoO. It envisages, "the committee should be constituted in consultation with the local villagers, and the non-official members of the forest protection committee should be selected by convening a meeting of the concerned villagers". These Resolutions were further amended vide No. 10F (Prm) 4/90/29525/FFAH dated 11.12.1990, and accordingly, the protected forests were also included for assignment to adjoining villages, and the forest protection committees could include women and persons belonging to SC, ST and landless categories.
- **2.8.** In order to make effective involvement of the local villagers in forest protection, and conservation the GoO's Resolution No. 16700-10F(Pron)20/93F&E dated 03.07.1993 was more transparent. Therefore, the involvement of the local community in protection of adjoining forests, formation of Vana Samrakshna Samittees (VSSs), their Executive Committees, execution of duties and responsibilities of the VSSs and Executive Committees etc are detailed in the order. But, how far these duties and

responsibilities of different stakeholders are practically executed at the grassroots level is a moot point. Following this, another Resolution was passed in 1996 and the salient features are the following:

- Village is considered as the unit of management
- Exclusive legal rights over R.F and other forest patches are defined through notification as village forest
- Grant of community primary usage and management rights in terms of a scheme of management developed by the community and approved by the concerned D.F.O.
- Freedom to enjoy community rights to collection of fuelwood, small timber, bamboo etc free of charge as authorised by the V.S.S.
- Grant of full rights over collection, possession, storage and processing of NTFPs but subject to disposal only to authorised agents, lessee, and also authorised officials.
- **2.9.** Despite grant of usufruct rights to the community over the forest products in the protected forest areas so as to provide a great deal of incentives to the adjoining villagers, around a quarter (26.0 per cent) of the statutory forest land has been brought under the JFM in Orissa till date. Observations however suggest that though participation in JFMs and area protected actively under their jurisdiction are somewhat less, its beginning is a novel of experiment in the development paradigm of the forestry sector in Orissa.

Status of JFM in Orissa as on June 2005

SI. No.	Type of Committee	Number	Forest Area Protected (In Ha)
(1)	(2)	(3)	(4)
1.	Village Forest Committees (VFCs)	9055 (*5683)	121460 (**78646)
2.	Village Forest Protection Committees (VFPCs)	5520	662012
3.	Vana Samarakshyan Samittees (VSSs)	9912 (*5981)	(**596269)
4.	Unregistered Groups	640	89864

Source: Office of the PCCF, GoO, Bhubaneswar

The above peoples' organisations namely; VFCs, VFPCs, VSSs have members both from the tribals and other categories of forest dwellers, who primarily depend upon forests for their food sustenance and livelihood. Indeed, collection of NTFPs, restricted minor processing at the household level and sale of these forest products in the local markets are crucial to their subsistence economy. Therefore, it was visualised that the best way of meeting the twin challenges of maximising collectors' income from sale of NTFPs and of ensuring sustainable harvesting could be successfully achieved by involving VFCs, and VSSs in collection and marketing in a big way. It is evidently noticed that such a participatory management approach through formation of VSSs has been immensely effective in increasing the bio-mass production in many naturally regenerated forests of Orissa and also, have successfully met the needs of fuelwood,

<sup>\*</sup> Active Committees

<sup>\*\*</sup> Forest Areas Actively Protected

fodder, small timber, bamboo and other minor forest produces of the local communities in to a very great extent. By June 2005 the total number of active VSSs for purpose of protection is 5981 actively protecting 596269 hectares of forest area.

**2.10.** Though there are thousands of VFCs, VFPCs and unregistered groups engaged in forest protection as well as conservation activities, many of such committees in rural Orissa are observed to show active interest for F-D participation through JFM model of management partly for deriving tangible benefits from the protected forest area in terms of securing food subsistence and livelihood on sustainable basis, but mostly to benefit from infrastructural as well as rural developmental activities simultaneously undertaken by the government in lieu of forest protection, conservation and preservation of biodiversity by the local people. These developmental activities include road construction, construction of tanks, tubewells and their renovation, construction of primary schools and health centre's that not only provide huge wage work opportunities to the local people to raise their level of living but also, these developmental, activities provide better quality of life through provision of safe drinking water primary health facilities and education to the forest-dependent poor population in the remote areas. But, the pertinent question arises whether the institutional as well as participatory issues emerged therein in due course of functioning of JFM model of management in many parts of the scheduled and partially scheduled districts of Orissa have been adequately addressed.



# **Review of Literature and Emerging Research Issues**

- **3.1.** There is dearth of literature and research on functioning of JFM in Orissa, primarily due to recent implementation of JFM programme in the state, but mostly due to inadequate attention on research/research appraisal on many developmental programmes including the emerging issues in JFM model of management. Similarly, there have been very limited attempt to explore the scope (if any) to enhance sustainable livelihood security of the local people. In point of fact, many of these issues have not been successfully addressed/not attended to by the JFM from the point of view of equity in participation, and certainty of benefit sharing by the community. Though collective management indeed ensures equity, there are apprehensions, whether joint management of CPR like forest could really take care of the needs, and the aspirations of the forest-dependent poor and women in particular in equitable manner.
- **3.2.** Evidences (Sarin 1997) show that in many areas of Orissa, JFM is found to have overlooked participation of grassroots level institutions. In particular, the Gram Panchayat (GP) does not find adequate involvement in the JFM model of management. Also, sharing of usufructs does not ensure equity due to emerging nexus amongst vested interests, who manage to dominate the management in the forest-based regions of Orissa. Besides, inter-community and intra-community conflicts pose series of obstructions with respect to sharing of equal benefits. Though, NTFPs provide multiple benefits on a continuing and regular basis in terms of food, fibre, fodder, firewood, medicine and raw materials to artisanal groups and small scale processing activities to the poorest group and account for between 20 to 50% of annual household income, none of the JFM order till date, including the 1996 one, provides for unfettered rights to collection, storage, processing and sale of NTFPs to the primary gatherers within participating communities. These issues indeed are crucial from the point of view of equity in terms of benefit sharing and sustainability in terms of livelihood security.
- **3.3.** However, equity issues in JFM indeed are linked to the conceptual requirements for community management. It is often assumed that all members of a community must equally benefit, if the community is to develop effective resource management institutions. Precisely, therefore the primary goal of JFM is to improve forest management at the village level. This could be done by establishing a direct connection between management efforts and access to key forest resources. The strength of this linkage and its ability to create a strong incentive for protecting forest resources is dependant on villagers having an effective share in the management authority for allocated lands. Increasing equity is however, a secondary goal, which could simply happen by transferring rights over resources to village societies. It appears however, that the conceptual basis for linking equity to management and the practical methods to do that are still weak and require further operational development.

- 3.4. People indeed bear great deal of hardships, and sacrifices for undertaking protection to precious resources and also, sacrifice a lot (in JFM areas) despite uncertainty with regard to sharing of the benefits in future. Therefore, it is argued that much higher benefits should be accrued to the people compared to the costs involved in it. However, the mismatch between the costs and returns might have caused adverse consequences for ensuring sustainability of the programme. Further, the issue that in the JFM, the poor protect the natural resources, and there is no scope to develop a sense of ownership on it (or any clue towards long term benefits excepting wages) appears to be very critical. Besides, the question whether the JFM has succeeded in giving fair attention to the poorest forest-dependent communities, such as; artisans, head loaders and podu cultivators need scrutiny. Because, the nationalised and other leased NTFPs, neither comes under the purview of 100% usufructs, nor under revenue sharing as JFM benefit. The primary gatherers of NTFPs instead continue to receive only wages for their labour, often abysmally low rates on the basis of time and effort required for collection. Precisely therefore, JFM seems to have not successfully catered to the livelihood interests of the poor beneficiaries so far, and whether it will really benefit the poor stakeholders in future is a moot point.
- **3.5.** Studies (Mallik: 1998, 2002, 2004) indicate that in the JFM model of management, the forest-dependent poor only protects the natural resources and there is no scope to develop a sense of ownership over the resource. Therefore, people see JFM merely as a contract, and seem to have apprehended that after the wage earning employment programmes are over/withdrawn, their food security may be jeopardized. Besides, differences in perceptions and expectations from JFM also create problems. It is argued that while the F.D sees JFM as a convenient means of regenerating forests, the local communities view it as a wage employment programme, and as a means of meeting their daily needs. Therefore, the need is to distinguish between a strategy that provides resources to people and encourages them to protect trees on the one hand, and a strategy that encourages building grassroots social capital for ensuring protection and conservation (Saxena, 2002). In other words, while JFM transfers the responsibility to the JFM groups for protection, there are other agencies and lessees not the primary gatherers, who reap the benefits of increase in NTFP production.
- 3.6. The other adverse situation of protection relates to increase of drudgery of the women, who are constrained to travel distant areas for collection of firewood, fodder and other food subsistence. As a result, they have no alternatives, but to collect inferior fuels; such as leaves, husk, weeds and bushes (Sarin 1997) from the protected areas. Very often, the needs of the poorest of the poor forest-dependent communities are also not well addressed. Instead, the elite class dominate the JFM governance, who in reality, do not depend on the forest resources for their livelihood, but benefit a lot in varieties of ways from forest protection. Further, most of the other village institutions; such as PRIs, Watershed Committees, Primary Co-Operative Societies are dominated by the elite, who serve their interests best and the interests of their political bosses. Even some self-initiated community forest protection groups do not always represent

the interest of the poor and women. Therefore, it is not surprising that the FD attaches greater importance to the interests of the village elite in the emerging rural social structure. In the present context of livelihood issues of the forest-dependent poor, the FD need to become aware of the hard realities of the emerging rural social structure in a broader developmental perspective and need to distinctly address to the livelihood issues of the poor stakeholders. But, unfortunately, the established power structures, socio-political and economic inequities and rigidities play their visible and invisible roles in hindering institutional changes in a big way.

- 3.7. Despite the provision of 'benefit sharing' (under the 1993 Resolution for sharing of 50.0 percent of the produce/income from a 'major' or 'final' harvest of timber between the FD and members of VSSs) the sharing provisions are guestioned on various counts. Thus, apprehensions are many with respect to future sharing of benefits. Inspite of the legal status of forest, since the entire regeneration activity is effected due to the community efforts, the claim entitlements at 50.0 percent of the major produce appears to be unfair/ unjustifiable, and the benefit sharing is not atall linked to cost sharing. Similarly, a strategy of uniform management model in JFM all over the state, irrespective of varied local needs and priorities appear not to be justified in the context of the provision of final harvesting management. Therefore, it is natural for the local communities to become apprehensive of the 'JFM deal' as a mechanism to regain control over regenerated forest in future. Further, lack of devolution on sharing benefits (despite their protection and management) also directly hits their emotions and livelihood, though the villagers hold a host of responsibilities. There are also problems with produce sharing agreements, since the land is under the Revenue Department (not the Forest Department) in case of Gramya Jungles, Khesra forests and un-demarcated protected forests.
- One of the major constraints with the Village Forest Committee (VFC) is their limited relationship with State Forest Department, since it has no legal and statutory status like the PRIs, who are democratically elected and get effectively involved in local governance. Due to their limited recognition, VFC finds difficulty to manage resources in long-term forest development perspective. Besides, one striking evidence with respect to management of natural resources by the user committees is that the benefits derived from the establishment of such committees are doubtful in terms of its sustainability in the long term. It is apprehended that as soon as the funds for forestry development would be exhausted, plantations may disappear, committees may be disbanded (for some reason or the other) though the livelihood of the poor could marginally improve. In point of fact, VFCs are more or less influenced by the vested interests like elite group and therefore, in reality, those, who actually do not contribute to protection/reforestation activities of degraded forests (elite group), they manage to appropriate the substantial benefits, and not the poor villagers, who, work tooth and nail for the development of forestry sector in terms of regeneration/reforestation activities. In such a critical situation, since VFC is not declared as the statutory institution of GP, such small user

communities are considered to be the less powerful groups disempowered at the village level.

- **3.9.** Though NFP 1988 envisaged bringing into effect a great deal of changes in the policy strategy; such as: (a) natural forests must be treated first as ecological as well as environmental necessity, (b) as a source of livelihood goods for local people (with emphasis on NTFPs); (c) as a source of wood and other products for industry; (d) the industries to provide financial credit, and technical advice to local people interested in setting up tree plantations, surprisingly, it has not envisaged any direct role of forest dwellers in the forest management. As a result, it seems the livelihood issues (in a broader perspective) in the management of CPR like forest are unhesitatingly diluted and the role of the government has been well addressed/highlighted and over emphasized. In other words, though the intention of the government is clear, the provisions (for unilateral actions) therein are inadequate, ambiguous, and certainly, these hinder the empowerment of the people in the so-called participatory forest management, particularly in the context of their skill building opportunities and decision making processes for ensuring better livelihood.
- **3.10.** Similarly, though JFM model in which the government guidelines have been specific on the rights of the local communities to forest lands with grant of usufructs for fuel, grass, fodder, small timber and other NTFPs (as a part of sale proceeds from 20 to 100 per cent), its success in terms of quality as well as sustainability of protection are found to have been confined to the States; such as: West Bengal, Madhya Pradesh and Andhra Pradesh (Saxena 1999). Historically, the role of government as regulator, protector, promoter, entrepreneur, and financier, seems to have caused several distortions due to enforcement of the Power of Law, Acts, Rules, Regulations and also specific provisions in the administrative orders from time to time. As a result of this, there are lots of evidences, where the livelihood interests of the poor, and primary gatherers of NTFPs in particular are being adversely affected (Mallik 2000) over years.
- **3.11.** Though the symbiotic relationship between tribals and forests contributed immensely for maintaining an eco-cultural balance between man and nature, this has been visibly disturbed not only due to fast depletion of forest cover, but also due to commercial exploitation of forests. The collection and sale of NTFPs which account for around 20.0 to 50.0 percent of the household income per annum (Mallik 1994,1996 & 1998) has been curtailed greatly by: (i) growing forest-dependent tribal population on the limited forest resources; (ii) conversion of tribal rights in to concessions (National Forest Policy 1952); (iii) exploitation of tribals by the middlemen (in various forms and magnitude) mostly due to their poverty, ignorance, illiteracy and low bargaining strength, besides the existence of very high trade margins at the hierarchical stages of disposal of NTFPs and absence of a forest dweller-friendly market strategy of the government; (iv) revenue oriented policy strategy of the government for regulating NTFPs; (v) unscrupulous use of forests by the vested interests; and (vi) lack of commensurated financial investments for regeneration of forests.

- **3.12.** However, as a major breakthrough, the NTFP resolution dated 31<sup>st</sup> March 2000 in Orissa vested authority on the GPs to regulate the purchase, procurement and trade so that primary gatherers get a fair price on sale of NTFPs. Accordingly, the GoO conferred ownership and control rights to GPs on 68 products in the scheduled areas (Panchayats in the non-scheduled areas were given only licensing rights for collection of NTFPs out side the reserve forests and protected areas). In the new policy, however, the leasing system is abolished and the GPs are given the power to register the traders at the local level, and also, to monitor their functions with regard to procurement price. Further, the GPs are now vested with the authority to cancel the registration of any trader in the event of procuring NTFPs at a rate lower than the minimum procurement price fixed by the government for that product. However, in the process of empowering GPs to regulate the procurement and trade of NTFPs since 2000, the government is still in the process of making desired amendments/formulating a set of rules under the GP Act and Orissa Timber and other Forest Produce Transit Rules 1980.
- **3.13.** Similarly, despite the PESA 1996 by the GoI, (which is unprecedented in the history) in granting radical self governance powers to the tribal community, and recognising their traditional community rights over the natural resources, through the tribal 'gram sabha', the unpopular and repressive policy of the government to control on processing of broom grasses by tribals in Rayagada district of Orissa in the recent past attracted attention of the media, NGOs and the GoI to resolve the challenging issue of hill brooms confronted by the tribal women. This bears testimony to the policy inconsistencies and insincerity of the GoO to adequately address to the poor people's livelihood issues concerning their food security. Precisely therefore, since very often policy formulations remain short of being implemented due to varieties of reasons, the ultimate sufferers are the common people and poor primary gatherers in particular. Several studies indicate that tribal people are slowly losing control and command of their traditional rights over natural resources and increasingly getting alienated from the centre of governance.
- **3.14.** Gender sensitisation is one of the major concerns in the management of forest resources concerning women's participation, equalisation and their involvement in various community and economic activities. Women and girl children particularly from low caste/poor tribal families collect firewood, fodder, small timber, various NTFPs etc. from the forest. Also, women are engaged in firewood headloading, primary processing of NTFPs at the household level such as: leaf plate making, *beedi* rolling, broom/mat making etc. By and large, women are also engaged in marketing of fuelwood, leaf plates, brooms/mates and varieties of other NTFPs. They cover huge distances in groups for procurement of forest products and firewood, fodder and indeed, spend more time in covering distances than exclusively in collection. But, they are least empowered, neglected/ignored and increasingly alienated from participation in decision-making forums like JFM. Neither they succeed in highlighting their participatory issues and constraints nor benefit in decision-making process due to their illiteracy, ignorance,

poverty and vulnerability – thus, increasingly remain away from the governance process.

- **3.15.** A study (Mallik 1992) shows that deforestation in recent years in Orissa has not only increased the drudgery of the women in spending more time, but also in covering huge distances (2 to 5 kms & above) to collect firewood, NTFPs and other forest products, but also, has caused collection of inferior fuel, such as leaves, branches, twigs, tree roots, shrubs and weeds. Further, forest products, available free of cost to forest dwellers, in the recent past, are now available on purchase. Also, it has begun to affect the livestock economy adversely due to non-availability of common grazing field. It is reported that the afforestation programme and the ensuing protection to it along with the emerging institutions such as JFM/CFM, have further aggravated the hardships of women in collection of biomas products from the protected areas due to emerging stringent protection and conservation measures. Though self employment in sale of firewood, livestock rearing, collection, processing and marketing of NTFPs have wide avenues in creating wide opportunities for tribals to earn some income for sustaining their livelihood, these activities are by and large restricted/prevented by rules/laws, Acts, stringent protection measures by CFM/JFM, on going deforestation and community compulsions. A research study (ISED 1992) indicates that the forest administration has grossly failed to ensure proper understanding and sensitising women issues. Therefore, women are alienated from the existing policy structure, and forest administration.
- **3.16.** On the contrary, evidences (Mallik 2003) indicate that there are a few successful cases of tribal women managing village forests in Ganjam, Khurda, Nayagarh, and Mayurbhanj districts of Orissa in terms of securing greater opportunities in JFM model of management through participation in discussions/ deliberations; decision making; sharing the benefits for enhancing their socio-economic status; their empowerment; better livelihood through meeting the bio-mass requirements; greater consciousness/ awareness about conservation of precious forest resources and preservation of bio-diversity. Thus, distinct variations over sharing of benefits across districts/regions suggest dissimilar performances due to varied institutional, natural, local, and socio-cultural factors.
- **3.17.** In reality, JFM in Orissa as elsewhere in the country is still in the protection stage. Its management has initially begun to bring more forests and plantations. But, in the socio-economic context, (apart from production of NTFPs) marketing is one of the means, in combination with processing and resource management that could cater to the needs of the forest dwellers in future in a big way. This trend is expected to accelerate further, once the forest produces from JFM areas start flowing on sustainable basis through sustainable forest management, capacity building activities of the stakeholders, conservation and protective measures with support from the government.
- **3.18.** There is ample scope for an effective forest management to harness NTFPs in the JFM areas of Orissa for improving the socio-economic conditions of the forest dependent communities and tribals in particular, within the carrying capacity of the

resource base. But, this essentially entails bringing about changes in the provisions of Forest Acts, Laws and Rules that limit the scope of procurement, marketing, primary processing and value addition in the JFM areas. Accordingly, the state policy on NTFPs could focus on sustainable resource management and improvement of livelihoods of the forest dwelling communities both quantitatively as well as qualitatively, so that in the long run, they would be empowered to carry out activities to procure, process and market the available NTFPs and could sustain their livelihood and food security in a big way.

- **3.19.** Further, better management of incentive structure could not only improve the performance of JFM programme, but also could promote the goals of livelihoods creation and sustainable management of forest resources. The twin challenges of; (a) maximising gatherers' income from NTFPs; and (b) ensuring sustainable harvesting could be possible only by sensitising the role of VFCs/VSSs in NTFP collection and marketing. In this connection, NTFP collection activity could be a powerful strategy for transforming VFCs into robust, autonomous people's organisations by imparting to them a strong economic drive. This could be possible by (a) restricting collection within the revenue boundaries; and (b) rationalisation of conflicts between contractors and the VFCs.
- **3.20.** There are views in various forums that the overall strategies of the VFCs/VSSs and F.D should be directed; (a) to promote the economy of NTFP that remains unexploited due to lack of market arrangements; (b) to control excessive incentive so far as to prevent unsustainable extraction level; and (c) to enable the primary gatherers to secure the best deal in disposal of NTFPs. More importantly, appropriate harvesting schedules need to be developed which will promote bio-diversity conservation and sustainable source of livelihood. These need a lot of capacity building training activities to raise the skill and capabilities of the stakeholders. But, whether, the strategies of these grassroots level institutions are adequately directed/monitored to promote the livelihood interests of the primary gatherers and to preserve rich biodiversity and ensure sustainable use of the forest resource in the JFM areas, is a moot point.
- **3.21.** However, the discussions so far suggest that atleast four overlapping phases are required for effective JFM programme. These are: (a) training- acquainting FD staff regarding the goals and methods to be used in the programme, (b) diagnosis- gathering sufficient information to determine where JFM may be appropriate; (c) implantation- the imitation of JFM projects in promising sites and (d) maintenance- providing support to JFM institutions and monitoring resource condition and compliance with management agreements.
- **3.22.** Further, the legal framework for joint management seems to have remained very weak as well as controversial. As a result, <u>first</u>; the existing old rights and privileges of the people in most degraded forests do not match with corresponding responsibilities, and often more than one village have their rights on the same forest; <u>second</u>, the new settlers in a village, who are deprived of such traditional rights, resort to illegal practices; <u>third</u>, people remaining far away from forest are keen in enjoying traditional rights

without participating and performing in management; <u>fourth</u>, intra-village conflicts have become a regular phenomenon- while track boundaries are not formally demarcated initially at the degraded stage and the conflicts begin to emerge as soon as valuable products are regenerated and green forest cover appears; <u>fifth</u>, boundary disputes between neighbouring Village Forest Committees (VFCs) also emerge as threats to success of JFM, once harvesting begins to occur; <u>sixth</u>, the status of VFCs versus village panchayats also creates a great deal of controversies, since the link between panchayats and JFM groups are fairly weak.

- **3.23.** Besides, there are several impediments to smooth relations between FD and NGOs. These include often-misguided, and very generalised perceptions of each other and lack of awareness concerning the cultural norms required for the respective institutions. Because, NGOs may consider the FD as corrupt, and inefficient, and captured by its own agenda. Similarly, the FD may view NGOs as non-cooperative, critical, and self-righteous. Further, while the JFM programme calls for an approach to management that is multi-sectoral, inter-disciplinary, process-oriented, need-driven, flexible and participatory, the FD structure by nature is sectoralised, uni-departmental, target oriented, resource-driven, standardized and authoritative in terms of management. In point of fact, there is an inherent danger of the JFM programme operating in isolation without broad range of institutional linkages which indeed leads to unsustainable land-use management.
- **3.24.** Though, as per the VSS programme, its Executive Committee is to execute MoU with the concerned Divisional Forest Officer (DFO), for protecting, regenerating and management of forest area, all Village Forest Protection Committees (VFPCs) constituted prior to 1993, have not yet been registered as VSSs in full. Further, VSSs, in the absence of legal powers have grossly failed to try individuals or the state for noncompliance (Mishra 1998) in the context of prevailing socio-economic inequalities in the rural villages. However, conflicting provisions and fast changing forest policies over the years without commensurate changes in the statutory Rules and Acts also have caused several legal and institutional ambiguities. For instance, Participatory Forest Management was initiated in Orissa according to Village Forest Rules 1985; (Prior to 1990). These were framed under section 31, 32 and 82 (Orissa Forest Act 1972). In the mean time, several Government Resolutions have been effected in 1988, 1990, 1993 and 1996 concerning Village Forest Management (VFM), but, none of these changes has been incorporated in the existing statutory rules 1985 in order to avoid confusions and legal invalidity (Mishra: 1998).
- **3.25.** Similarly, in Orissa JFM and Panchayati Raj Institutions (PRIs) are not interlinked (though PRIs are the sensitised institutions in governance at the grassroots level). Further, though the government Resolutions 1993 and 1996 provide scope for due linkage between these two sensitised grassroots level institutions, the Panchayati Raj Department is said to have been ignored while framing such Resolutions. Besides, there are several ambiguities between the formation of village communities vis-a-vis the involvement of Panchayats. It seems, the missing links in the existing policy provisions,

Forest Acts and Rules have caused a great deal of hindrances, distortions, in the management of the forest resource, resulting in affecting the livelihood interests and food security of the forest dwellers very adversely on the one hand and ecological, conservation as well as environmental interests of the government on the other.

- **3.26.** However, sharing management authority is a key element underlying effective linkages between rights and responsibilities. It is very rare that people are willing to accept responsibilities without benefits. Further, for a variety of historical, economic and social reasons, villagers often do not trust governmental agencies (including FD) to act in their best interests or to fulfil their promises. Therefore, user groups have begun to realise the need to have sufficient management authority to ensure (a) that the products they desire need to be produced; (b) that they get the products in time and in manner agreed upon; (c) they can enforce JFM decisions. Similarly, unless the FD shares authority, villagers are unlikely to have sufficient incentives to accept responsibilities for forest protection. Therefore, sharing of authority is essential in order to create an atmosphere in which user groups could actually accept management responsibilities.
- **3.27.** In point of fact, the issues concerning sustainable livelihood and food security are basically determined by the way the local people with facilitating assistance from the F.D could succeed in managing the precious local natural resource for ensuring sustainable availability of forestry food crops through bio-diversity conservation, notwithstanding ecological/ environmental security, and extinction of precious plant species. But, sustainable availability of NTFPs and their management, procurement, processing, marketing are governed by a set of Forest Policies, Acts, Laws and Government Regulations, which directly become adverse to their management. Similarly, restrictions on harvest, transport from one place to another as well as official stipulations to sell nationalised products to government agencies, prevention on processing and marketing cause a great deal of difficulties for enabling the JFM beneficiaries to secure safe livelihood and food security on sustainable basis. Because, these policy distortions (restrictions and stipulations) seem to have been depressing returns to primary gatherers, and so also to their food security in a big way - thus, severe their incentives for greater participation in management (JFM) of the precious resource, increased productions and sustainable harvest.



# Conceptual, Institutional and Legal Framework

The concept of village communities and state Forest Department (F.D) jointly managing forest lands has been rapidly gaining popularity in South Asia and in many Indian states in particular. Over thousand villages in Orissa have formed FPCs in lieu of protection and conservation of village forest resources, where the village communities have been granted rights by the FD to the extent of 50% of the marketed value of all regenerated timber (after final harvesting) and benefit sharing of 100% from minor forest products, besides some forest-related concessions. Needless to say that there are two linked problems which seem to have been reconciled in jointly managing the forests in Orissa; first, the FD lacks the organisational capacity to control forest degradation, unless required co-operation and participation of the villagers are sought for; second, the villagers have little incentives to participate in the management of forests, unless they directly derive some benefits, and have sufficient authority to make the management effective. In India however, the official blessing for such an approach originated in the NFP 1988 which urged the need for creating a stake for the local communities in lieu of their participation in forest conservation. Accordingly, JFM as a strategy for forest conservation with the active participation of local communities in collaboration with the F.D. was emerged in 1993 in Orissa, which makes a distinct departure from the historical policing approach. As a logical consequence therefore, there is a need for radical change in the attitudes of all categories of stakeholders, besides, re-orientation of the forestry development programme, training, capacity building activities for the forest staff.

An attempt is made in this chapter to discuss, (a) some relevant concepts used in JFM model of management, (b) several Forest Protection Committees/Institutions, (c) some legal issues and statutory provisions and (d) the benefit sharing issue, which may help us later on in understanding the ground realities better.

### **Forest Protection Incentives:**

**4.2.** Here, villagers are granted a great deal of incentives to take care of the local forest resources not only for enabling them to increase their access, but also to exercise control over the local resources. The basic purpose is to trade increased access so as to ensure increased management responsibility and authority. On the contrary, the FD also grants a lot of concessions, besides sharing of benefits. However, access to these resources is directly linked to village agreements to reduce activities causing forest degradation. The basic idea however is do away with destructive forest uses through watch and ward even by imposing fines for violating forest rules in order to improve forest conditions and also, to create strong incentives for forest protection by linking access to resources with protection responsibilities. In this context, sharing management authority is the key element underlying effective linkages between rights and responsibilities.

- **4.3.** Banerjee (1989) indicates that joint management can not be approached with "I do, you participate" attitude which seems to underlie so many attempts at peoples' participation. In point of fact, for a variety of historical, economic, social reasons, villagers most often do not trust the Governmental Agencies (including FD) to act in their best interests. Therefore, the user groups are keen to have sufficient management authority to ensure; (a) the products they desire are produced; (b) they get the products in time and in manner agreed upon; (c) they enforce joint management decisions. In this context, the villagers in many areas may be reluctant to allow timber harvesting, which may threat many other forest products they are now receiving from regenerated forests, (besides increasing threats to precious biodiversity, environment and livelihood of the local forest-dependent population).
- **4.4.** Besides, there may arise more conflicts between different forest users due to varieties of reasons; firstly, there is a direct contradiction between village community and the F.D. on the question of sharing benefits and management responsibilities; secondly, sharing management authority, by the stakeholders and differential access by the community people to forest resource also create conflicts. It is observed that in many areas, the F.D., the powerful politicians, the vested interests and local communities, are interested in using forest land for purpose other than forestry. In particular, the F.D. is reported to have collided with their political masters and sacrificed their own interest and the interests of forest for short-term gains resulting the JFM programme to face severe threats. In this context, there is need for some kind of legislative backing to strengthen the JFM Programme in the State and ensuring that accountability mechanisms are put in place. This may atleast help for the survival of JFM and also its progress in a big way.

### **4.5.** Equity:

The basic purpose of JFM is to ensure equity in sharing of benefits, in terms participation in the community management of the forest resource and also, equitable access to the resource base. Therefore, equity issues are linked to the conceptual requirement for community management. The equity aspect has been considered crucial in 'joint management' as a valid goal in itself, since it is considered to be the best possible way to distribute benefits/resources to disadvantaged sections of society. Besides, the basic need in the joint management is guarantee of representations from all communities, who need to share the benefits equally. However, the primary goal of joint management is to strengthen the linkage between management efforts and access to forest resources, and also, to strengthen strong incentives for ensuring better and effective forest protection as well as conservation. Though, increasing equity in joint management seems to be crucial, the conceptual basis to link equity to management appears to be very weak at the grass roots level and therefore, needs further operational development.

### 4.6. Strategy:

Though a number of basic factors attribute to local institution development so as to formulate the strategy for ensuring successful 'joint management', these are often not

available at the grassroots level, - leading to limited success of the scheme. It is indisputable to say that in 'joint management' a very distinct clear, enforceable, demarcation of rights and responsibilities are essential. But, in practice, it is not only becoming difficult to demarcate rights and responsibilities very clearly, but also, equally not easy to enforce those. Therefore, 'joint management' system performs better, where villagers are homogeneous in caste, with minor economic class divisions. This homogeneity itself improves the quality of 'joint management' to achieve the objectives of equity in sharing benefits and efficiency in resource management (due to similar interest in forest resources) where the elite and powerful groups become relatively less effective/powerful. But, such ideal situation does not prevail in reality.

**4.7.** Besides, 'joint management' could resolve many forest resource problems in the following situations; first; where a direct link could be established between improvement in degraded forests and increasing access to forest resource; second, where a single village is the user of a specific forest area; third, where available forest resources are shared by the villagers in lieu of increased forest protection as well as conservation; fourth, where the village is homogeneous in terms of caste and economic class and fifth, where the villagers have higher degree of dependence on forest resources for their livelihood. In point of fact, these are some ideal situations/conditions in which the 'joint management' of forest resource at the village level may perform better. But, the grass root level realities suggest that most sample villages of our study do not necessary provide such ideal conditions, and therefore, conflicts become common in joint management.

However, despite widespread interest and a great deal of 'joint management' activities in thousands of villages in Orissa, the very core objective of peoples' participation depends upon how the goal is interpreted to achieve sustainable source of livelihood notwithstanding conservation of precious species, rich biodiversity and environmental security.

**4.8.** In the context of PFM, a number of Forest Protection Committees are noticed in the forest-based regions of Orissa and these are:

### (a) Van Samrakhyan Samitis (VSSs)

As per the Government Resolution of July 1993, the total number of VSSs formed in different districts is 9549 till the end of June 2005. (Annexure - B). The highest number VSSs are noticed in the Bhawanipatna Circle; 1526 followed by Koraput circle; 1992 and Berhampur circle; 1235. These VSSs have been formed for undertaking and implementing the protection and conservation activities as per the resolution/scheme. So far, as much as 843058 hectares of degraded forest land (though some RF areas also have been assigned to the VSSs) have been brought under the direct supervision of VSSs for protection and conservation. In the emerging situation also some of the existing forest protection committees and unregistered organisations engaged in protection of village forests are gradually being converted in to VSSs (due to direct intervention of local forest officials to convert more to JFM model) resulting the number

of VSSs and protected area to increase and this indeed shows spectacular change in the JFM model of management.

### (b) Forest Protection Committees (FPCs)

On the basis of the recommendation of a State Level Steering Committee (constituted vide the Resolution of July 1993) the existing FPCs constituted prior to the Resolution of 1993 may be allowed to function as such till they are reconstituted as VSSs. There are as much as 5520, FPCs in the state of Orissa by June 2005, who are assigned an area of 662012 hectares for protection in terms of their active participation. FPCs were constituted in each assigned village. Following the government of India's JFM guidelines issued on June 01,1990 (GoI, 1990) and the Orissa government modified the earlier circular later on to provide representation to women and minorities in the FPCs (GoO 1990).

Further, in order to enlarge the purview of 'joint management' the village woodlots and social forestry plantations raised under the SIDA assisted social forestry project 1984-94, have been declared village forests and have been brought under the purview of JFM model of management. Therefore, the village Forest Committees (FCs) created for protecting these forests are also part of JFM. In 1996, the Orissa Government issued another resolution to provide encouragement for protection of forests by adjoining villagers and confer right to the villagers protecting these forest (GoO 1996).

### (c) Unregistered Groups Engaged in Forest protection:

Apart from FPC, and VSSs there are a number of unregistered self-initiated groups like Yuvak Sangh protecting forests at the village level. As per available information, there are as much as 640 such unregistered groups in Orissa protecting forest area of 89864 ha. These are all voluntary, self-initiated village level institution spontaneously created in different forest-based regions to meet pressing local needs of the community population.

These different peoples' organisations namely the FPCs, VSSs and VFCs however, have members, who are both tribals and non-tribals, but bulk of them depend on forests for their livelihood. Since NTFP collection and sale are crucial to their subsistence economy, it could be possible to involve these well organised groups for improving the current management practices of NTFP collection, processing and marketing in order to provide the primary collectors better returns for their labour and time involved in NTFP collection.

### 4.9. Financial Assistance to JFM Programme:

Financing JFM programme to execute some of the forestry activities at the grassroots level is an issue of concern. As per the proceedings of 20<sup>th</sup> meeting of the State Level Co-ordination Committee of the World Food programme (WFP), it was decided to provide financial assistance to various items of JFM programme; such as: Orientation training to the VSS members, construction of Forest Awareness Centrecum-Meeting Room, Preparation of Micro Plan for rehabilitation of degraded forest in 13 Forest Divisions of the state.

However, as a part of State Plan scheme, the Government of Orissa had granted around Rs.70 lakhs during 1995-96 to execute JFM programmes in the state. It was decided to finance two micro plans in each forest division in order to cover atleast 167 ha. in case of Tribal Area Forest Divisions and 202 ha. in case of non-tribal area forest divisions. It is reported that during 2003-04, the Government of Orissa have spent Rs.3965.51 lakh on RLTAP, (Revised Long Term Action Plan), Economic Plantation, Jagannath Vana Prakalpa, and Natural Afforestation Programme funded by FDA.

### 4.10. Some legal Issues and Statutory Provisions:

According to government orders, (following the suggestion of the DFO/ Range Officer/Forester) it was envisaged that a meeting of all adults living in the selected villages will be convened by the F.D. officials, where the forest officials will explain the scheme of JFM, and depending on the response and motivation of the villagers, formation of VSS may be possible. The members of the VSS however, include two adults from every household of the village including one female member.

- **4.11.** The V.S.S through its Executive Committee executes MoU with the concerned DFO for active participation in protection, regeneration and management of the forest area assigned to it, and also, for implementation of programmes as per JFM Plan. But, participation in forestry activities is intimately associated with management and empowerment issues. It is believed that participation/mutual acceptance of rights, responsibility and accountability strengthen empowerment. The tradition of working together and participation in mutual work (which differ across villages/regions and castes) also empower local people for undertaking varieties of forestry activities. However, the former VFPCs constituted at the village level in the recent past are being motivated by the FD at present to form VSS. But the VSS does not enjoy any legal powers to try individuals or the State for non-compliance with the guidelines of the 1993 office order. Thus, lack of legal provision is reflected in insecurity on the part of VSS members .Further, the legal ambiguities noticed in the institutional structure put serious hindrances in the normal functioning of JFM in the state of Orissa. In the absence of legal power, the VSS faces difficulties to ensure equitable distribution of usufructs. Besides, occasional threats of the adjacent villagers, forest thefts, forest fire, entries of timber smugglers can not be restricted/prevented.
- **4.12.** In point of fact, some conflicting and changing policies without commensurated changes in statutory forest rules and acts have created several legal and institutional ambiguities which seem to have prevented the poor to secure desired benefits. In the Forest Laws, Acts and regulations formulated and implemented in Orissa till date, the primary intention has been obviously to improve the socio-economic conditions and level of living of the forest dwellers. Also, customary rights have been bestowed in the local tribes in some areas for their bonafide consumption (not for sale).
- **4.13.** However, PFM in Orissa was initiated well before the passage of the June 1990, GOI guidelines through the Orissa Village Forest Rules, 1985 and were framed under powers conferred under sections 31, 32 and 82 (d) of the Orissa Forest Act, 1972. These rules are statutory in nature, in nature and therefore, cannot be amended

except by issuing similar statutory notifications (Mishra, 1998). Since then, several government resolutions have been effected in 1988, 1990, 1993 and finally 1996 dealing with village forest management. However, none of these changes have been incorporated within the existing statutory rules of 1985 (a necessity to avoid confusion and to give the current resolutions validity since no resolutions can supersede these statutory rules). This laxity has led to much uncertainty and confusion to various forest committees. Therefore, because of all these different resolutions, a number of Village Forest Committees (formed under the 1985 rules), Forest Protection Committees (under the 1988 resolution) VSS (formed under the 1993 and 1996 resolutions) and unregistered committees are functioning simultaneously in many parts of Orissa. This has, "led to utter confusion in the field with respect to legal status, powers and functions of these committees (Mishra, 1998).

- **4.14.** Besides, a number of other legal issues also have further compounded the confusion. While it is widely believed that the 1988 resolution formally launched PFM in Orissa, in fact, the formalization of PFM predates this resolution and owes its origin to the 1985 rules. Therefore, the scheme for participation of local communities in the protection, development and management of village woodlots and social forestry block plantations (raised under the SIDA assisted Social Forest Project between 1984 and 1994) came under the purview of PFM through the 1985 rules. This was almost a decade before, the GR of 1994 (7/12/94) which is erroneously believed to be the resolution that integrated the Social Forestry project with JFM, (Mishra 1988) and according to which "All the village woodlots, and Social Forestry block plantation raised under the SIDA assisted Social Forestry Project between 1984 to 1994, after being notified as village forests, will also come under the purview of this scheme."
- **4.15.** This has further led to confusion as to whether the committees can be formed in reserve or protected forests. Under Section 30 of the Orissa Forest Act, 1972, no reserve forest or any part there of can be constituted /converted as a village forests without the prior approval of the Central Government as laid down in section 2 of the Forest (Conservation) Act, 1980. Only protected forests can be constituted as village forests by the procedures laid down in Chapter III of the Orissa Forest Act, 1972 (Mishra, 1998). The 1990 resolution however, ignored this stipulation by clubbing protected and reserve forests together and ignoring the legalities involved therein.
- **4.16.** The solution to this problem is easy once, recognition of legal identification of these two distinct forest classifications is made. This will not prohibit JFM from being carried out in both these types of forest but it will provide legal sanctity to the entire area. According to Mishra, (1998) while there is no difficulty in introducing JFM in R.F areas, (since it is the absolute property of the State with no rights of private individuals or the community), a protected forest is burdened with rights and privileges of local communities. The only way then is to constitute Village Forests in pursuance of the provision of Chapter III of the Orissa Forest Act, 1972". Chapter III empowers the State Government to constitute village forests on "any land at their disposal." However, it is the Revenue Department (R.D) which owns the land outside of R. F. Therefore, Village

Forests on Protected Forest cannot be created without the concurrence of the R.D. Therefore, the F.D in order to create village forests on protected forest land needs to demarcate the village forest boundaries, and publish notifications to that effect with the assistance of the Revenue Department (Mishra, 1998).

- **4.17.** There also exists some degree of uncertainty regarding the linkage between Panchayati Raj institutions and JFM in the State. While the 1993 and 1996 resolutions provide ample scope for linkages between these two grass roots level peoples' institutions, the framing of the resolutions has been done without carrying out due consultations with the concerned departments. There also exist several ambiguities between the formation of village committees vis-a-vis the panchayat involvement as specified in the GRs and what the 1985 rules allow. Therefore, discussions with concerned departments will have to be carried out to resolve these legal implications.
- **4.18.** The notification of village forests for PF area is also a step which may help to resolve a diverse range of issues relating to NTFP collection, transportation and marketing. The rights of tribals and other special categories, or the transference of ownership of NTFPs to Gram Panchayats in Scheduled areas of the State under Orissa Gram Panchayats (Amendment) act, 1997 as per the 73<sup>rd</sup> amendment of the Constitution of India. This is because the rights and concessions of local communities have to be determined under Section 32 of the Forest Act before various provisions can be allowed for village forests constituted in PF areas.

### 4.19. Benefit Sharing:

One of the major challenges in sustaining forest conditions, uses and values is to understand the dynamic relationships among people, forest resources and environmental services provided by forest and overall standards and quality of human life. In the absence of use-effectiveness, some vested interests and forest staff seem to have been involved in damaging wood-cutting practises. Further, the top-down approach in decision-making has also not adequately addressed to deforestation activities. As a result, the poor and the disadvantaged group of population have compelled to adopt strategies that are environmentally damaging. However, NFP 1988 for the first time have taken radical steps in formulating a policy strategy that could meet the basic needs of the local people, essentially, fuel wood, fodder, small timber, bamboo, medicinal herbs etc.

**4.20.** The benefit sharing arrangement in JFM is a two-way process in which the people benefit from the usufructs to which they are entitled to in lieu of protection and conservation of local forest resource and the government/state benefits both from protection and management activities carried out by the community leading to improved forest conditions as well as productivity. Benefit sharing is also crucial in the context of JFM in order to ensure improved forest productivity and as per the government orders 1993, 1994,1996, 50.0% of the final harvest of timber will be shared with the communities. Besides, the dead wood and small timber collected form forests will be given to the community free of cost and so also, timber for house construction. In particular, according to 1993 resolution, usufructs like leaves, grasses, fodder, thatch

grasses, broom grasses, thorny fencing materials, brush wood and fallen lops and taps and twigs used as fuel wood would be available to the members of the community free of cost. In addition to this, according to 1996 resolution, each resident family, (who is member of VSS) is entitled to gather wood, small timber, bamboo from the protected forest, free of cost.

- **4.21.** Villagers in Orissa have been enjoying varieties of forest access rights, concessions and privileges and these rights indeed are according to the types of forests and their tenurial status. In Orissa, while 48.0% of forest land falls under the jurisdiction of F.D, the rest 52.0% comprise under control of protected forests and forest land under the direct control of the R.D. Similarly, while the R.F rests with the F.D, the other areas including the 'Gramya Jungle' (Village forests on revenue lands) and other forests that lie within revenue village boundaries are administered by the local Panchayats under the Orissa Gram Panchayat Act 1968, who is responsible for their management (Sarin M. and Rai A. 1998). Thus, there are multiple agencies to control and administer the forest resource in Orissa leading to complexities in governance process.
- **4.22.** A close look at the forest rights granted by the F.D to the people for collection of fuelwood, fodder and other forest products to meet subsistence and commercial needs suggest that people had the similar privilege to access to such forest produce even during the pre-JFM period. Access to forest was however regulated by certain restrictions, but were specific to meet bonafide needs of the people. Sarin and Rai (1998) report that in this context, only 'B' category forests and PF's were demarcated for peoples' use. In most cases, however, people were entitled to pay some amount of cess. However, with the introduction of JFM, fuelwood collection is opened to forest-users free of any charge. Similarly, the members of VSS are allowed to collect fodder grasses from the protected forest areas though lack of grazing land and lack of alternate supply of grasses cause a lot of pressure on forests and so also hardships to the common people.
- **4.23.** Apart from the benefits of usufruct rights over the NTFPs and major share from timber following final harvest, wage employment in forestry activities under taken by the FD is an additional benefit to the village people in the JFM areas especially during agricultural lease seasons, when they have in fact very limited opportunities for securing subsistence. In many of the JFM areas, we visited during field survey, many community beneficiaries reported that due to the introduction of JFM, it has indeed granted some rights over the forest produce and the scope for opportunities to earn some more income from forests has been widened.
- **4.24.** According to Sarin and Rai (1998)' empowering NTFP collectors to increase their incomes from NTFPs through unambiguous rules, processing and sale rights would not only increase livelihood security of the forest-dependent communities but also, contribute to forest conservation objective by reducing their dependence on forests and also their attitudes towards damaging and unsustainable activities like firewood head loading or working for timber smugglers to earn wages for survival. In this context (more importantly) JFM model of management could strengthen their empowerment through

participation in management, sharing responsibility and accountability in governance of the precious resource at the grass roots level. Though, as per 1993 government order, usufructs like fodder grasses, leaves, broom grasses, brushwood and fallen lops and tops, twigs and firewood etc are available as major incentive to the villagers in lieu of protection and conservation of precious forest resource, nationalised products like kendu leaves, sal seed and bamboo are still delivered to the Departmental Agencies against prescribed wages for collection and delivery. Attempts by the government of Orissa to minimize involvement of middlemen and exploitation by setting up of Orissa Forest Develop Corporation (OFDC), Tribal Development Cooperative Corporation (TDCC) have indeed resulted very limited success. But unlike many states, Orissa has nationalised many precious forest produces and this seems to have limited/restricted livelihood opportunities of tribal committees in a big way, though increasing bureaucratisation and delaying process of payments to the primary collectors have accentuated the miseries of the primary gatherers in a big way.



# Objectives, Study Area, Research Design and Methodology

- **5.1.** In the preceding chapters, we attempted to focus on the emerging JFM programme, its status in retrospect and prospect, and presented a critical review of literature. Apart from this, some conceptual, institutional, legal and benefit sharing issues also have been highlighted in the context of Orissa. More specifically, we indicated how some of the existing forest laws, rules and provisions in the Forest Acts, indeed contradict the New Forest Policy (NFP) 1988 and pro-people enactments. Because, the NFP 1988 categorically indicates "the life of tribals and other poor living within and near forests, the rights and concessions enjoyed by them should be fully protected". Though different forest laws, Acts, and Regulations also make similar provisions to improve the socio-economic conditions of the forest dwellers, most of such Acts and forest policies enacted/formulated and implemented in the State are found to be inadequate to address issues concerning sustainable use of forest resource, livelihood and food sustenance of the forest-dependent population.
- Evidently, some of the existing laws are observed to have remained far from normative principles and are found inadequate to align the social as well as economic way of living of the tribal forest dwellers with forests and forest products. The conflicting situations such as: between individual interests and ecological/social interests, intervillage and intra-village conflicting interests under the emerging JFM regime, appear to have caused a great deal of distortions and therefore, have grossly failed to direct right path of action. In other words, the existing forest laws, Acts and provisions therein do not indeed assist in benefiting the so-called people-centred policy strategies in ameliorating the socio-economic conditions of the forest-dependent poor. Instead, many of such laws in many respects have proved unsuccessful, improper and self-defeating. In point of fact, it is not policy rather provisions in forest Acts which very often regulate the action of the government, and empower its officials to implement the provisions in the Acts that are detrimental to the subsistence interests of the forest dwellers. Accordingly, (a) the industry and other large end- users secure the first charge on the product, and so also at the subsidised rates; (b) the objective of revenue maximisation enjoys the priority without any policy to encourage any value-addition at lower levels; and (c) the interest of the poor and tribal is relegated to the third level.
- **5.3.** In fact, of sustained issues relating to functioning of JFM in Orissa, sharing of benefits amongst the stakeholders, issue of equity, strategy, resource use conflicts amongst the villagers and intra-village conflicts etc are of crucial concern for successful operation of JFM programme in the state. But, it is evidently noticed that existence/creation of multiple institutions at the grassroots level for ownership, control and management of forest resource, such as F.D, R.D and Gram Panchayat (GP), VSS and the GP interface, multiplicity of Forest Protection Committees and their heterogeneity in

administration of the forest resource have created a great deal of complexities, conflicts in the management of the resource. Though, sustainable livelihood of forest dwellers and tribals in particular depends upon sustainable management of the precious resource, the emerging conflicts amongst the villagers, stakeholders and the intravillage conflicts appear to have maintained a distance and have alienated the forest dwellers not only from their chief source of livelihood, but also, from the centre of governance of the resource. Of course, natural resource conflicts emerge due to various kinds of disputes and disagreements over access to control as well as use of the resource. However, different uses of the resource and different ways of its use pave ways for disagreements and these get further widened due to differential interests and needs of various stakeholders. In point of fact, these conflicts of interest are inevitable in every society. Because, conflict is a common feature of any resource use system including forest. Therefore, its sustainable management has to encounter some threats /challenges unless adequately countered through some specific people-centred policy strategies.

**5.4.** The primary purpose of the research study was to examine and highlight conceptual, institutional, legal and participatory issues concerning JFM in Orissa, (which has been introduced in the State since 1993) in the context of some policy as well as institutional reforms in the forestry sector with respect to management of forest resource and NTFPs in particular. Therefore, the following aspects were looked at in detail keeping the following selected broad objectives in mind.

### 5.5. Major Objectives:

- To what extent, the livelihood security of the forest dependent population has been addressed in the JFM regime from the point of equity in participation and certainty in benefit sharing in Orissa and in particular, whether the livelihood issues of the most disadvantaged groups of forest dwellers as well as women have been fairly attended to.
- 2. to study the success/failure of the existing forest Policies, Acts, Laws, Administrative provisions and the recent NTFP Policy 2000 in empowering the local forest dwellers and tribals in particular to have control on the forest resource and improved livelihood. Do these counter (if any) to the functioning of JFM and also, to the traditions, customs, cultural identify of the tribals as well as preservation of biodiversity and environmental security.
- 3. to identify various conflicting interests of the stakeholders at the local level, conflicts within FD, local community institutions, several inter-village as well as intra-village conflicts, and how the seemingly incompatible goals; such as; conservation of forests, meeting market demand, promotion of broad-based sustainable forestry could be reconciled, which could successfully reduce incidence of chronic rural poverty in the forested regions of Orissa.
- 4. to examine how far control and regulating mechanism through JFM has opened up new as well as greater opportunities to the low-income beneficiaries from

- NTFP market and has reduced both livelihood as conservation risks under the JFM regime.
- to outline the policy reforms that provide expanded opportunities with respect to ownership rights, besides reducing excessive regulatory burden, ensuring greater protection and reduced risks in NTFP market development under the forest regime.
- 6. how far policy strategies on marketing and commercialisation of NTFPs in the liberalised policy regime has alleviate poverty and livelihood risks of the forestdependent poor and have strengthened their socio-economic capabilities through realisation of fair price from sale of NTFPs, reduction in distress sales, greater participation in the JFM structure etc.

### 5.6. Hypotheses:

- (a) JFM has grossly failed to achieve twin objectives of meeting subsistence needs of the forest-dependent poor in the JFM regime and improved livelihood security partly due to multiplicity of institutions in ownership, control and management of the forest resource, overlapping of their functions/ activities, contradictions and confusions in the existing forest policy, laws, Acts and the Government Resolutions, but mostly, duel to emerging inter-village and intra-village conflicts in the JFM areas while managing the precious forest resource.
- (b) Mere formulation of policies (GoO 2000, PESA 1996) by conferring ownership as well as control rights over the 68 NTFPs to GPs and licensing rights for collection in the non-scheduled areas do not really reduce/alleviate the prevailing adverse conditions at the G.P level. Further, neither, these strengthen the grass roots level institutions to ameliorate the socio-economic conditions of the forest dependent poor nor the government in terms of revenue and sustaining the local forest resource base.
- (c) The livelihood issues of the local forest-dependent poor and their food security have not been adequately addressed in the JFM areas of the state of Orissa neither from the point of view equity in participation nor certainly from the point of view of benefit sharing.

### 5.7. Methodology and Sampling:

In order to obtain relevant information based on the study objectives necessary questionnaire formats, household /village schedules were canvassed amongst the sample households pertaining to collection of relevant basic information, keeping in view of some emerging conceptual, institutional and participatory issues. However, a few PRAs were also conducted in the selected sample villages for obtaining relevant information, people's views and opinions on JFM through participatory mode of discussions in groups on the above three broad issues. Accordingly, focussed as well as intensive group discussions were conducted for qualitative and quantitative data collection in selected sample villages in the presence of stakeholders ranging from Orissa forest staff, professional local NGOs (wherever available) and the members of JFM.

5.8. The empirical exercise as well as research investigation in to a number of overarching questions was conducted in two full scheduled divided (new) districts; namely, Rayagada and Mayurbhanj and two Partially schedule districts; namely, Keonjhar and Kandhamal (Annexure-A). All these four new districts are located in different forested regions and are situated under different agro-climatic zones of the state of Orissa (in which different tribes do live in). Accordingly, sixteen villages from eight blocks having Vana Sarakshyana Samities (VSSs) were identified from which 321 households were selected by stratified random sampling method and studied in-depth. Since, the basic purpose was to examine and highlight the peoples' attitudes, understanding, perceptions and nature of participation in JFM, their conceptual clarity, institutional setting etc. eight fringe forest villages (adjacent to JFM villages) were also chosen as contrasting cases where there was no JFM (VSS) and 80 households in total were chosen by using simple random sampling method to study their participation in forest conservation, protection and utilisation without any institutional intervention like VSS.

One of the primary purposes of the study was to know the differential perceptions, understanding, extent of participation of different tribes in the participatory management of the forestry resource, awareness/knowledge on policies, procurement prices, collection centres, value addition, etc. at the grass roots level. However, our ultimate focus was to identify conceptual, legal, institutional and participatory issues emerging in the JFM during last couple of years of its functioning in different parts of the State. Therefore, we employed a multi-stage sampling method due to large diversity in the universe and multi-faceted set up of the JFM committees and other groups to select at least two JFM villages and one NJFM village from each sample block (two in each districts) in consultation with the local DFO/ACF, other local forest officials. While selecting the study villages, the status of VSS, VFPCs, VFCs at the village level were thoroughly examined. Besides the forest area allotted to JFM units, tribal population, the level of development, the potential of NTFP resource, proportion of tribal population below poverty line were also considered.

- **5.9.** While selecting the beneficiaries from each village (also from committees and groups) necessary care was taken to select tribal, non-tribal and women headed households. Some non-beneficiary households in different study regions were also interviewed with the help of structured household schedules specifically designed for the NJFM villages in order to compare their socio-economic status and livelihood status with those of JFM beneficiaries.
- **5.10.** Similarly, while canvassing the village schedules information on the aspects; such as: status of VSS/VFPC /VFC, agro-climatic conditions, demographic profile, composition of caste/class, land use pattern, income derived from various sources including income from NTFPs (in terms of sale), procurement of NTFPs for sustenance, distance of forests from the village, market place, trade centres, processing/value-addition manufacturing units, infrastructure facilities like roads and communications, socio-cultural institutions etc were examined. Similarly, while canvassing household schedules, a number of aspects; such as: nature/degree of participation in the

management (JFM), types/extent of participation in protection and conservation of protected forests, consumption pattern of the forest dwellers, marketing and disposal of NTFPs, agencies involved in marketing network, role of middlemen, government agencies, relevant information on education, occupation, avenues of livelihood, customs, traditions, cultural practices, traditions relating to forest-related activities household consumption expenditures of the sample household, non-farm sources of income etc were collected. Some local traders, middlemen, NGOs were also specifically interviewed with the help of interview guidelines. Adequate care was taken to examine the indigenous knowledge, skill, capabilities of the forest dwellers in the respective areas/villages to explore the scope for sustainable source of income for them (from procurement, value addition marketing activities) and also to meet their food sustenance. Similarly, attempts were made to assess the possible primary and secondary processing activities of NTFPs as well as the market linkages in the concerned region to raise the socio-economic capabilities of the forest dwellers to alleviate their poverty by raising their level of income. However, apart from primary source of data collected from different parts of the forested-regions of Orissa, relevant secondary source of information were collected from the FD, TDCC, LAMPS, OFDC and other organisations, unpublished /published study reports, statistical hand books etc. in order to strengthen primary source of data for research analysis.

## **Socio-Economic Profile of Study Villages**

- 6
  - **6.1.** The prime sources of livelihood everywhere indeed need proper care, management and protection. But, access to and control over natural resource is one of the major requirements of the poor for the purpose of securing food sustenance and livelihood. This is more significant in case of forest dwelling population living below the poverty line, who dwell in and around the forests. In recent years, huge funds are being invested in exploring the potential of non-destructive utilisation of forest to provide substantial benefits to local people and forest-dependent communities. Besides, continuous efforts are being initiated by various organised and unorganised agencies to expand opportunities for enhancing their income generation notwithstanding conservation of precious forest resource. This is being complemented by many other development strategies such as; non-forest based enterprises and employment-based poverty-reduced measures in the state of Orissa.
  - **6.2.** As has been told earlier, in an attempt to explore the grass roots level realities of JFM as a strategy towards forest conservation in Orissa, four districts; Kandhamal, Keonjhar, Mayurbhanj and Rayagada were chosen for an in-depth study. All the sample districts however are situated in the Eastern Ghat Agro-climatic region. It was observed during the field study that various tribes in the forest villages of different regions, in fact, use the forest resources differently due to distinct differences in their consumption pattern, perceptions about forests and its management, nature and degree of their dependence. Besides, nature and degree of development intervention, infrastructural (including marketing centres) processing units, availability of alternative sources of livelihood etc in these regions also seem to have influenced differential use of existing forest resource.
  - 6.3. The average rainfall in the Eastern Ghat Zone ranges between 1350 to 1520 mm in contrast to mean annual rainfall of 1600 mm in other regions. Needless to say that the Eastern Ghat districts infact are characterised by dense forests. Most part of the region has an elevation of over 3000 ft acting as a watershed of two sets of rivers, one set flowing directly to the Bay of Bengal, and the other set flowing to the river Godavari. On the other hand in the northern plateau, there is an undulating upland frequently intersected by hill ranges sloping by and large from the north to south. It is a contribution of the Chhotanagpur plateau of Bihar.
  - **6.4.** Among the sample districts, Kalahandi demonstrates dense forest, black and stony sands, which are both medium to high textured having low to medium fertility. Soil in Rayagada district is moderately red, but rich in iron and aluminium. In Keonjhar, soil is red and yellow; but, the soils are acidic and have low fertility and the moisture content in the soil is high. The soils in Mayurbhanj are black and red with high iron content and moderately acidic. But, the moisture content in the soil is too high.

- **6.5.** All the sample villages are situated adjacent to hills and mountains in the dense forest regions. It is confirmed from Table-6.1 that as much as 321 sample households consist of ten scheduled tribes, four scheduled castes and five OC. However, their perceptions about forest, customary rights and privileges, cultural practices, customs and traditions, indigenous knowledge of forest. Processing of forest products, value addition activities etc are distinctly dissimilar. Therefore, it would be of much interest to see a kind of differential situation with regard to the effects of forest Policies. Acts, Regulations, etc (implemented over years) to affect the livelihood sustenance of tribals quite differently. There are ample evidences that the sample villages brought under JFM regime through formation of VSS had community institutions like CFM/VFC/VFPC, which were considered to be the primary institutions to manage village community forests in the recent part.
- **6.6.** These grassroots level institutions appear to have been the powerful democratic bodies to look after their basic livelihood interests notwithstanding ecological/ environmental security, conservation of forests and preservation of bio-diversity for ensuring better standard of living source to the village communities. But, for fulfilment of their immediate basic domestic requirements and pressing consumption needs they appear to have framed some rules and regulations to procure forest produces with approval of the VSSs in the JFM model of management.

Table-6.1 Profile of Sample Villages

SI.	Forest	Districts	Block	Name of the	No.	Name of the	No. of	Total No.
No.	Divisions	Districts	Biook	JFM Villages	Sample	NJFM Villages	Sample	of Sample
110.	Dividiono			or in vinagoo	House-	1101 III Villagoo	House-	House-
					holds		holds	holds
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1.	Phulbani	Kandhamal	Phulbani	Belapadar	20	` '		20
		(Partially		*Sarupada	20			20
		Scheduled)		•		Matighati	10	10
			Khajuripada	Khaumunda	20	_		20
			, .	*Sitikapanga	20			20
						Badiguda	10	10
2.	Keonjhar	Keonjhar	Keonjhar	*Badaposi	20			20
		(Partially	Sadar	Maidankeli	20			20
		Scheduled)				Nishchintpur	10	10
			Telkoi	Padiaposi	20			20
				Keranga	20			20
						Khanda-bandh	10	10
3.	Karanjia	Mayurbhanj	Jashipur	Ektali	21			21
		(Full		*Rangamatia	20			20
		Scheduled)				Handipuhan	10	10
			Thakurmunda	Jamukhanjari	20			20
				*Ghodabindha	20			20
						Jamunalia	10	10
4.	Rayagada	Rayagada	Rayagada	Badahanshsa	20			20
		(Full		Gendagadia	20			20
		Scheduled)				Turihansha	10	10
			Bisam Cuttack	Dambakumpa	20			20
				Goudaguda	20			20
						Burjuguda	10	10
		Total			321		80	401

Villages (in Bold) where PRAs were conducted

Table 6.2(a)

Distribution of JFM HHs According to Ethnic Communities

SI.	Name of			ST House	eholds	SC Househ	olds	OC House	holds	Total
No.	the District	Block	Village	Name	No	Name	No	Name	No	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1.	Kandhamal	Khajuripada	Sitikapanga	Sabar	20	` '	` '	` '		20
			Khaumunda	Kandha	18			Carpenter	2	20
		Phulbani	Sarupada	Kandha	20					20
			Belapadar	Sabar	16	Pana	2	B. Smith	2	20
2.	Keonjhar	Keonjhar	Badaposi	Saunti	3			Potter	1	4
		Sadar		Bathudi	14			Milkman	1	15
				Kolha	1					1
			Maldankeli	Kolha	3	Fisherman	1	Kudumi	4	8
				Mundari	3	Washer	1	Carpenter	1	5
						man				
				Ganda	4	Dama	1	Milkman	1	6
				Sabar	1					1
		Telmoi	Keranga	Sabar	14					14
				Juanga	6					6
			Padiaposi	Kolha	6					6
				Munda	7					7
				Ganda	7					7
3.	Mayurbhanj	Jashipur	Rangamatia	Kolha	13			Kudumi	7	20
			Ektali	Kolha	16			Kudumi	1	17
				Santal	4					4
		Thakurmunda	Jamukhanjari	Santal	3			Kudumi	17	20
			Ghodabindha	Kolha	17					17
				Santal	3					3
4.	Rayagada	Bisam Cuttack	Gaudaguda	Kandha	20					20
			Dambakupa	Kandha	20					20
		Rayagada	Badahansa	Kandha	20					20
			Gendagadia	Kandha	20					20
5.	All			Kandha	118	Pana	2	Kudumi	29	149
				Kolha	56			Carpenter	3	59
				Munda	7			B. Smith	2	9
				Ganda	11			Potter	1	12
				Santal	10			Milkman	2	12
				Juanga	6	Fisherman	1			7
				Sabar	51	Washer	1			52
						man				
				Saunti	3	Dama	1			4
				Bathudi	14					14
				Mundari	3					3
6.		Grand T	otal		279		5		37	321

- **6.7.** It is confirmed from Table 6.2(a) that as much as 10 ST communities, 4 SC communities and 5 OC groups live in sixteen sample JFM villages and almost in each village, distinctly different group of tribes also live, whose perceptions about forest conservation, consumption pattern, commercial activities, nature of dependence on forests, customary rights and privileges, cultural practices, customs and traditions are different. Similarly, their indigenous knowledge on processing of forest products, value addition activities etc. are distinctly dissimilar.
- **6.8.** Similarly, in eight non-JFM sample villages, 6 categories of STs, two OC caste groups and one SC category of community live with different customs and traditional use of forest resources (refer to Table 6.2 (b)). Except Matighati, (the NJFM village of Phulbani block of Kandhamal district), all households belong to SC (*pana*) community. However, not only across the tribes but also across the ethnic communities, the perceptions on conservation and protection of forest

Table –6.2(b)

Distribution of NJFM HHs According to Ethnic Communities

SI.	Name of the	Name of the	Name of the	ST Hous	seholds	SC		OC	;	Total
No.	District	Block	Village			Househ	olds	Househ	olds	
				Name	No	Name	No	Name	No	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1.	Kandhamal	Khajuripada	Badiguda	Sabar	10					10
		Phulbani	Matighati			Pana	10			10
2.	Keonjhar	Keonjhar Sadar	Nischintpur	Kolha	7			Milk Man	3	10
		Telkoi	Khanda-	Kolha	1					1
			bandha	Munda	1					1
				Sabar	8					8
3.	Mayurbhanj	Jashipur	Handi-	Kolha	7					7
			puhan	Bhumija	3					3
		Thakurmunda	Jamunalia	НО	5					5
				Kolha	5					5
4.	Rayagada	Bisam Cuttack	Burjuguda					Reddy	10	10
		Rayagada	Turihansa	Kandha	10					10
5.	All			Sabar	18	Pana	10	Milk	3	31
								man		
				Kandha	10			Reddy	10	20
				Kolha	20					20
				Munda	1					1
				НО	5					5
		Bhumija	3					3		
Grand	Grand Total				57	10		13		80
					(71.25)	(12.5	0)	(16.2	(5)	(100.00)

Table 6.3
Distribution of Forest Land in the Sample Districts According to Categories

Name of	Geographical	Total	Forest La	nd Under	Forest Land	Under Control	of Revenue		
the District	Area	Forest	Control of Forest			Department			
		Area	Depai	Department					
			Reserve	n-	Demarcated	Un-	Other		
			Forest	classified	Protected	demarcated	Forest		
				Forest	Forest	Protected	Under		
					(DPF)	Forest	Revenue		
						(UDPF)	Department		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		
Kandhamal	7650	5709.83	2010.06	2.00	1783.30		1914.47		
	(100.00)	(74.64)	(26.28)	(0.03)	(23.31)		(25.03)		
Keonjhar	8303	3097.18	1834.09	0.26	273.64	220.79	768.40		
	(100.00)	(37.30)	(22.09)	(0.00)	(3.30)	(2.66)	(9.25)		
Mayurbhanj	10418	4392.13	3330.14	2.20	245.06		814.73		
	(100.00)	(42.16)	(31.97)	(0.02)	(2.35)		(7.82)		
Rayagada	7580	2812.33	771.62	0.96	1147.19		892.56		
	(100.00)	(37.10)	(10.18)	(0.01)	(15.13)		(11.78)		
Orissa	155707	58135.47	26329.12	20.55	11685.68	3838.78	16261.34		
	(100.00)	(37.34)	(16.91)	(0.01)	(7.50)	(2.47)	(10.44)		

Source: Office of the PCCF, Government of Orissa, Bhubaneswar

N.B.: Figures in parentheses represent to per cent of respective total geographical area.

resource (in different regions), and also on the functioning of JFM model are expected to be distinctly dissimilar.

**6.9.** An estimate of forest land under the control of the F.D across the districts (Table 6.3) suggests that though in Orissa, forest area constitutes 37.3 per cent of the geographical area, such percentages in Kandhamal, Keonjhar, Mayurbhanj

and Rayagada (divided) are 74.6, 37.3, 42.2 and 37.1 per cent respectively (table 6.3). The government has the ownership as well as control authority in administration of bulk of forest land and resources. But, in recent years, the government has taken series of policy measures on such precious resource by way of devising forest policies and creating grass root level institutions, like VSSs and assigning them the adjacent forest land to be jointly managed by the community and the F.D. Interestingly, only 12.29 sq. km of forest area in Orissa is under the private ownership against 58135.37 sq. km under the government in the Forest and the Revenue departments. Further, as regards the status of JFM in Reserve Forest area, (which is distinctly designed in the Orissa Forest Act, Section –24), it is clearly suggested that the state can assign its rights over forest and forest produce to any community to serve the designed strategy of JFM. Further, though the section 24 allows state government to confer rights on people, FCA, 1980 limits the rights of the state. Therefore, in such a situation, JFM could only be taken up in reserve forests, without any legal change of the status of land.

However, district-wise information on total number of VSSs and total forest area brought under JFM in Orissa by June 2005 is presented in Annexure - B. Out of these, 2651 have been registered under the Society Registration Act under FDA. Total forest area assigned to VSS is 843085 hectares which is brought under the JFM regime in Orissa by June 2005.

**6.10.** All the 24 villages (both JFM and NJFM) proposed to be studied in-depth, however have some common community interest to secure fuel, fodder, medicine and other forest produces for both consumption and sale. However, the total number of sample households are 401 (321 from JFM and 80 from NJFM) and all these were interviewed with respective structured household schedules, besides some PRAs in the JFM villages.

The empirical research findings of our primary survey on the JFM and NJFM households are presented in the succeeding chapter from which conceptual, Institutional and participatory issues emerged in the JFM model have been examined keeping in view of the ground realities.



## **Major Findings From Field Research**

### **Empirical Results:**

- 7.1. The forgoing discussion in the proceeding chapters suggests that forestdependent communities, and tribals in particular across the forest-based regions of Orissa are deprived of their genuine benefits. Many of them have turned vulnerable owing to stringent forest laws, rules and existing Acts as well as administrative provisions, who have not benefited either in terms of free access to or control over the local resource as well as its management. The emerging multiplicity of grassroots level institutions, namely; JFM/CFM/VFC/VFPC, also have not addressed to these issues, rather prevent them in varieties of ways for securing necessary access to the forest resources and their management. In consequence, the households economy of the forest dwellers in terms of employment, income generation and life-support sustenance have been adversely affected. Further, massive degradation of forest resource, deforestation, lack of desired involvement of the village community in the management of local resource (in many parts of the State), relentless commercialisation not only have accentuated their poverty, miseries of the forest-dependent population, but also, have caused greater food insecurity, vulnerability and impoverishment. More strikingly, large scale displacement, on-going land alienation, growing depletion of productive assets, meagre wage employment opportunities, deforestation (degradation in particular) have accentuated their poverty and vulnerability. However, of late, NFP 1988 recognised peoples' participation in forest protection and management, and accordingly, we find today thousands of VSSs, VFPCs, FPCs etc. in Orissa engaged in protecting and conserving thousand hectares of precious forest land in lieu of some concessions and benefits from the protected forests.
- **7.2.** The primary purpose of this chapter is to present our field research findings and identify some legal, conceptual, institutional and participatory issues emerged in JFM model of management during the last few years of its functioning in the state. Besides, we also propose to highlight resource management conflicting issues and livelihood issues of the local communities emerged in course of their participation in protection, and conservation for ensuring sustainable livelihood. In order to make an in-depth analysis of field data collected from different agro-climatic as well as tribal regions, we propose to employ two criteria purposefully in grouping sample households; namely: income group index and ethnic group index. Evidently, our field-survey data reveal that the tribals in Orissa are well dispersed over the regions, and indeed, concentrate in various forest habitats.
- **7.3.** Distribution of forest-dwelling sample households according to income group and ethnic group is presented in table-7.1 (a) and 7.1 (b) to explain how dispersed these tribes are, and how different tribes fall in various income groups. Evidently, even some

of them are interestingly found in higher income groups. It is confirmed therefore that tribal families across the sample districts work tooth and nail to earn substantial income Table-7.1 (a)

# Distribution of Sample HHs According to Income Groups and Ethnic Communities in JFM Villages

(In Nos.)

Name of the District	Community	Name of the Tribe	Up to 6000	6000 - 11000	11000 - 15000	15000 & above	Total
1	2	3	4	5	6	7	8
ALL	ST	Kandha	4	25	73	16	118
(Kalahandi,		Kolha	2	26	24	4	56
Keonjhar,		Munda	3	3	1	0	7
Mayurbhanj		Ganda	0	3	6	2	11
and		Santal	1	4	5	0	10
Rayagada)		Juanga	2	4	0	0	6
		Sabar	1	15	30	5	51
		Saunti	1	0	1	1	3
		Bathudi	2	3	7	2	14
		Mundari	0	1	1	1	3
		Total	16	84	148	31	279
	SC		0	2	3	0	5
	OC		3	7	23	4	37
	All		19	93	174	35	321

Table - 7.1 (b)
Distribution of Sample HHs According to Income Groups and Ethnic
Communities in NJFM Villages

(In Nos.)

							(111 1400.)
Name of the District	Community	Name of the Tribe	Up to 6000	6000 - 11000	11000 - 15000	15000 & above	Total
1	2	3	4	5	6	7	8
ALL	ST	Kandha	0	2	7	1	10
(Kalahandi,		Kolha	0	10	8	2	20
Keonjhar,		Munda	0	0	1	0	1
Mayurbhanj		Sabar	2	5	10	1	18
and		Bhumija	0	0	2	1	3
Rayagada)		Но	0	2	1	2	5
		Total	2	19	29	7	57
	SC		0	4	5	1	10
	OC		0	0	10	3	13
	All		2	23	44	11	80

from various sources (though forest sources provide as much as one-third of the total income per annum to a forest-dwelling family). The income from forest sources (only sale) varies very distinctly across the districts from 23.6% (Rayagada) to 43.8% (Mayurbhanj). That, the tribes are found in very higher income groups suggest that all of them do not really live in abject poverty (in terms of income) or in hunger though their social, cultural, political deprivations can not be ruled out. The pertinent question therefore arises as to how these tribal households raise such higher income, when

many of them do not have enough land and even, some are landless. Since, one of our major objectives was to make a close scrutiny to their various sources of income to ascertain the degree of their dependence on forest and NTFPs in particular under the JFM/NJFM models of management, we follow therefore two-way tables to make statistical findings more interesting and meaningful for analysis to draw a set of inferences in the end.

Table - 7.2 (a)

Distribution of JFM sample households According to Ethnic groups and Income Groups

			anno gre	Jups and	111001110 (	210apo					
Name of the District		Ethnic Groups				Income Groups (In Rs.)					
	SC	ST	OC	Total	Up to 6000	6000 - 11000	11000 - 15000	15000 & above	Total		
1	2	3	4	5	6	7	8	9	10		
All	5 (1.56)	279 (86.92)	37 (11.53)	321 (100.00)	15 (4.67)	97 (30.22)	174 (54.21)	35 (10.90)	321 (100.00)		
Kandhamal	2 (2.50)	74 (92.50)	4 (5.00)	80 (100.00)		16 (20.00)	49 (61.25)	15 (18.75)	80 (100.00)		
Keonjhar	3 (3.75)	69 (86.25(	8 (10.00)	80 (100.00)	6 (7.50)	33 (41.25)	34 (42.50)	7 (8.75)	80 (100.00)		
Mayurbhanj		56 (69.14)	25 (30.86)	81 (100.00)	5 (6.17)	29 (35.80)	40 (49.38)	7 (8.64)	81 (100.00)		
Rayagada		80 (100.00)		80 (100.00)	4 (5.00)	19 (23.75)	51 (63.75)	6 (7.50)	80 (100.00)		

(Figures in parentheses represent percentage to respective totals)

**7.4.** It is revealed from (table 7.2(a)) that, of total 321 households in the JFM areas, as much as 89.0% (286) live below the poverty level income of Rs 15000/-, and these include ST,SC and OC households, though 87.0% (279) of the total sample households are ST, followed by 11.5% (37) OC and 1.6 (05) SC. Evidently, as much as 11.0% (35) sample households have income over and above Rs. 15000/- per annum during 2004-05 indicating higher level of living and they belong to different types and sample districts; Kandhamal (15), Keonjhar (7), Mayurbhanj (7) and Rayagada (6). But, how far, JFM model introduced in such villages have helped them to earn higher income from forests and adequate food subsistence is a moot point.

Table - 7.2 (b)
Distribution of NJFM sample households According to
Ethnic groups and Income Groups

Name of the District		Ethnic Groups				Income Groups (In Rs.)					
District	SC	ST	OC	Total	Up to 6000	6000 - 11000	11000 - 15000	15000 & above	Total		
1	2	3	4	5	6	7	8	9	10		
All	10 (12.50)	57 (71.25)	13 (16.25)	80 (100.00)	2 (2.50)	23 (28.75)	44 (55.00)	11 (13.75)	80 (100.00)		
Kandhamal	10 (50.00)	10 (50.000)		20 (100.00)		6 (30.00)	12 (60.00)	2 (10.00)	20 (100.00)		
Keonjhar		17 (85.00)	(3) (15.00)	20 (100.00)	2 (10.00)	7 (35.00)	10 (50.00)	1 (5.00)	20 (100.00)		
Mayurbhanj		20 (100.00)	0.00)	20 (100.00)		8 (40.00)	7 (35.00)	5 (25.00)	20 (100.00)		
Rayagada		10 (50.00)	10 (50.00)	20 (100.00)		2 (10.00)	15 (75.00)	3 (15.00)	20 (100.00)		

(Figures in parentheses represent percentage to respective totals)

- **7.5.** Similarly, in the NJFM areas, (table 7.2 (b)) we notice that of total sample households of 80, as much as 58.8% (47) constitutes ST, followed by 25.0 (20) SC and 16.3% (13), OC households. Interestingly, 13.8% (11) of all three ethnic group categories of households reported to have secured higher level of living above poverty line (Rs.15000/-), and the rest live below the poverty level income. But, whether, nonforestry economic activities have benefited them to earn higher levels of living or the forestry activities or both such activities could be ascertained from the field survey data.
- 7.6. In the context of such higher level of income of some tribal families, income index may not be considered adequate to answer series of over-arching questions concerning poverty and livelihood sustenance of the tribals due to emerging class differentiation amongst them. Because, by and large tribals are poor, and majority of them live in abject poverty, impoverishment and distressing conditions. But, all that is necessary, is to understand their nature and magnitude of dependence on forests, and also their participation in the management of the resources to raise their socio-economic level of living. Besides, howfar the degree of access to forest resources and benefit sharing arrangement under the JFM regime have benefited their economic wellbeing. However, the conflict management issues which differ very much across the districts and tribes (due to hierarchical structure of management committees, VSS, property rights, differential forest endowments /potential and deforestation) under the JFM regime need to be examined and highlighted with the help of primary source of data and observations.

Table-7.3 (a)
District Wise per Household Average Income from Various Sources (JFM Areas)
(In Rs.)

Name of	No.	Fo	rest Source	ces		Non Fo	orest Source	:S		All
the district	of	NTFP	Fuel	Total	Agriculture	Salary/	Business	Misc.	Total	Sources
	HHs		Wood		,	Wage				
1	2	3	4	5	6	7	8	9	10	11
All	321	3623	614	4237	4711	2513	156	1197	8577	12815
		(28.27)	(4.79)	(33.07)	(36.76)	(19.61)	(1.22)	(9.34)	(66.93)	(100.00)
Kandhamal	80	3966	1564	5530	5334	2819		1183	9336	14866
		(26.68)	(10.52)	(37.20)	(35.88)	(18.96)		(7.96)	(62.80)	(100.0)
Keonjhar	80	3268		3268	4289	3084	444	932	8748	12015
		(27.20)		(27.20)	(35.69)	(25.67)	(3.69)	(7.75)	(72.81)	(100.00)
Mayurbhanj	81	5131	42	5173	3816	1572	180	1067	6635	11808
		(43.45)	(0.36)	(43.81)	(32.32)	(13.31)	(1.53)	(9.03)	(56.19)	(100.00)
Rayagda	80	2110	858	2967	5418	2589		1609	9615	12583
		(16.77)	(6.81)	(23.58)	(43.06)	(20.57)		(12.79	(76.42)	(100.00)

(Figures in parenthesis represent percentage to respective total).

**7.7.** Across the sample districts (table 7.3 (a)), in the JFM villages, per household annual average income from forest sources is higher in the district of Kandhamal (Rs. 5530/- per annum) compared to Rs.2967/- in Rayagada, though the average income from forestry sources per annum is Rs. 4237/- (all districts) followed by Agriculture (36.8%) and salary/wage 19.6%. However, of total income from forest sources in terms of sale of NTFPs is 28.3 % (of the total). This shows the degree of dependence of the forest-dependent population on forests in the sample districts.

Table- 7.3 (b)
District Wise per Household Average Income from Various Sources (NJFM Areas)

		·		·				•		(In Rs.)
Name of the	No.	Fo	rest Sour	ces			All			
district	of	NTFP	NTFP Fuel Total		Agricul-	Salary/	Business	Misc.	Total	Sources
	HHs		Wood		ture	Wage				
1	2	3	4	5	6	7	8	9	10	11
All	80	3937	822	4760	4844	2142	190	1198	8374	13134
		(29.98)	(6.26)	(36.24)	(36.88)	(16.31)	(1.45)	(9.12)	(63.76)	(100.00)
Kandhamal	20	4422	960	5382	5283	765		1462	7509	12891
		(34.30)	(7.45)	(41.75)	(40.98)	(5.93)		(11.34)	(58.25)	(100.00)
Keonjhar	20	3467	130	3597	3045	3037	85	1200	8003	11599
		(29.89)	(1.12)	(31.01)	(26.25)	(26.49)	(5.91)	(10.35)	(68.99)	(100.00)
Mayurbhanj	20	6404	1420	7824	2538	2380	75	848	5840	13664
		(46.87)	(1039)	(57.26)	(18.57)	(17.42)	(0.55)	(6.20)	(42.74)	(100.00)
Rayagda	20	1456	780	2236	8510	2350		1285	12145	14380
		(10.13)	(5.42)	(15.55)	(59.18)	(16.34)		(8.93)	(84.45)	(100.00)

(Figures in parenthesis represent percentage to respective total).

- **7.8.** In the NJFM villages of the study districts (table 7.3(b)), income from forest sources in the district of Mayurbhanj is Rs. 7824/- per annum (compared to Rs.2236/- in Rayagada) and 57.3% of the total income. This is followed by Kandhamal, Rs. 6382/- per household and only 41.8% of total. Such regional variations in income across the districts show differential nature of forest products for sale, forest potential and collection of forest products for sale.
- **7.9.** It is evidently clear from the preceding discussion that the chief sources of income of the forest dwellers and tribal families in particular are form sale of NTFPs and Fuel wood/charcoal. Higher income from forestry sources logically impresses upon the fact that man-days of employment in varieties of forestry activities are relatively more compared to any other economic activities, though variations across the districts, income groups and ethnic groups are glaringly visible. Evidently, however, we failed to notice any spectacular difference in income from forest sources between the JFM and NJFM areas. Therefore, the emerging community management of the local forest resource with direct support from the F.D in terms of jointly managerial options have grossly failed to yield any spectacular change in the economic wellbeing of the community population, though average annual income from sources in JFM villages is relatively lower than NJFM villages.

It is pertinent to point out that forestry activities alone provide 240 person days of employment in the JFM villages (Table-7.4(a)) and this distinctly varies across the districts from 327 person days in Mayurbhanj to 161 in Rayagada. Female person days of employment however is higher than male members. This not only bears testimony to the variations with respect to their dependence on forest and its produce, but also, shows the degree of variations in regard to the availability of forest products due to the emerging forest protection and conservation in the VSS assigned areas. However, in a situation of meagre employment opportunities elsewhere, their dependence on forest is on increase for securing livelihood the study observes.

**7.10.** It is pertinent to notice that there is also distinct variation of average person days of employment (table 7.4(b)) across the districts in the NJFM villages (depending on types of forest/NTFP potential, collection, processing, and marketing of varieties of

forest produces). While per household person days of employment in forestry activities in Mayurbhanj is 423 days per annum, in Kandhamal, Keonjhar and Rayagada, these are 335,200 and 144 respectively. However, it is very significant to notice overall 275 person days of employment in forestry activities in NJFM villages which is very

Table - 7.4 (a)
District wise Per Household person days of employment generated in
Forestry Activities in JFM Areas

(In Rs)

District	No. of	No. of Persons	Avg.	Avg. Income	Income per Manday of	Prevailing
	HHs	Engaged per	Person	from Forest	Employment in Forest	Wage Rate
		Household	days	Sources	Sources	
1	2	3	4	5	6	7
All	321	3.0	240	4237	17.65	38.75
Kandhamal	80	2.7	295	5530	18.75	35.0
Keonjhar	80	2.5	175	3268	18.67	40.0
Mayurbhanj	81	3.2	327	5173	15.82	35.0
Rayagada	80	3.5	161	2967	18.43	45.0

(Person days of employment relate to both Male and Female members).

Table - 7.4 (b)
District wise Per Household person days of employment generated in
Forest Activities in NJFM Areas

(In Rs)

						( 1 10)
District	No. of HHs	No. of Persons Engaged per	Avg. Man-	Avg. Income from Forest	Income per Manday of Employment in Forest	Prevailing Wage Rate
	0	Household	days	Sources	Sources	Trago riato
1	2	3	4	5	6	7
All	80	3.23	275	4760	17.31	38.75
Kandhamal	20	3.5	335	5382	16.07	35.0
Keonjhar	20	3.2	200	3597	17.99	40.0
Mayurbhanj	20	3.75	423	7824	18.5	35.0
Rayagada	20	2.45	144	2236	15.53	45.0

(Person days of employment relate to both Male and Female members).

substantial to strengthen subsistence based household economy of the forest dwellers. The higher level of income from varieties of forestry activities is very much commensurated with the higher person days of employment in the sample districts.

- **7.11.** It is evidently noticed that while a forest dwelling family earns Rs.17.65 and Rs.17.31 from sale of NTFPs and other forest produces (in JFM and NJFM villages respectively), the average prevailing wage rate for agricultural labourers in the both the JFM/NJFM study regions is Rs.38.75. This shows very distressing conditions of the forest dwellers due to distress sale of NTFPs at throw away prices. Despite this, the dependence of the forest dwelling population is on increase.
- **7.12.** District-wise collection of various forest produces (including NTFPs) from both protected and non-protected areas of JFM villages is presented in table 7.5 (a). Collection of types of NTFPs is made for purpose of meeting food sustenance and also, for sale. As has been told earlier, consequent upon the introduction of JFM programme in the villages, the members of V.S.S are entitled to collect their daily food sustenance from the protected forest areas due to grant of usufruct right over the products in lieu of

Table - 7.5 (a)

District Wise Per Household Total Collection, Value for Sale & Consumption from Forestry Sources in JFM Areas

(in Rs.)

							(111 17.5.)
District	District No. of Total Sa		Sale	Comsump-	Income from all	Income from all	% of Value of
	HHs	Collection		tion	Sources sources + value		total forest
					excepting value of of consumption of		collection to total
					consumption	of forest	income from all
					Forest Produces	produces (5+6)	sources
1	2	3	4	5	6	7	8
All	321	8308	4237	4070	12815	16885	49.2
		(100.00)	(51.00)	(48.99)			
Kandhamal	80	10787	5530	5257	14866	20123	53.6
		(100.00)	(51.27)	(48.73)			
Keonjhar	80	6488	3268	3220	12015	15235	42.6
		(100.00)	(50.37)	(49.63)			
Mayurbhanj	81	10075	5173	4902	11808	16710	60.3
		(100.00)	(51.34)	(48.66)			
Rayagada	80	5859	2967	2892	12583	15475	37.9
		(100.00)	(50.64)	(49.36)			

(Figures in parentheses represent percentage to the respective total)

forest protection and conservation. It is evidently noticed that of total collection of forest produces, while sale value of forest products constitutes 51.0%, the computed value of forest produces for consumption purpose constitutes 49.0% though no distinct variation across the sample districts is glaringly visible. However, the total value of collection of forest produces (both sale value and computed value of consumption) to total income (from all sources) of a household per annum is 49.2% and distinctly varies from 60.3% in Mayurbhanj to 38.0% (37.9%) in Rayagada depending on density of forests, success of JFM programme in forest protection and conservation, degree of access to forests, value addition, market network, types of forest produces collected for purpose of consumption sale etc. That, of total, as much as 50.0% (49.2%) income per annum is derived from forestry sources bears testimony to greater dependence of forestdependent population on forests. However, it appears that dependence of the forest dwellers and tribals in particular on forests for securing food sustenance and for livelihood is so high that despite policy intervention for implantation of multiple antipoverty rural development programmes, agricultural development on the one hand and increasing denudation of forest cover over years it has not reduced to a desired level.

**7.13.** On inspection of Table 7.5 (b), (as expected) it is evident that of total collection, as much as two-third (66.3%) of the value is sold out and on an average a forest dwelling family earns Rs. 4760/- per annum compared to Rs. 4237/- in the JFM villages. However, restrictions and preventions on collection of varieties of forest produces from the protected forest area might have caused lower income to the community population in JFM areas compared to NJFM areas. In the absence of V.S.S in the latter categories of villages, the primary collectors (particularly women) have failed to collect forest-based food items in huge quantity from the distant forest areas (by covering huge distances with greater drudgery). But despite prevention by the local forest officials, their collection of sal

Table - 7.5 (b)
District Wise Per Household Total Collection for Sale & Consumption from Forestry
Sources in NJFM Areas

(in Rs.)

							(111 1 (0.)	
District			Sale	Comsump-	Income from all	Income from all	% of Value of	
	HHs	Collection		tion	Sources	sources + value	total forest	
					excepting value of of consumption c		collection to total	
							income from all	
					Forest Produces	produces (5+6)	sources	
1	2	3	4	5	6	7	8	
All	80	7176	4760	2416	13134	15550	54.64	
		(100.00)	(66.33)	(33.67)				
Kandhamal	20	9331	5382	3949	12891	16840	72.38	
		(100.00)	(7.68)	(2.32)				
Keonjhar	20	6998	3597	3401	11599	15000	60.33	
		(100.00)	(51.40)	(48.60)				
Mayurbhanj	20	8096	7824	272	13664	13936	59.25	
1		(100.00)	(96.64)	(3.36)				
Rayagada	20	4282	2236	2046	14380	16426	29.78	
, ,		(100.00)	(52.22)	(47.78)				

( Figures in parenthesis represent percentage to respective total).

Table-7.6 (a)
District-wise Collection of various Forest Products Per Households in JFM Areas

(In Rs.)

								(
District	No.	Protected Forest Area/VSS Assigned Area						
	of	Leaves	Fuel wood/	Drugs &	Oil	Fruits/	Misc.	All
	HHs		Charcoal	Medicinal	Seed	Roots		Products
1	2	3	4	5	6	7	8	9
All	321	1845	2610	878	603	302	689	6927
		(22.21)	(31.42)	(10.57)	(7.25)	(3.63)	(8.30)	(83.38)
Kandhamal	80	2235	4707	1249	937	754	820	10702
		(20.72)	(43.64)	(11.58)	(8.68)	(6.99)	(7.61)	(99.22)
Keonjhar	80	888	1325	862	468	144	838	4524
		(13.68)	(20.42)	(13.28)	(7.21)	(2.21)	(12.92)	(69.72)
Mayurbhanj	81	3623	2634	773	610	138	681	8458
		(35.96)	(26.15)	(7.67)	(6.06)	(1.37)	(6.76)	(83.96)
Rayagada	80	613	1774	629	397	174	418	4005
		(10.46)	(30.27)	(10.73)	(6.77)	(2.97)	(7.14)	(68.35)

Contd...

District	No.	Non-Protected Forest Area/Non VSS Forest Area							
	of	Leaves	Fuel	Drugs &	Oil	Fruits/	Misc.	All	
	HHs		wood/	Medicinal	Seed	Roots		Products	
			Charcoal						
1	2	10	11	12	13	14	15	16	17
All	321	274	540	182	137	118	129	1381	8308
		(3.30)	(6.51)	(2.19)	(1.65)	(1.43)	(1.55)	(16.62)	(100.00)
Kandhamal	80		35	8		20	21	84	10787
			(0.32)	(0.08)		(0.18)	(0.20)	(0.78)	(100.00)
Keonjhar	80	502	328	311	231	297	297	1964	6488
-		(7.73)	(5.05)	(4.79)	(3.56)	(4.58)	(4.58)	(30.28)	(100.00)
Mayurbhanj	81	399	730	189	181	41	77	1616	10075
		(3.96)	(7.24)	(1.87)	(1.80)	(0.40)	(0.77)	(16.04)	(100.00)
Rayagada	80	193	1068	221	134	117	122	1855	5859
		(3.30)	(18.22)	(3.77)	(2.29)	(2.00)	(2.08)	(31.65)	(100.00)

(Figures in parenthesis represent percentage to respective total).

leaves for sale constitutes 96.4% for sale purpose in Mayurbhanj district compared to 52.2% in Rayagada, 51.4% Keonjhar and 57.8% in Keonjhar.

7.14. Similarly, on inspection of table 7.6 (a), it is distinctly, clear that collection of various types of forest produces (from both the protected forest areas and nonprotected forest areas) in JFM villages constitutes 83.4% from the protected forest areas, and the rest 16.6% from the non-protected forest areas. It therefore suggests that the food sustenance and livelihood of the forest dwellers are much more protected by the VSS assigned area compared to other forest areas. Evidently, as per the usufruct rights over the forest products in the protected area, the value of fuelwood/charcoal constitutes 31.4%, followed by leaves (including dry leaves) 22.2%, Drugs and medicinal products 10.6%, oil seed 7.3% and fruits as well as roots 3.6%. However, collection of very meagre value of forest produces from non-protected forest areas (16.6% of total income) bears testimony to the greater dependence of the local forest dwellers on the former than the latter. This is exclusively due to extensive as well as intensive protection and conservation measures by the V.S.S members for securing food sustenance and livelihood on sustainable basis and that has really benefited the members in a big way to meet their pressing consumption needs, instead of visiting distant forest areas as before. Besides, protecting measures also have benefited the members in protecting environment and precious forest species. However, differential availability of forest produces across districts characterises regional character of availability as we notice sal, siali and kendu leaves fetch higher income in "Mayurbhani JFM villages (36.0%) followed by Kandhamal, 20.7%, where as fuelwood/ charcoal fetches higher income in Kandhamal (43.6%) followed by Rayagada (30.3%).

Table - 7.6 (b)

District wise Collection of Various Forest Products Per Household in NJFM Areas

(In Rs.) District Oil Fruits/ No. of Leaves Fuel Drugs & Misc. ΑII HHs Wood/ Medicinal Roots **Products** (dry leaves) Seed Charcoal 2 7 9 3 6 8 ΑII 80 79 778 1022 7176 1845 2887 565 (25.71)(40.22)(1.11)(7.87)(10.84)(14.25)(100.00)Kandhamal 20 2487 3665 52 730 1717 681 9331 (39.28)(0.55)(7.82)(18.40)(7.30)(100.00)(26.65)20 Keonjhar 278 2142 1287 2426 82 782 6998 (18.40) (34.67) (1.17)(11.18) (3.97)(30.61)100.00) Mayurbhani 20 3090 2985 44 298 1013 666 8096 (38.17)(36.87)(0.54)(3.69)(12.51)(8.22)100.00) 20 Rayagada 517 2470 140 450 104 601 4282 (12.07)(57.68)(3.27)(10.51)(2.42)(14.03)(100.00)

(Figures in parenthesis represent percentage to respective total).

**7.15.** Evidently, it is noticed that leaves (including dry leaves) and Fuel wood/charcoal constitute two-third (66.0%) of total income (Rs. 7176/-) in the NJFM villages. The total value of collection includes both computed value of consumption and sale, though distinct variation across the districts is glaringly visible depending on types of forest products; such as: leaves, charcoal, fuelwood, dry leaves, branches and twigs etc. In

comparison to JFM areas, however the collection for sale from the nearby non-protected forest is high as the forest dwellers seem to have worked tooth and nail to earn more to eke out a living. Besides, lack of preventions/restrictions on their collection from non-VSS areas permit them for higher collection for sale (66.3%) of the total value of collection). Despite their non-forestry activities including agriculture and salary/wage work, their dependence on fruits/roots for subsistence is also high compared JFM areas.

### Marketing and trade under the JFM Regime:

**7.16.** JFM relates its activities in terms of protection and conservation in the assigned forest area through access and control management (of assigned forests) besides, marketing activities of surplus forest produces from the assigned forests after meeting the subsistence consumption needs. Therefore, the volume of sale of forest produces (over and above the subsistence consumption needs) depends upon the status of forest and plantation activities in the JFM areas, though it is at present, at the protection stage. Marketing however enables sustainable forest utilisation for maximising the values of forest products and distribution amongst the participants. In the socio-economic context of forestry, it is believed that marketing in combination with processing and resource management could cater to the needs of entire population besides raising level of living.

Needless to say that forests products are sold out in variety of formal and informal ways. Public sector dominance is also noticed in marketing. Of course, trade of some specific forest products is nationalised with monopoly rights vested with the state government. But, unlike agricultural products, marketing of forest products has not been developed through private sector in Orissa particularly due to huge government control. But, it cannot be disputed that of late, markets and market mechanisms have begun to develop, albeit in competition with the OFDC, FD, particularly after the success of farm forestry.

**7.17.** Despite the ban on green felling in Orissa, the state has a major stake in NTFPs and as much as 75.0% of the forest revenue is collected from such source. The income accrued to JFM households in different parts of the state in terms of sale continues to constitute a major part of life-support sustenance of forests-dwelling communities. However, they fetch very lower prices for the NTFPs in the markets. The local merchants, middleman and vested interests not only exploit the primary gatherers in price but also in weights and measurement against adverse terms of exchange.

At this background, an attempt is made below to see the grass roots level realities of marketing and trade of NTFPs under the JFM regime in the state of Orissa.

**7.18.** The dimension of the whole issue of NTFPs relate to marketing and trade of varieties of forest products collected by the primary gatherers dwelling in and around forests. But, NTFP is considered as the secondary production of forest, and it acquires a value only when an individual collects it and brings to the collection centre for sale. Therefore, bulk of NTFPs available in the forest is left uncollected and unutilised in the absence of effective organisation at the division/district as well as the State level. Because, experiences show that potential production of NTFPs has been scarcely

tapped both in the protected as well as unprotected areas. Further, the very characteristic of NTFPs also influences the market behaviour, mode of exchange and prices as such differently in different situations. Moreover, owing to the availability of variety of NTFPs, the market for these products shows corresponding variation; bartering in subsistence economy and local village markets. However, while some of the products meet major part of the demands at the local level (edible leaves, nuts, resin), others reach specific national/international markets.

- **7.19.** Studies (Mallik 1994,1996,2000,2002) also report that traditionally, the supply of NTFPs has involved networks of local collectors and intermediaries bound by long-term, often debt-based relationship. Such a practice from the time immemorial has never been reversed/diminished despite so much of development intervention including introduction of JFM in many areas. Further, lack of dissemination of information about the support price of NTFPs in time (earlier to harvest), market avenues, processing units for value addition, etc. result in increase of vulnerability of primary gatherers owing to 'distress sales' of their products at throw away prices. In the absence of appropriate link between input sector, and post-production sector, exacerbated by lack of dissemination of market information, the collectors, the cultivators and resource owners of NTFPs fail to secure a fair share of processing and value addition even under the so called JFM regime at present. The Studies further reveal that the primary gatherers have absolutely no control on prices they receive. The traders very often do not pay in cash, and insist on barter payment thus, enjoying double monopoly, as the forest dwellers do not have choice neither in terms of price nor in terms of payment.
- **7.20.** It is also revealed from our field research findings that the forest dwellers have been impoverished atleast in part as a result of the processes set in motion (not reversed so far). The JFM system of management by and large has not successfully revived the subsistence economy of tribals by ensuring a fair price to their products. Instead, in the process of impoverishment the primary gatherers have been deprived of their livelihood, impoverished and have fallen in the hands of moneylenders, (who accompany the industrial agents) to whom very often they loose their land and turned into bonded labourers. For bare survival, the communities in the NJFM areas however that had till then preserved forests have resorted to destructive practices like cutting trees as wage labourers in order to sale as fuelwood. Similarly, vulnerability of NTFPs has also increased partly due to extinction of precious species (due to demand push as well as pull factors), but mostly due to unstable supply, inconsistent quality and unreliability of their source, besides due to the changes in consumer preferences and stringent quality specifications. In the JFM areas however, though primary gatherers have not succeeded to benefit in terms of fair price for the NTFPs, community participation in protection and conservation of local forest resources and joint management with the F.D. have successfully done away with destructive attitudes of the community people.
- **7.21.** The situation however is still worse when we find that the State agencies have equally strong profit orientation in order to earn more revenue for the State at the cost of

primary gatherers, (who make great strides to strengthen their economic well-being). Interestingly, NTFP trade and markets are highly disorganised. As a result, benefits of different measures by the Government over the years have not been percolated down to the poor and guaranteed them remunerative prices to their forest products. In the JFM areas, it is evidently noticed that the NTFP dependent population have grossly failed to extricate from the various exploitative practices of the hierarchical structure of market network in the tribal areas. The dominant role of intermediaries in NTFP trade (where the primary collectors have the poor bargaining power due to their inescapable social and economic disadvantages) is reported to have made the primary gatherers isolated and powerless. Their exploitation is manifested in low price, credit-linked trade and by way of cheating in the measurement. It is reported that former middlemen have turned in to de facto agents of Government - sponsored organisations. These, along with a number of co-operative organisations and other private agencies engaged in procurement, processing and marketing of NTFPs in the JFM areas have grossly failed to do away with exploitative interests of intermediaries, traders and private businessmen.

**7.22.** In any case, it is distinctly confirmed that forest dwellers in the JFM villages depend more on VSS assigned protected area to draw their livelihood (83.4% of total collection) with lesser troubles/inconveniences in covering lower distances and so also, with reduced drudgery to women folk. This clearly reflects on the degree of their dependence and therefore, any restriction/prohibition on collection of forest produces is likely to create disastrous situation on the livelihood sustenance of the forest-dependent poor. But, the usufruct rights over collection of such items from the VSS assigned areas in lieu of protection and conservation have immensely benefited the primary collectors in a big way. Therefore, in the name of extinction of precious trees and threats to biodiversity in the sal forests, the tribals should not be alienated from their age-old practice/privilege of collection of forest produces from the forests, notwithstanding preservation of precious forest species the study observes.

Table - 7.7
Agency wise Distribution of Sales Value of Forest Products in Study Districts

(Value in Rs.) District HHs Immediate at Value of Direct Sale to Middle Direct Sale to Total man/ Traders/ Govt./ Other the door steps sale to consumer Business man in to traders/ Agency middle man/ Local haat/ Sadar businessman market 1 2 4 5 6 7 3 ΑII 321 1369 132 2202 533 4237 (12.59)(32.31)(3.13)(51.98)(100.00)80 Kandhamal 3424 1275 5530 658 173 (11.90)(3.13)(61.92)(23.05)(100.00)Keonjhar 80 861 94 1511 802 3268 (26.36)(2.86)(46.25)(24.53)(100.00)Mayurbhani 81 3348 145 1617 63 5173 (100.00)(31.26)(1.22)(64.72)(2.80)584 80 2265 Rayagada 118 2967 (19.69)(100.00)(3.98)(76.32)

(Figures in parenthesis represent percentage to respective total).

- **7.23.** Interestingly, in the JFM areas across the agencies, (table 7.7) the sale of varieties of forest produces by the forest dwelling communities is more (52.0%) to the middlemen/traders in local haat/sadar market compared to immediate sale at the door steps (to meet pressing consumption needs), which constitutes 32.3%. However, direct sale to government agencies is only 12.6%. Across the districts, while sales at the doorsteps constitute 64.7% in Mayurbhanj, it is only 12.0% in Kandhamal. Similarly, middleman/traders in local haat/sadar markets dominate their activities of buying (may be against exploitative terms, lower price and faulty measurement) in the districts of Rayagada (76.3%) and Kandhamal 62.0%. However, direct sale to the consumers constitutes only 3.1%. to the government agencies in Kandhamal and Keonjhar to the extent of 23.0% and 24.5% respectively suggest that in case of nationalised products and some important commercial products like Mahua flower, tamarind, myrabolans, the sale to the government agencies is mandatory.
- **7.24.** In the study districts, the principal agencies involved in collection of NTFPs are middlemen, traders, businessmen and agents. It is not surprising if the agents work as de facto agents of the state agencies atleast, the primary collectors are ignorant about this. But, it can not be denied that these agents indeed collect NTFPs in disguise, and sale to the state agencies later on at exorbitant prices. The prices however, at which NTFPs are procured vary from place to place, and also from time to time partly due to unorganised market network, but mostly, due to 'distress sales' by the primary gatherers to meet their pressing cash needs. Prices also vary depending on the bargaining strengthen of the tribals, extent of availability of NTFPs, time of disposal etc. Thus, we notice a fair degree of variation in the procurement as well as sales prices.
- **7.25**. Table 7.8 reveals that in the process of disposal, there is great deal of difference between what the primary gatherers realise and the price realised at the hierarchical stages of disposal. Though price difference between village level and local haat shows (in some products) quite marginal, such difference at the local level sub-agent is spectacular due to weak bargaining power of the tribals, but mostly, due to their vulnerability. The top-level traders/manufacturers (Agents) very often provide advances to sub-agents, but not to the primary gatherers. The sub-agents however do not pay any advance. But, the exploitation is noticed in the products like, char seed, mango, myrabolans, mushroom, tamarind, mahua seed, mahua flower, where the exploitative element is glaringly visible and the benefit of profit accrues to the middlemen, but not to the forest dwellers. The middleman, agents, traders/businessman appropriate the situational advantage and pay as much as 3/- to Rs. 8/- compared Rs. 4/- to Rs. 11.50/which they realise at the other point. In other words, such price differences are to the extent of 125% to 183.3%. Evidently, during off-season these agents usually start selling back to the primary collectors most often at exorbitant prices. These activities of the agents are not uncommon in the remote forest areas and often, in the knowledge of the state agencies (not reversed so far despite policy intervention fro time to time). The situation is still worse when the state-sponsored institutions have equally strong profit

orientation to enhance the state revenue. In this context, as has been told earlier, Forest Acts and provisions therein and often policies as well as government resolutions have successfully helped the private traders to exploit the primary gatherers in varieties of ways. On the contrary, there is much evidence to show that even peoples' access to

Table - 7.8
Trade of a few selected Forest Products

(Value in Rs. Per Kg/Bundle/Unit)

SI. No.	Items	Primary Collectors disposal to consume		Price Difference		Price Dif		Price Difference:	Govern- ment
		The Village Level	At Local Hat Level	Village Level & Local Hat	Village Level Sub Agent	Village Level & Sub Agent	Local Level Sub- Agent	Between the Village Level & Local Level Sub Agent	Price
1	2	3	4	5	6	7	8	9	10
1	*Sal Leaves	8.00 (100.00)	10.00 (125.00)	2.00 (25.00)	11.00 (137.50)	3.00 (37.50)	11.50 (143.75)	3.50	4.00
2	Mahua Flower	6.00 (100.00)	7.00 (116.67)	1.00 (16.67)	8.00 (133.33)	2.00 (33.33)	8.50 (141.67)	2.50	10.00
3	Mahua Seed (Tolo)	8.00 (100.00)	9.00 (112.50)	1.00 (12.50)	10.00 (125.00)	2.00 (25.00)	10.00 (125.00)	2.00	15.50
4	Sal Seed	3.00 (100.00)	3.50 (116.67)	0.50 (16.67)	4.00 (133.33)	1.00 (33.33)	4.00 (133.33)	1.00	3.00
5	Char Seed	30.00 (100.00)	35.00 (116.67)	5.00 (16.67)	40.00 (133.33)	10.00 (33.33)	50.00 (166.670	20.00	60.00
6	Mango	3.00 (100.00)	4.00 (133.33)	1.00 (33.33)	5.00 (166.67)	2.00 (66.67)	5.50 (183.33)	2.50	6.00
7	Myrabolans	3.00 (100.00)	3.50 (116.67)	0.50 (16.67)	4.00 (133.33)	1.00 (33.33)	5.00 (166.67)	2.00	5.00
8	Mashroom	30.00 (100.00)	35.00 (116.67)	5.00 (16.67)	40.00 (133.33)	10.00 (33.33)	50.00 (166.67)	20.00	
9	Tamarind	3.00 (100.00)	4.00 (133.33)	1.00 (33.33)	4.50 (150.00)	1.50 (50.00)	5.00 (166.67)	2.00	5.90 (MU)/ 6.60 (KPT)

(Figures in parentheses represent percentage to respective total).

Note: - \*Quantity in Bundles

Other Items are however in Kilograms

Col. - 10 Refers to Price of Forest Products Fixed by Government of Orissa

Prices of Sal seed and Tamarind refer to 1999 – 2000

forests for meeting their basic subsistence needs has been prevented/restricted in a big way resulting in determination in their level of living and that is fairly widespread.

**7.26.** That, the middlemen exploit the tribals are taken for granted. The forest dwellers and tribals in particular accept whatever price is offered to them by the buyers due to their poverty, ignorance and vulnerability. The prices of different NTFPs at which these are really disposed off to industries/other agencies for final use are not known. But, even if it does happen, one is not surprised to see that a vast difference between the procurement price and the sales price at the ultimate level of exchange exists. Such price differences ultimately suggest that the forest dwellers, and tribals in particular are in the ambit of deprivation and fail to secure their legitimate share due to exploitation even by the State Agencies, besides the middlemen and the contractors. All the profits

indeed are appropriated by the middlemen and state agencies, but those (forest dwellers and tribals) who work tooth and nail to earn their subsistence, are thrown out not only from their legitimate claims, but also are gradually getting alienated from the basic source of their livelihood. This has also been observed in a number of Studies, and also, by the National Committee for the Development of Backward Areas (1979, 1981). Evidently, these issues are not well addressed in the JFM model and the F.D. appears to have been much concerned on protection and conservation measure and least to the livelihood interests of the poor and disadvantaged of VSS members.

### **Participatory Management and Ground Realities:**

- 7.27. Better management of incentive structure not only helps improvement in the performance of JFM programme, but also, promotes the goals of livelihoods creation and sustainable management of forest resources. But, a self-sustaining, selfregenerating forest management system at the grass roots level itself needs peoples' organisations and meaningful involvement of local communities, which could not only help in increasing productivity of degraded forests, but also, could manage in a manner conducive to the peculiarities of the region. In this connection, 'sustainable management', sustainable use of the resource and bio-diversity conservation are the key issues in forestry development concerning food security. Of course, the viability of the JFM model heavily depends on the villagers' agreement with regards to benefit sharing arrangements in lieu of their participatory role in managing as well as protecting community forests. The benefit of some usufruct rights to the VSS members and the state sharing of the benefits from protection and management activities carried out by the people lead to improved forest condition and productivity. Thus, benefit sharing assumes significance in the context of recently emerged JFM model in Orissa (as else where in the country) due to the promise of improved forest productivity in lieu of greater protection and conservation measures by the community.
- **7.28.** Though, the household schedules were canvassed preferably amongst the heads of JFM beneficiary households (during our field survey), some of the qualitative information required on some basic questions with respect of conceptual, institutional, participatory, gender, livelihood issues concerning JFM, could not be collected. A purposeful attempt was made therefore, with the help of another set of questionnaire to view the knowledge, perceptions, understanding, attitudes of the stakeholders, aspects of benefit sharing, sustainability of the programme in JFM (during its functioning for last one decade or so) by conducting a few PRAs. The ground realities are the following:
- **7.29.** When the JFM beneficiaries (both males and females) were asked to express their opinion about their extent/degree of participation, in the deliberations/discussions in the day-to-day management activities in the VSS meetings, all reported to have exhibited dissimilar participation. The females across the tribes reported to have participated form 70.0% in case of Santal, to 100.0 in case of Munda, Saunti, Bathudi and Mundari. This is indeed a positive indication of empowerment of some specific tribal women. Similarly, in watch and ward, activity females of all categories of tribes are very much behind the males (Male 99% and female 68.5%). Evidently, participation of

beneficiaries in safeguarding food security, plantation activities, forest conservation, preservation of bio-diversity, the male participation is reported to have become substantial compared to the females (Table 7.9).

Precisely, greater participation of the female VSS members in the sample JFM villages in various managerial activities concerning local forest resource/VSS assigned protected area is a reflection of their knowledge about the JFM model and its future benefits. Therefore, bulk of these male and female members do not become apprehensive of the long term benefits of JFM model`.

Further, to our specific question as to whether the VSS members participate in various resource management activities effectively, as much as 75.7% of the total (321), responded affirmatively in some activities and the rest expressed their negative view. However, as much as 24.3% of the tribal families reported to have been deprived/ignored in the participation due to their illiteracy/vulnerability, 66.7% due to economically backwardness, 33.3% due to weak political affiliation. However, ineffective/limited participation in some forestry activities in the JFM model shows limited capacity building training activities /no such activities (in the JFM villages) for the stakeholders.

- **7.30.** While, the forest-dwelling families were asked about the co-operation/co-ordination of the local Gram Panchayat (GP) in the management/governance of the forest resource at the local level, as much as 74.5% (239) reported negatively, and only 25.6% (82) expressed their positive opinion. But, to our further query as to whether the office bearers of GP put obstructions/hindrances in the functioning of JFM, majority (93.6%) offered negative view. In other words, it impresses upon the least interference of the GP members in the day-to-day activities of JFM, and also in the Executive Committee. But, those who expressed a positive view about interferences, they made responsible to the elite groups and vested interests in the village, (who exploit the management, and resource, in varieties of ways).
- **7.31.** When the VSS households were further asked to explain whether the registered traders with the GP collect NTFPs from the VSS assigned areas, 81.0% (260) reported negatively. But, of those 19.0% (61), who reported affirmatively, 66.2% (41.2%) of them reported that the GP interventions in trading activities may adversely affect the primary interest of the VSS members thus, the issue of interface of these two institutions in the JFM needs to be addressed.
- **7.32.** To our pertinent question on the exact relation of FPC with the local GP members in matters of forest management, (a) as much as one-half of the respondent families expressed the view that GP members are also a part of Executive Body of JFM, (b) only 12.5% (40) reported that GP supports the FPC and JFM activities in ensuring qualitative management, besides exercise of authority in forest protection as and when necessary; (c) 45.2% (145) responded complementarily between GP and FPC; (d) 6.5% (21), reported these two institutions to have been competitive; (e) 14.0% (45) reported that FPC is not subsidiary to GP administration; (f) 20.2% (65) reported to

Table – 7.9

Nature and Degree of Participation in Forest Management

(In Nos)

District	Communi ty	ni Tribes	No. of HHs	Deliberations/ Discussion		Watch & Ward work of Village/ Local Forests		Participation for Safeguarding the food security/ livelihood security		Plantation Activities		Conservation of Precious/ Plants		Maintenance of bio- diversity	
				Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
All (Kandha mal, Keonjhar, Mayur- bhanj and Rayagada )	, L	Kandha	118	118 <b>(100.00)</b>	104 <b>(88.14)</b>	118 <b>(100.00)</b>	86 <b>(72.88)</b>	118 <b>(100.00)</b>	92 <b>(77.97)</b>	118 <b>(100.00)</b>	104 <b>(88.14)</b>	108 <b>(91.53)</b>	83 <b>(70.34)</b>	110 <b>(93.22)</b>	90 <b>(76.27)</b>
		Kolha	56	56 <b>(100.00)</b>	52 <b>92.86</b>	56 <b>100.00</b>	40 <b>71.43</b>	56 <b>100.00</b>	37 <b>66.07</b>	55 <b>98.21</b>	50 <b>89.29</b>	50 <b>89.29</b>	40 <b>71.43</b>	35 <b>62.50</b>	24 <b>42.86</b>
		Munda	7	7 (100.00)	7 (100.00)	7 <b>(100.00)</b>	5 <b>(71.43)</b>	7 (100.00)	4 ( <b>57.14</b> )	7 <b>(100.00)</b>	6 <b>(85.71)</b>	7 (100.00)	4 ( <b>57.14</b> )	5 <b>(71.43)</b>	3 <b>(42.86)</b>
		Ganda	11	11 <b>(100.00)</b>	10 <b>(90.91)</b>	11 <b>(100.00)</b>	7 (63.64)	11 <b>(100.00)</b>	8 <b>(72.73)</b>	8 <b>(72.73)</b>	9 <b>(81.82)</b>	11 <b>(100.00)</b>	6 <b>(54.55)</b>	9 <b>(81.82)</b>	10 <b>(90.91)</b>
		Santal	10	8 <b>80.00</b>	7 <b>70.00</b>	7 <b>70.00</b>	5 <b>50.00</b>	7 <b>70.00</b>	7 <b>70.00</b>	7 <b>70.00</b>	7 <b>70.00</b>	5 <b>50.00</b>	2 <b>20.00</b>	4 <b>40.00</b>	4 <b>40.00</b>
		Juanga	6	6 (100.00)	5 <b>(83.33)</b>	(6) <b>(100.00)</b>	(2) <b>(33.33)</b>	6 (100.00)	2 (33.33)	6 <b>(100.00)</b>	3 <b>(50.00)</b>	6 (100.00)	2 (33.33)	6 (100.00)	1 <b>(16.67)</b>
		Sabar	51	51 <b>(100.00)</b>	48 <b>(94.12)</b>	51 <b>(100.00)</b>	32 <b>(62.75)</b>	51 (100.00)	32 <b>(62.75)</b>	50 <b>(98.04)</b>	47 <b>(92.16)</b>	48 <b>(94.12)</b>	28 <b>(54.90)</b>	46 <b>(90.20)</b>	19 <b>(37.25)</b>
		Saunti	3	3 (100.00)	3 (1 <b>00.00</b> )	3 <b>(100.00)</b>	2 <b>(66.67)</b>	3 (100.00)	3 (1 <b>00.00</b> )	2 <b>(66.67)</b>	1 (33.33)	3 (100.00)	1 (33.33)	1 (33.33)	1 <b>(33.33)</b>
		Bathudi	14	14 <b>(100.00)</b>	13 <b>(92.86)</b>	14 <b>(100.00)</b>	11 <b>(78.57)</b>	11 (78.57)	13 <b>(92.86)</b>	13 <b>(92.86)</b>	9 <b>(64.29)</b>	12 <b>(85.71)</b>	5 <b>(35.71)</b>	13 <b>(92.86)</b>	9 <b>(64.29)</b>
		Mundari	3	3 (100.00)	3 (1 <b>00.00</b> )	3 (1 <b>00.00)</b>	1 (33.33)	3 (100.00)	1 (33.33)	1 (33.33)	1 (33.33)	2 ( <b>66.67</b> )	2 ( <b>66.67</b> )	3 (1 <b>00.00</b> )	2 <b>(66.67)</b>
		Total	279	277 <b>(99.28)</b>	252 <b>(90.32)</b>	276 <b>(98.92)</b>	191 <b>(68.46)</b>	273 <b>(97.85)</b>	199 <b>(71.33)</b>	267 <b>(95.70)</b>	237 <b>(84.95)</b>	252 <b>(90.32)</b>	173 <b>(62.01)</b>	232 <b>(83.15)</b>	163 <b>(58.42)</b>
	SC		5	5 (100.00)	2 ( <b>40.00</b> )	5 (100.00)		5 (100.00)		5 (100.00)	3 ( <b>60.00</b> )	5 (100.00)		5 (100.00)	
	OC		37	28 <b>(75.68)</b>	18 <b>(48.65)</b>	22 <b>(59.46)</b>	13 <b>(35.14)</b>	25 <b>(67.57)</b>	13 <b>(35.14)</b>	20 <b>(54.05)</b>	17 <b>(45.95)</b>	24 ( <b>64.86</b> )	17 <b>(45.95)</b>	17 <b>(45.95)</b>	11 <b>(29.73)</b>
	Total		321	310 <b>(96.57)</b>	272 <b>(84.74)</b>	303 <b>(94.39)</b>	204 <b>(63.55)</b>	303 <b>(94.39)</b>	212 ( <b>66.04</b> )	292 <b>(90.97)</b>	257 <b>(80.06)</b>	281 <b>(87.54)</b>	190 <b>(59.19)</b>	254 <b>(79.13)</b>	174 <b>(54.21)</b>

(Figures in parentheses represent to percent to respective totals)

have apprehended small user communities to lose authority to the local elite of GP. However, while 38.0 (132) reported that VFC should generate some link with the G.P (the local level statutory institution) to benefit from overall rural developmental activities, 40.5% (130) expressed a dismal view that the VFC is not granted any legal power under any law what the G.P enjoys.

- **7.33.** Regarding a question on co-operation of GP with the JFM in conservation activities of precious forest resource, while 81.3% (261) reported negatively, of which, 88.5% (284) reported negatively on protection, 88.8% (285) on regeneration and 82.2% on re-forestation activities. Since, the objectives and programmes of these two grass roots level institutions (JFM and GP) are distinctly different, and many times "cooperation in their activities may not be possible", the respondents reported. But, with the grant of ownership and management of 68 NTFPs to the GPs by the government of Orissa, (since April, 2004) 12.8% (41), forest-dwelling households expressed that the JFM has turned very weak in performing its original functions. But, when the respondents were asked whether JFM programme and GP should be complementary in their activities as well as programme, as much as 92.7% (296) sample households responded affirmatively. Similarly, to our question on ownership/control/management of the precious forest resource, 87.5% (281) responded that it may be jointly owned and controlled by the government and the local people for ensuring sustainable management of the resource. Thus, there is a positive response to complementarity, (not competition) between the JFM and GP in developmental activities and programmes, but unfortunately, the issue of establishing some linkage between these two grass roots level institutions has not been addressed in the JFM model.
- **7.34.** As regards the question as to whether JFM has been detrimental to the livelihood interests and food security of the local people, while as much as 77.8% (250) responded negatively, only 22.2% (71) replied affirmatively. However, around 58.0% of them responded that the detrimental interests relate to restrictions/preventions on collection, on trading of precious species, timber and major forest produces from the VSS assigned area, and cutting of trees/plants, forest fire, rearing of cattle's etc.
- **7.35.** However, the major concern of JFM for the livelihood interests and food security is a positive sign of trust of the VSS beneficiaries on the programme and its future prospects. We attempted to know whether JFM activities at the village level indeed have hindered/disturbed traditions, customs, culture, ethos etc, of the tribal people to which, almost all (99.1%) responded negatively. In other words, despite the intervention of the government as a partner in the participatory forest management of the local forest resource at the village level, tribal traditions, tribal heritage and culture reported to have remained unaltered. In stead, while 96.0% (305) responded that JFM honours tradition, conversations, culture and ethos of the people, and also, added that protective as well as conservative measures do not harm atall their food subsistence and livelihood interests.
- **7.36.** Regarding their knowledge and impression about the stakeholders of JFM, the VSS members of all sixteen sample villages responded that the FD, FPC and NGO are

the three stakeholders of JFM but, the role of NGO as a stakeholder in the management seems to have been diluted in the study region. However, while 81.35 (26) forest-dwelling households reported that the villagers stake claim over the rights and concessions over the concerned protected forest patch, 71.7% (230) of them reported to have threat of apprehensions from the neighbouring village/hamlets /communities to their protected forests. More importantly, 95.0 (305) were of the opinion that the village people do enjoy customary/traditional rights over the patch of protected forest land, though only 50.5% (162) reported that several villagers do not have access to the same forest area and its management, and therefore, they come across several conflicting interests, which affects very much the sustainability of the resource management and so also, benefits to the members. Thus, inter-village conflicts over the precious forest land seems to have been putting regular threats to management, and in such a critical situation, intervention of the government and the NGOs for some amicable settlement may be a right remedy.

- **7.37.** When the respondents of JFM sample households were asked whether the customary use pattern of the local forest resource were adequately mapped and studied earlier to the introduction of JFM in the village, 62.7% (201) respondents replied negatively and despite this, 93.5% (300) of them reported to have remained unaffected. However, while 56.1% (180) of total forest-dwelling respondents replied that forest area has been demarcated by stone marking and another 44.0% responded negatively (no stone marking). Of all types of conflicts, as much as 37.5% (120) responded that there are intra-village conflicts, put, 62.6% (201) reported not to have witnessed such conflicts atall. The villages in which intra-village conflicts were witnessed, 17.0% of the total respondents replied that these get resolved at the local level, to which 62.6% (201), did not agree. Further, while 12.5% (40) responded positively to resolve the conflicting issues by the FD, 80.8% (259) did not agree, but the FD appears to be somewhat active in resolving the conflicting issues, the study observes.
- **7.38.** As regards, customary rights of the villagers over forest land, 69.2% (222) agreed to have enjoyed passage through forest land for hereditary use of the forest products, 90.7%(291) agreed to have enjoyed collection of leaves, roots, firewood, small timber, bamboo etc, where as 87.6% (281) agreed to have enjoyed the customary rights over forests for holding some ritual activities from forests from the time immemorial. Thus, under the JFM model of management, customary rights and privileges of the community people have been adequately honoured/protected despite intervention of the F.D. and the State. In the emerging situation therefore, it ensures sustainability of the programme.
- **7.39.** As a positive measure of the F.D, 93.8% (301) of the sample households responded that the forest officials have extended full support at the initial stage in encroachment of forest land (considering it as a part of JFM protected area). However, all the forest-dwelling responded positively about the signing of MoU between the FD and VSS committee, and all the stipulations/provisions made therein were understood by the FPC without any ambiguity. However, co-operation, support and mutual trust

amongst the stakeholders in many study villages are found to have played major role in the smooth functioning of JFM model, the study observes.

- **7.40.** The respondents however reported to have understood the major sharing of benefits form protection (a) 100.0 usufruct right over collection, processing and marketing of NTFPs, (b) consultation with the VSS members regarding plantation of species (c) 100.0 benefit sharing from conservation measures by the VSS. However, 99.8% (320) forest dwelling sample households reported to have great faith in the FD regarding sharing of benefits in intermediary operations and final harvests in future as per the provisions in MoU. Thus, mutual trust in the provisions of sharing arrangements in JFM model seems to have strengthened their co-operation for better protection and conservation.
- **7.41.** When the respondents were asked about their future course of action in the event of non-compliance of terms and conditions incorporated in the MoU, while as much as 25.0 (80) reported to instantly stop participation in forest protection/conservation and management, 6.0% (19) reported to resort to destructive measures, and 99.0 (318) reported to resort to legal protest measures in case terms of agreement, and violated. Interestingly, 31.5% reported to resort to non-co-operation in developmental activities implanted by the government. Thus, it seems the VSS members are very conscious of their rights and privileges in benefit sharing as per MoU. **7.42.** As regards any guarantee of 50.0% benefit sharing in timber harvest after one decade or so of hard work for protecting, and consuming local forests assigned to VSS, 69.0% reported to have strong faith in the F.D, while 28.0% (90) do not agree to. To our further query as to whether they apprehend conflicts over sharing benefits at the time of final harvest, 28.0% (90) reported affirmatively, whereas 70.0 (223) did not apprehend any due to (a) greater faith in the MoU signed with the FD, (b) self motivated attitude and greater optimism; (c) strong community feeling /faith in themselves.
- **7.43.** Regarding equal accountability of the stakeholders; such as: FD, VSS and NGO in forest protection and conservation, 64.0% (205) responded positively, where as 31.0% did not consent. However, of all the three stakeholders, VSS is reported to have been more accountable in comparison to the F.D and the NGO, and this is possibly due to their direct/instant benefits from protection and conservation of the protected forest area, the study observes.
- **7.44.** In between the dates of registration and formal permission to start with the VSS activities, 62.3% (200) reported to have been engaged in intermediary forestry activities such as: mapping of resource, preparatory work for plantation and seed, 50.0% replied to have undertaken preparation of systematic planning for plantation as well as protection work, 55.8% (179) reported to have held informal discussion with the FD and local NGO to effect plantation work very systematically. More importantly, all the VSS members reported to have been actively participating in JFM activities.
- **7.45.** Of total VSS members interviewed, as much as 69.2% (222) reported to have been indulged in commercial activities of NTFP/ fuelwood affecting the common interest of the community in the locality to which adequate stringent measures (to do away with)

have not been effected. However, some measures such as: (a) heavy pecuniary punishment on the basis of quantum of offence; (b) social boycotting, (c) prevention of entry in to protected area was reported to have been effected. Surprisingly, the FD is reported not to have intervened in such unwarranted activities of the VSS members, and this shows the indifferent/apathetic attitude of the FD. In consequence, this may cause unscientific harvesting, extinction of valued species, threats to bio-diversity etc. in future. Surprisingly, such an issue is not addressed in the JFM model of management.

- **7.46.** As regards the understanding and perception of the VSS members on JFM philosophy that aims at transforming open access forest resource to a common property resource, 93.4% of the respondents reported to have understood, and in all matters of governance of the resource, the VSS members reported to have observed domain-consensus to do away with conflicts. Such attitudes and perceptions indeed are the boon in disguise for successful implementation of the JFM model in other areas of the State.
- **7.47.** Regarding management of JFM Fund in the village, 91.0% respondents of the total replied that a member nominated by the Executive Committee administers the fund. But, the fund account is jointly operated by the forester as the secretary of VSS and the president. This appears to be in tune with the provisions in the JFM model and indeed a positive sign for success of the programme.
- 7.48. Apprehensions over future JFM activities, and also, the benefits that accrue to the VSS members relate to mere wage employment activity as soon as reforestation/regeneration of tree is completed. While the respondents were asked to react to their apprehensions over its prospects, 84.4% (271) replied affirmatively. In such a situation, as a confidence-building measure, the respondents suggested that (a) the VSS members be offered a major stake in the programme; (b) granting free access to resource and also, to its management suggesting that the government be considered merely as facilitator, but not regulator; (c) granting sufficient concessions to the forestdependent communities; such as; artisans, head-loaders and primary collectors to benefit from protected forests; (d) allowing villagers to undertake value addition activities and marketing of their products; (e) effecting desired changes in the Panchayat Act, Forest Laws, Excise and revenue rules to support effective governance of local natural resource through JFM. But, all that is necessary to undertake the above measures need a lot of people-centred policy measures as well as need-based capacity-building training programmes for the implementing officials, stakeholders including primary collectors, the study observes.
- **7.49.** Very often, nexus amongst the politicians, bureaucrats and the contractors ruin the effective functioning of grass-roots level institutions like JFM in varieties of ways that ultimately becomes detrimental to the food subsistence and livelihood interest of the primary gatherers. When the respondents were specifically asked to react to the nexus (if any), while 34.3% replied affirmatively, majority; 62.9% (2002) did not agree to. But, those who supported nexus activities, majority made responsible to nexus amongst FD, contractors and traders (including government sponsored agencies) though middleman,

politicians and money lenders reported to have played active role in commercial activities. Nexus amongst the vested interests exists in the JFM model in some form or the other, but its minimisation /elimination paves ways for benefiting the VSS members most.

- **7.50.** But, when asked about the dominance of elite class, upper caste, economically well-to-do people in the management and control of local forest resource in the JFM areas only 12.5% (40) recognised existence of their dominance and majority; 84.7% (272) did not concede to. However, the dominance is exclusively noticed in formulating proceedings and so also, in decision making process of the management of resource sidelining the poor and the under privileged. However, since prevention of inequality from the society is remote, minimisation of its effects needs to be taken care of in the management of Common Property Resource (CPR) like forest, the study remarks.
- **7.51.** Of all, the major causes that attribute to multiple conflicts in the use and management of local resource the study observes; (a) multiple as well as competitive demands on the resource by the stake holders; (b) recurring inequities in distribution of benefits amongst the stakeholders; (c) unsatisfactory implementation of policies and programmes; (d) uncoordinated planning, where sectoral approaches with limited cross-sectoral planning and co-ordination; (e) lack of effective mechanisms for intra-village conflicts management, (f) poor information sharing on policies, laws, legal procedures, (g) inadequate dissemination of information and programme objectives and lack of clarity regarding policies and laws are important. However, to our further enquiry about various actors in resource management conflicts; (a) neighbouring communities disputing over forest area and woodland, (b) powerful wood mafias of neighbouring as well as urban centres, (who use arm forces and muscle power to exploit timber forest found in the VSS assigned area) are important.
- **7.52.** As per the provision in MoU, the community members need to be consulted in afforestation/artificial regeneration activities in the JFM villages. But, in our sample JFM villages, while as much as 53.6% (172) responded to have been consulted, the rest reported to have been ignored. But, regarding decisions over types of plantation in the degraded areas, 37.4% (120) of total respondents admitted dominance of FD in plantation of Akasia/ Eucalyptus trees to meet fuel wood needs of the villagers in lieu of protection to nearby/ adjacent timber based forest resource. Because, such plantation helps in ensuring greater protection to timber-based forestry and other forests in the locality from destruction. However, 35.7%(90) reported to have been affected very adversely due to such plantation in terms of food sustenance, forest-based medicinal needs, and other domestic needs. Therefore, in such an adverse situation, majority of the respondents reported to have collected/procured their traditional, cultural, ritual needs from the nearby R.F, adjoining village forests, and nearby market places. However, 91.0% of their responded proposed plantation fruit-bearing, medicinal and other trees and suggested its inclusion in the reforestation programme on priority.
- **7.53.** Regarding views/understanding on the issue of conflicts management in natural resource like forest; while 88.0% (282) of the total respondents suggested through

development of participatory and consensus-building strategies, 68.8% (221) of total opined resolving conflicts management issues on the basis of grass roots level realities, but not at all uniformly in every situation. It was however suggested to resolve conflicting interests of the stakeholders through discussions/deliberations. Further, 19.0% of total suggested to address conflict issues in right time, which is the prerequisite for sustainable natural resource management since the conflicts grow in scope, magnitude and intensity.

- **7.54.** We attempted to make further enquiry whether the forest-dwelling respondents have resolved various conflicting issues in their respective JFM villages during the last few years, and have successfully resolved for ensuring food security, livelihood and conservation of precious flora and fauna notwithstanding environmental security/safety. As much as 60.0 (192) reported to have responded affirmatively, though around onefourth of the total reported to have failed to address those issues. Among the crucial factors that attributed to resolve those conflicting issues (responses mentioned in percentage are given in parentheses) (a) community endeavour, group spirit and homogeneity in caste in the village (79.5%); (b) consideration of conservation as well as protection by the VSS members(100.00%); (c) the feeling of trust on the Community for action towards common good (79.5%), (d) the bitter experiences of yester years regarding disastrous degraded forests and therefore, community determination towards reforestation and conservation (79.5%) (e) the element of optimism to secure long term benefits from the JFM programme (90.0%) (f) necessary co-operation from the FD and the local NGO (32.1%); the facility of wage work on sustainable basis to the local people in undertaking reforestation activities, (49.5%), are very important.
- **7.55.** Among the important reasons for not addressing to the some conflicting issues, (responses mentioned in percentage are given in parentheses) (a) the element of mistrust and conflicting feeling amongst the stakeholders (98.8%); (b) the limited feeling of short term benefits from the JFM programme (not the long term) create disincentive for their participation in protection and conservation of forests, (98.0%) (c) recurring intra-village and boundary conflicts over the local forest resource (75.2%); (d) the treatment of FD to the VSS members as wage earners, but not as the real protectors of local forest are noteworthy.
- **7.56.** On a very sensitive issue of government's intervention (as a partner in management) in the management (having owned the resource) the respondents were provoked to react to the role of government in protection, conservation and benefit sharing. More strikingly, about 90.7% (291) agreed that the government role is not peoples'—friendly, conservation-friendly, protection-friendly, but bureaucratic in governance of the resource at the local level. But, when they were further asked to respond to the attitude of government officials in JFM programme with respect to long term livelihood perspectives of the village people, 97.2% (312) responded affirmatively. Regarding effective participation of the forest officials in JFM proceedings, while 59.5% (191) of the total respondents reported their positive participation, the rest 37.7% (121) expressed their dismal participation.

- **7.57.** On the issue of marketing of forest produces and NTFPs in particular that immensely support their livelihood, the respondents were asked to explain the obstacles encountered by them. Around 68.8% (221) of the sample households reported to have admitted encountering obstacles/preventions/restrictions in varieties of ways. The major reasons attributed to such prevention/obstruction (expressed by 68.8% respondents) are: (the number of responses in percentage is given in parentheses). (a) low and distressing price of the NTFPs (100.0); (b) preventions on procurement by the local/village institutions; such as JFM/CFM/GPs/Registered groups (54.8%); (c) non-dissemination of procurement prices to the grass roots level at the right time (99.5%); (d) inadequate value addition and processing of NTFPs that lead to limited demand (63.8%); (e) absence of registered/approved market agencies such as: TDCC/OFDC at the grass roots to procure at the right time and at the right price (91.0%).
- **7.58.** As regards the adverse effect of JFM programme on aesthetic and religious feelings (that enriched participatory forest management) while as much as 84.1% (270) expressed their feelings negatively. Instead, protection, conservation of protected area/VSS assigned area have enriched these feelings in a big way, they reported. More importantly, the VSS assigned area (that includes adjacent RF for protection and conservation) has included all categories of households including women, landless, SC and ST for protection and conservation with the common endeavour and group spirit on long term sustainable basis. This precisely shows, peoples' satisfaction over management of CPR like forest at the local level. But, as regards, right over collection, processing storage and marketing of NTFPs to the approved authorized officials/lessees/ agents, 37.8% (121) reported to have been satisfied and 59.2% (190) are not. It appears, this is an area of concern that has not been well attended to in policy or by the implementing agencies, since the livelihood interest of the forest-dependent poor is closely associated with it.
- **7.59.** One of the positive measures taken by respective VSS in the study area relates to stringent measures and risks to resist the timber smugglers from felling of valuable trees. Evidently, around 69.5% (223) of the total reported to have revealed stringent measures and risks resistance measures with full support from the community. On the other hand, they reported to have expressed their full dissatisfaction on the FD, police department, law and order authorities, Gram Panchayat and the government for their very limited support and help on such very crucial, but sensitive cause. Needless to say that the VSSs do not enjoy police power/authority legal power (if any) like GPs. However, majority of the respondents reported to have claimed better performance on such sensitive issue if VSSs are authorised to exercise the policy power.
- **7.60.** We attempted to ascertain the awareness of the VSS members about the NTFP policy 2000 of the GoO and surprisingly, majority (68.9%) of them are unaware about this. Those who, atleast are aware about it, do not sale NTFPs to registered traders (with GPs) and instead, to the middlemen at the door steps, in local haats at the prevailing market price against instant payments but much less to the government recognised agencies/lessees/agents. More strikingly, 78.2% (251) of the total

respondents reported not to have secured genuine price to their products on sale, and at least never at the procurement price declared by GoO. Thus, 97.2% (312) resort to 'distress sale' due to; (a) ready buyers are not available to buy against instant payments; (b) middlemen buy at door steps against instant payments; but, low prices (e) procurement prices are not disseminated at the right time; (d) perishable character of most of the forest produces and inadequate storage facilities/ no storage facilities in the vicinity; (e) but, more importantly, to meet immediate and pressing household expenditures. This issue indeed has not been addressed at all in the JFM model, the study observes.

## **Women in JFM Programme:**

- **7.61.** Of 22.2% of tribal population (population census, 2001, Gol), in Orissa, nearly 14.01 lakh tribal women are engaged in forest-based occupations to draw their food subsistence and livelihood. In particular, tribal women perform varieties of forestry activities; such as: collection of fuel wood, fodder, leaves, small timber and varieties of NTFPs, primary processing activity at the household level in leaf-plate making, beedirolling, broom/ mat making, besides marketing of all types of forest products. These not only provide them a great deal of family employment opportunities but also, some household income for their livelihood.
- 7.62. In recent years, their role indeed is recognized in protection, conservation and management of the local forest resource (in the emerging JFM programme) for sustaining their household economy and securing livelihood. In particular, in the context of denudation of forest cover, shortage of fuelwood, fodder, deterioration eco-system, unhealthy, environment, extinction of precious species and increasing deterioration of their basic source of livelihood and trees, their role is being recognised due to their extensive knowledge about forest species, flora and fauna, besides the forest surroundings. It is revealed from different studies (Mallik 1994, 1996 1998, 2000, 2004) that poor women-as gatherers, processors, users, protectors contribute immensely to the households economy and food security in terms of their daily survival needs from forests. But, the emerging deforestation seems to have accentuated their drudgery (in terms of spending more time in travelling for collection of their daily necessities for securing food subsistence and livelihood). Now, consequent upon the introduction of JFM programme in the state, bulk of their needs are being met from the VSS assigned areas. The wage employment in varieties of forestry activities; such as: nursery, plantation, cupping, logging, bush cutting, road-construction under the JFM regime also seem to have strengthened support to their livelihood and have begun to provide them wide opportunities in their meaningful participation in the forest management through discussions/deliberations, decision-making, sharing of benefits for ensuring not only sustainable livelihood, but also, in enhancing their socio-economic capabilities for a reasonable level of living.
- **7.63.** An attempt is made in the ensuring section to ascertain local people's perceptions not only regarding local forest management issues, but also, the extent of

participation of women in protection, conservation, participation in JFM in different study districts of Orissa. The major findings are the following:

(a) Despite equal number of male and female membership participation in JFM in each village, a small number of male and female members of the VSSs constitute each executive committee with fair representation of women, SC, ST and others. The nature and degree of participation of both male and female members in various JFM, activities in the study villages (Figures: 7 (a)) suggest that of total members in VSSs female members participation (85.0%) in discussion and deliberations is fairly close to male members (97.0%) and also, in plantation activities (male: 91.0%, female: 80.0%). However, in watch and ward, safeguarding the food security /livelihood security, conservation of precious plants and

Fig. 7 (a)

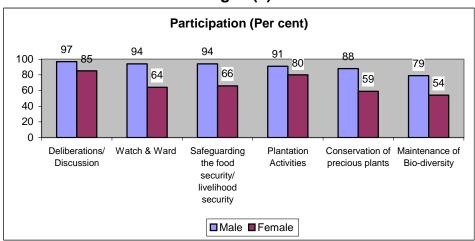
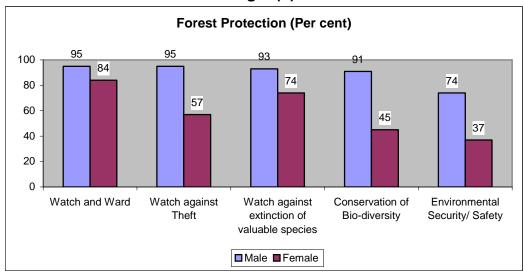


Fig: 7(b)



maintenance of bio-diversity, participation of the male members reported to have an edge over the female members. Therefore, delegation of legal powers to VSSs, training, and scientific harvesting, adequate official support from the FD could ensure better resource management of the precious resource in the VSS assigned areas, the

members suggest. Though, distinct variations across the districts with respect to participation are glaringly visible in each of the forestry activity, though in totality males have an edge over the females.

Further, in response to the question on the role of male and female members in forest protection figure 7 (b) while 95.0% of the male members undertake watch and ward activity, only 84.0% female members reported to have participated in such activity. Similarly, while participation of male members in watch against theft of valuable species is 95.0%, in watch against extinction of valuable species 93.0%, in conservation of biodiversity 91.0%, and in environmental security purpose only 74.0%, in contrast, we notice relatively lower female participation in watch and ward (84.0%), watch against theft (57.0%), watch against extinction of valuable species (74.0%), conservation of biodiversity (45.0%) and only 37.0%), environmental security and safety. The above findings suggest that male members have specific and greater role vis-à-vis female members in various forest protection measures in JFM model.

However, people show greater interest to protect forest and wild life as the habitant of forest to protect their bio-diversity and environment, the study reveals.

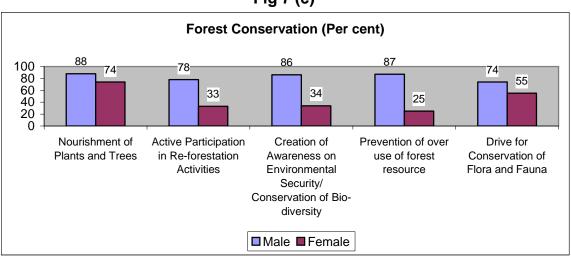
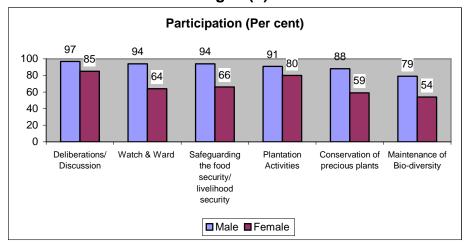


Fig 7 (c)

It is evident from figure 7(c) that in regard to various aspects of forest conservation, female members exhibit dismal performance (excepting in to some extent in nourishment of plants and trees (74.0%) compared to their male counterparts (88.0%)). However in reforestation activities, creation of awareness on environmental security/safety, prevention of over use of forest resource and drive for conservation of flora and fauna their participation is very dismal at 33.0%, 34.0%, 25.0% and 55.0% respectively. In all the above activities however, their male counterparts have an edge over them, the study reveals.

Fig: 7(d)



The overall participation of both male and female members in the forest resource management (figure 7 (d)) at the local level exhibits a distinct bias in favour of male members (despite provision of equal number of membership). Evidently, in watch and ward activity (94.0%), discussion and deliberation in management issues (97.0%), safeguarding the food security and livelihood security (94.0%), plantation activity (91.0%), conservation of precious plants (88.0%) and in maintenance of biodiversity (79.0%).

Precisely, the dismal performances of female VSS members in varieties of participatory forestry activities and meagre participation under the JFM model (despite specific provisions in the MoU to undertake various capacity/skill upgradation training programmes) suggest that such a very critical issue has not been adequately addressed/ attended to, resulting in disempowerment/non-involvement/meagre involvement of women in the JFM model in Orissa.

# **Forest Management, Policy Issues and Options:**

8.1. The field research households (321) in the

**8.1.** The field research findings from an extensive survey of forest-dependent sample households (321) in the JFM villages (also, 80 NJFM households) situated in different agro-climatic zones of the State of Orissa raise series of conceptual, institutional, managerial, legal, participatory, livelihood issues etc. under the JFM model in policy and development perspectives of the forestry sector. Though JFM model of resource management at present is in vogue in almost 9549 villages (by June 2005) in the State of Orissa with the major objective of forest protection and conservation, a critical evaluation of its functioning at the grass roots level to identify series of contradictions, conflicts, deficiencies/ inadequacies and suggestions for some policy options to make JFM a vibrant people-centred policy strategy (for ensuring effective protection, conservation and regeneration of existing forest resource), seems to have been unhesitatingly neglected /ignored at the government level. Here, is a modest approach for a critical evaluation of the JFM model introduced in Orissa since 1993.

On the basis of our field research findings, ground realities and observations, an attempt is made in this chapter to present a few legal, conceptual, institutional, participatory, as well as benefit sharing issues emerged in the JFM model of management during last one decade or so and present some policy options in the end.

- **8.2.** The concept of JFM is based on the legal boundaries of a village. But, it is confirmed from the field survey that there are situations where households of the adjacent village have been traditionally enjoying the usufruct rights over the same forest. In such a situation, exclusion of such households from the jurisdiction of JFM often leads to conflicts. Since, in JFM, it is the village and not the Panchayat that manages the forest land, membership of the traditional users living outside that village may be left to the concerned JFM village for inclusion/exclusion of the adjacent villagers in VSS. Such a minor legal issue very often creates major inter-village conflicts of recurring nature and the JFM model needs to address such an issue.
- **8.3.** Similarly, the issue of late membership in V.S.S/VFPC at a later stage creates the question of rights on the benefits of the JFM programme. Further, the elite people living outside the village at distant places due to some employment/economic activity manage to put claims in benefit sharing arrangement or usufruct rights over the products in the JFM villages. This issue could be resolved by way of raising the fees for late comers/absentees or asking them to enjoy proportional benefits. In point of fact, this issue in JFM in many villages still remains unresolved leading to resource use conflicts.
- **8.4.** The arrangements of sharing benefits from final harvesting of timber between the F.D. and the community raises a lot of apprehensions and confusions with respect to possible changes in the initial arrangements in future. Though, some VSSs reported to have lot of confidence in the F.D. at this stage, the difference between the cost involved in protection and conservation by the community on the one hand and the arrangement

of benefit sharing on the other seems to have been creating apprehension in some VSSs the study observes. Further, the limited association/inactive role of NGOs in the JFM model (in many parts of the State of Orissa) due to their great concern/advocacy towards CFM and motivation in that direction also have compounded apprehensions on sharing arrangements in the final harvest. Thus, to avoid possible conflicts/apprehensions the issue needs regular and continues appraisal in the VSS meetings and periodical clarifications (if any) may be sought for. Further, the components in expenditures during growth process/final harvesting and the gross market value of the final produce should be made transparent to the VSS members for ensuring trust/self-confidence to strengthen sustainable management of the resource under the JFM regime, the study suggests. Besides, any action by the F.D. on withdrawal of the JFM scheme (if any) in future needs to be based on violations of specific conditions and not arbitrarily/unilaterally as the F.D. exercises some undue/unpleasant power over the rights of the VSS members (due to subjective provisions and absence of compensation of any kind) which many VSS members report with much courage and confidence.

- **8.5.** The local communities depend on forests largely to meet their recurring requirements of food, fodder, fuelwood, small timber, bamboo etc. but definitely not for much lumpsum income from protected forests in future. But, when the forests grow, it is most likely that the availability of fodder reduces, and in effect, involvement of the local community also reduces thus, members begin to think more about final harvesting. But, this in reality does not happen. In such a critical situation, in joint management model, the F.D needs to involve community people in decision making process, besides introducing a lot of capacity-building training programmes to make people conscious/aware about their rights and responsibilities so as to avoid apprehensions of future benefits promised in the MOU. However, such a possible situation is not remote, and may arise in the process of governance of the forest resource thus, needs adequate timely care.
- **8.6.** Our field survey data and research findings suggest that co-operation, good understanding, mutual trust etc. amongst the stakeholders are the key factors to success of JFM model. In many sample JFM villages, though satisfactory performance is reflected in terms of better protection, conservation, benefit sharing, and also in all other forestry activities, in some, the performance is dismal due to lack of co-operation and mutual trust leading to confusions and limited progress of JFM. It is observed that while the F.D. ultimately enjoys the ownership over forest land and the NGOs have strong bonds with the local people due to their specialised skills for motivation, co-ordination/co-operation the role of NGO is very essential for progress of JFM. But, the ground realities in many JFM villages do not suggest such an ideal situation/presence of NGOs though co-ordination between the F.D. and the NGO at the grass roots level is very conducive for progress of JFM. In point of fact, such an issue is very often overlooked/sidelines in the governance process resulting in making JFM very weak.
- **8.7.** Further, the village level institutions need greater autonomy in dealing with various managerial issues at the local level. Though, it is the collective responsibility of

all three stakeholders to make recently emerged joint management very successful, ground realities suggest that the F.D. is very inactive, slow, indifferent, bureaucratic and stereotyped in implementation as well as monitoring the programme despite its pioneering role and greater responsibility in the JFM model. Such a very critical participatory issue needs to be addressed very distinctly through skill upgradation training programme for the forest staff to change their mindset for ensuring active participation.

- **8.8.** It is believed that a sustainable partnership between NGOs and the F.D could succeed to make the JFM model more effective as well as participatory for ensuring sustainable management of the resource if it is based on mutual trust and respect. But, the ground realities show very passive role of NGOs in the JFM villages due to their strong belief on the detrimental role of the F.D towards livelihood security of the community population (not people-friendly) thus, their concerted advocacy goes in favour of CFM (in many parts of the State), where they believe that community people could protect, conserve and manage the local forest resource better without the participation of F.D. Thus, there is need to work out to restore relationships, realisation of capabilities as well as skill and the role of each institution needs to be clearly defined so as to mitigate feelings of threats and mistrust to ensure an environment that is conducive to cooperation.
- **8.9.** Admittedly, the main objective of JFM is to institutionalise an integrated forestry development programme with a great deal of supports from the NGOs. But, in our JFM study villages, NGOs seem to have taken an isolated lead role merely as programme implementers. Further, it is expected that the NGOs should strive to become functional specialists across regions in defined areas of advocacy and education, capacity building training programmes, co-ordination and applied social and ecological research, so that they could become invaluable programme facilitators and trainers to activate forestry developmental programmes at the grass roots level. Therefore, an important institutional issue relating to complex processes of institutional change in the F.D, NGOs and community groups calls for wide spread/multiplication of FPCs and institutionalisation of programme procedures; such as : registration, membership, conflict arbitration and benefit sharing.
- **8.10.** Similarly, the issue of linking equity with management is very crucial in JFM so far as the aspect benefit sharing is concerned. Though the VSS members in the sample JFM villages are not very apprehensive of the future benefit prospects, they however, plead for higher benefits in sharing than the prescribed limits incorporated in MoU, due to the mismatch between costs and returns. Therefore, the issue of differential perceptions and expectations of the community groups on sharing of benefit in the JFM model need to be examined and adequately addressed, since there is no linkage between sharing of benefits and management responsibility, the study observes.
- **8.11.** Further, the conceptual contradictions over sharing management authority that stemmed from various historical, economic and social factors seem to have been diluted in the JFM model. Field observations suggest that the user groups have failed to

exercise sufficient management authority in the process of governance of the local forest resource due to policy lapses and conceptual contradictions. A recent policy decision of the government of Orissa on final harvesting of timber in many dense forested regions of the State seems to have created a great deal of apprehensions, confusions, contradictions in the minds of user groups due to the likely threats to biodiversity, environment and regenerated forests (under the JFM regime) in the State. Such a direct contradiction between the village community and the F.D. on the concept of appropriate management in the JFM model poses question to its future prospects. In point of fact, there is no alternative mechanism/institution in the rural areas so far that could enable to make people exercise their rights to claim their entitlements. Because, many institutions emerged therein during the last couple of years in the governance process have only succeeded to act against each other. Therefore, the management control and governance are in conflicts and the linkage between management efforts and access to forest resources is not established at the grass roots level. Therefore, the issue of linkage of equity with management needs to be further operationalised as well as strengthened.

- **8.12.** The issue of decision making in joint management is complex and cumbersome, since the stakeholders do not easily reach at concensus due to differential perceptions, motives and interests. Though, the JFM model facilitates to make decision making more participatory and transparent, this does not happen in reality due to varieties of social, economic, cultural and institutional factors. In point of fact, the issues involved in ensuring equity in sharing of benefits, empowerment of the user groups (and women in particular) and devolution of functions have not been adequately addressed. As a result, decision making is found to be biased, bureaucratic, self-motivated/partial and least people-friendly. The dominance of elite class still very much exists in the JFM governance in the forest-based regions. In the absence of desired capacity building/training-based skill upgradation programmes for the community groups, the decentralisation process in the rural areas is very much hindered, resulting decision making process non-participatory as well unilateral. This, indeed is not atall a healthy sign in governance of Common Property Resource (CPR) like forest under the recently emerged JFM model. Therefore, the issues of institution building, organisational responsibilities and decision making need re-orientation to make JFM model a success, the study observes.
- **8.13.** The issue of involvement of Panchayat in JFM model is gradually gaining significance and relevant in the context of one recent policy decision of the Government of Orissa (GoO) on 1<sup>st</sup> April 2000, indicating that the rights of collection and marketing of 68 NTFPs available from the JFM area are vested in the village Gram Panchayats. In the mean time, some conflicts between Village Level Organisations (VLOs) and the GPs in many JFM areas have quietly generated on NTFP related issues, since two grass roots level institutions are treated to be different so far as recently emerged JFM is concerned. Therefore, it has become inevitable to work out some modalities between

the GPs and VSS/VFPC to minimise/avoid the emerging conflicts in local level forest resource management.

## **NTFP Management**

- **8.14.** Better management of incentive structure can help not only to improve the performance of JFM programme but also promote the goals of livelihoods creation and sustainable management of forest resources. The best way of meeting the twin challenge of maximizing collectors income from forest produces and NTFPs and of ensuring sustainable harvesting is to involve VFCs/VSSs in NTFP collection and marketing. NTFP collection can also be a powerful strategy for transforming VFCs into robust, autonomous people's organizations by imparting to them a strong economic drive. For this the interventions required may be:
  - restricting collection within revenue boundaries of the village to avoid conflicts between villages and poaching in one another's territory
  - rationalization of conflicts between contractors and the VFCs
- (a) One plausible option would be of demarcating the boundaries of the areas to be managed by each VFC, as prescribed in the JFM resolution. The past experience underscores the merits of mainstreaming. It would be important that within the current system of NTFP trading and marketing, space should be created for VFCs. Especially in the case of nationalised NTFPs where the Government agencies appoint private parties as sub-agents, it would be possible for them to entrust the VFCs as sub-agents in the areas where VFCs are operational.
- (b) Apart from capacity building measures, financial assistance would be essential for the VFCs to undertake this assignment. The capital provided for making prompt payments to collectors could either be an investment from the Government or could be recovered from the VFCs from the profits they would make from the trading operations. The VFC involvement in marketing activity would definitely have an economic scale of operation to gain a strong bargaining position in the market. With sizable quantum of NTFPs coming from the VFC areas they could influence and force changes in the current system, the study observes.
- (c) Another option would be to promote user groups of NTFPs and involve them in forest management along with VFCs wherever they exist. The FD would need to lend its support to these groups to strengthen them. Especially in the JFM areas the FD would need to change its policy (Saxena *et al* 1997):
  - it should claim no share in NTFP collection by VFC members
  - VFC should charge a marginal fee, from sale proceeds, for providing local storage and monitoring over-exploitation.
  - the VFC should be free to sell its collection to agency which provides them the best deal.
- (d) The involvement of VFCs in NTFP collection should aim at ensuring sustainable harvesting and value addition through efficient processing and marketing, but not merely maximising revenue for the government. In such a situation, the FD could bring in improvements by prevailing upon the collectors to ensure scientific methods of

collection, harvesting, storage etc. in order to sustain and improve the quality of the product.

#### 8.15. Role of VFCs/VSSs/FPCs and the FD

Through the Protection Committees, it would be important for the FD to provide assistance to them to undertake the responsibilities mentioned earlier. The Committees should take care of all aspects related to collection and marketing of NTFPs, under the guidance of FD, as follows:

- promote the economy of NTFPs that remain unexploited due to lack of market arrangements
- make arrangements under which collectors get best reward/remunerative price.
- control over-incentive to prevent unsustainable extraction levels
- (a) Free competition might not be the best alternative in the current situation because:
  - FDs revenue from NTFPs could decline
  - large number of tiny operators may not be able to build and sustain linkages with upcountry markets and the entire NTFP economy might shrink.
  - high collector prices could strengthen over incentives in unsustainable harvesting.
- (b) The second option could be to promote a small number of licensed contractors in a self contained territory for a license fee. This would increase FDs revenue and may also take care of volume of each operator, but it would still create incentives for over-harvesting. This can be avoided by promoting user groups of NTFPs and then involving them in forest management along with VFCs. This would not only eliminate the risk of illegal removals but also make monitoring easy. In such a situation the FDs machinery can lend its support to such groups by preventing smuggling.
- (c) Apart from changes in the policy guidelines that need to be formulated with respect to processing, marketing and use of NTFPs; there needs to be other changes with respect to the management strategies also. Separate Working Circles may be created in Working Plans for the management of NTFPs so that operational prescriptions can be incorporated for improved silviculture and utilisation practices. Appropriate harvesting schedules may also be developed which will promote biodiversity conservation (Sharma undated).
- (d) Besides, the State Level Steering Group that has been set-up as per the guidelines in the JFM resolutions of 1990 and 1993 of the Orissa Government, it is important for the FD to constitute Working Groups at the State, Division and Range levels. The State-level Working Group under the Chairmanship of the PCCF, the Division-level Working Group under the DFO and the Range-level Working Group under the Range Forest Officer could be constituted with concerned officials, stakeholders and NGOs as members. Such groups would offer greater flexibility to the FD to monitor the progress of JFM more effectively and take quick decisions.

(e) Government ownership over forests and forest products has alienated the *bona fide* users of NTFPs to secure benefits of subsistence from forests. In this respect, bestowing the rights to collection, marketing and processing of NTFPs on them would, in a big way, strengthen the household subsistence economy of forest dwellers. Similarly, formation of local level primary collectors' institutions could widen the scope of forest dwelling activities of the primary collectors. Further, financial assistance and provision of adequate infrastructure for storage, processing, transportation and sale would be beneficial to the Government and primary collectors.

# (f) Value addition

With regard to limited scope for processing and value addition work, amendment to the forest rules may be required to allow storage of certain NTFPs to ensure household artisan activity towards value addition for greater income. The VFCs/VSSs should be activated and reoriented towards the task of value addition. Other measures might include:

- Programmes for capacity building for value addition, packaging, stocking etc. may be taken up at the village level for which a market-friendly value addition/processing network with both structural as well as financial supports from the Government should be developed
- Periodic reviews of these training programmes also need to be taken up to monitor their efficiency and make required changes.
- Restriction on setting up of processing units should be abolished, and Panchayats should be allowed to participate at the appropriate level where the FD may work as facilitator
- Women who play dominant role in the tribal household economy on individual basis or in groups may be given financial and marketing assistance to secure self-employment on sustainable basis
- Forest dwellers should be recognised as primary producers owing to the minor processing work carried out by then at the household level, instead of primary collectors
- Recently amended law on the rights of Panchayats at the appropriate level should be implemented forthwith for sale as well as utilisation of NTFPs by the tribal people as their ownership rights over NTFP resources have already been accorded legal sanction.

#### 8.16. Gender Issues:

Field observations suggest that gender issue needs extra care and there is need for specific gender sensitive strategy and also, one that aims for extraction of NTFPs to the fullest extent from the available forest potential to benefit the forest-dependent communities. Further, traditional use rights of tribals to forest produces should be restored to enhance their entitlements, empowerment, participation and capabilities. Apart from this, State controls and regulations need to be replaced with measures that are compatible with the development welfare and strategy towards better livelihood prospects of the forest-dependent poor. In this context, peoples' institutions like VSS

also could gain a degree of empowerment in the process of participation in the State sponsored JFM.

## **Concluding Remarks:**

8.17. The issues raised in the research study indicate that there is not only need for clarity in certain policy provisions regarding JFM, but also for simplifying the procedures, so that the user groups could benefit the maximum. Besides, the village institutions need greater autonomy - (thus, least intervention of the F.D.), so that various managerial issues could be administered better at the local level. Similarly, while it is the responsibility of all partners/stakeholders to make JFM very successful, greater responsibility lies with the F.D (sponsoring agency) and much of the success depends upon the activities, attitudes, mindset etc. of the FD. Evidently, field research suggests that the F.D is deliberately performing slow due to various uncertainties regarding the sustainability of the joint management programme. Thus, it does not play a pro-active role to involve people in JFM and to provide security of rights and greater autonomy to village level institutions. Further, field observations suggest that the F.D perhaps intends to keep the programme informal as the emerging programme provides a lot of scope and power to handle any changes as and when necessary. Therefore, it is deliberately going slow indifferent due to various uncertainties on the sustainability of the programme.

Though the process of empowerment is a long and arduous task and the bureaucracy is holding power to control empowerment to take forward of the programme, research findings indicate that the emergence of Peoples' Institutions (PIs) at the grass roots in the forestry development programmes could not only strengthen empowerment process, but also, could successfully redesign the JFM programme to make it more people-centred. It is believed that by this, the empowerment process within PIs could provide a differential access to resources, decision making and also, benefit sharing in favour of the poor and the disadvantaged groups of rural population. But, empowerment of PIs needs provision of financial assistance for carrying out several forestry programmes. In this context, transparency in use of financial resource, accountability as well as responsibility of user groups needs to be defined and well addressed in the JFM model the study suggests.

Needless to say that co-operation among different stakeholders is the key to success of JFM model. Therefore, co-operation among the F.D officials, villagers, NGOs as well as different village level organisations are of crucial significance. In case of Orissa however, ground realities suggest that there is need for active involvement of local NGOs, due to their strong bonds with local people as well as specialised skills to motivate them. At the same time, it is believed that varieties of capacity building /skill upgradation programmes (and motivations) for the stake holders and dissemination of information on the duties, responsibilities, broad provisions in the JFM, accountability etc. to the user groups could indeed strengthen their forestry activities to sustain forest management for better livelihood. Once, co-operation, mutual trust, equity in benefit sharing, participation of the community in various forestry activities, support from NGOs

and the F.D etc. are achieved in course of governance of the precious local forest resource through joint management system, most of the intra-village and inter-village conflicts may get automatically resolved/minimised at the grass roots level. Similarly, once some positive attitudes of the F.D towards people-centred measures are evolved for the socio-economic upliftment of the poor and disadvantaged group of forest-dependent rural population, the exciting beginning of JFM model strategy may yield many more positive results. Thus, empowerment of the user group, Peoples' Institutions, greater devolution of functions, functionaries and funds, active participation of the stakeholders, due weightage to entitlements of the community etc. are likely to benefit the forest-dependent poor most in future, the study observes.

It is striking to find that local forest protection institutions are spontaneously proliferating in some parts of the State, though many with the encouragement and assistance of the F.D, field staff and some NGOs. Interestingly, old attitudes are quietly changing and badly abused forests are gradually making a come-back. In such an emerging situation, the challenge ahead is to expand this modest beginning in order to sustain and accelerate the momentum of JFM programme. Further, as regenerating forests under the JFM regime have begun to produce lucrative range of NTFPs, and sharing of final harvests of timber is nearing, new problems as well as some unforeseen issues may emerge in the process of governance. The F.D and the NGOs may also be challenged with various legal and social issues in future which need to be adequately addressed in the JFM model in time with care.

Field research suggests that in the JFM model, social reorientation and training necessary of the F.D and allied departments should be directed more towards the challenging issues of human values, perceptions, cooperation, mutual respect, trust, behaviour etc. rather than on traditional emphasis on technical skills and methods of upgradation. Similarly, documentation of field learning concerning social and ecological issues not only need to be carefully documented, but also, be shared as well as utilized in evolving programme planning and management. There may be concerted efforts towards joint research by the F.D and NGOs with the help of village records to measure and monitor changes in the flow and value of forest products. Needless to say that NGOs as facilitators and brokers in the JFM model, should get intensively/intimately involved in specialising their skills in advocacy as well as awareness, field training and documentation, and at the same time (while liaising with the F.D and community groups), must ensure that neither of the other two stakeholders becomes overly dependent exclusively on its services. In the long term perspective of JFM programme however, the JFM philosophy must be underpinned to generate faith in the capability/ skill of the local people to manage local forest resources very effectively on sustainable and equitable basis, the study concludes.

#### Annexure - A

# SCHEDULED AREAS (STATES OF BIHAR, GUJARAT, MADHYA PRADESH AND ORISSA), ORDER, 1977

In exercise of the powers conferred by Sub-paragraph (2) of Paragraph 6 of the Fifth Schedule to the Constitution of India, the President hereby rescinds the Scheduled Areas (Part A States), Order, 1960 in so far as it relates to the areas now comprised in the States of Bihar, Gujarat, Madhya Pradesh and Orissa, and the Scheduled Areas (Part B States) Order, 1950, in so far as it relates to the areas now comprised in the State of Madhya Pradesh and in consultation with the Governors of the States concerned, is pleased to make the following order, namely:-

- (1) This order may be called the scheduled areas (States of Bihar, Gujarat, Madhya Pradesh and Orissa) Order, 1977.
- (2) The areas specified below are hereby redefined to be the Scheduled areas within the States of Bihar, Gujarat, Madhya Pradesh and Orissa.

#### **ORISSA**

- (1) Mayurbhanj district
- (2) Sundergarh district
- (3) Koraput district
- (4) Kuchinda Tahasil in Sambalpur district
- (5) Keonjhar and Telkoi tahasils of Keonjhar sub-division and Champua and Barbil tahasils of Champua sub-division in Keonjhar district.
- (6) Khondmals tahasil of Khondmals Subdivision and Balliguda and G. Udayagiri tahasils of Balliguda sub-division in Boudh Khondmals districts.
- (7) R. Udayagiri Tahasil and Gumma and Rayagada Block of Parlakhemundi Tahasil of Parlakhemundi Subdivision and Sururda Tahasil excluding Gazalbadi and Gochha Grama Panchayat of Ghumsur Subdivision in Ganjam district.
- (8) Thuamul Rampur block of Kalahandi Tahasil, and Lanjigarh block falling in Lanjigarh and Kalahandi tahasils in Bhawanipatna Subdivision in Kalahandi district.
- (9) Nilagiri Community Development Block of Nilagiri Tahasil in Nilagiri Subdivision in Balasore district.
- 3. Any reference in the preceding paragraph to a territorial division by whatever name indicated shall be constructed as a reference to the territorial division of that name as existing at the commencement of this order.

N. SANJIVA REDDY
PRESIDENT

S. HARIHARA IYER

Joint Secretary to Government of India

Annexure - B

DISTRICT WISE NUMBER OF VSS, FOREST AREA BROUGHT UNDER JFM
THROUGH VSS IN ORISSA AS ON END OF JUNE 2005

(Area in Hect.)

SI.	Name of the	Total No. of	Total Forest area	(Area in Hect.)  VSS Registered under society		
Si. No,.	Name of the Divisions	VSS Formed	brought under JFM	Registration Act/Regd. under		
140,.	DIVISIONS	VOO I OIIIIEU	through VSS	FDA		
(1)	(2)	(F)	(8)	(11)		
1.	(2) Angul	(5) 160	(o) 25485	45		
2.	Athamallik	147	10563	0		
3.	Dhenkanal	270	33390	0		
4.	Athagarh	117	10815	20		
5.	Cuttack	68	6112	10		
6.	Satkosia (WL)	17	383	17		
7.	Khurda	76	11854	23		
8.	Nayagarh	218	21947	218		
9.	Chandaka (WL)	19	1241	0		
10.	Chilika (WL)	19	1068	0		
11.	Puri (WL)	17	4170	15		
12.	Rajnagar(WL)	22	1170	0		
13.	Mahanadi (WL)	0	0	0		
14.	City Forest	9	218	0		
15.	Ghumsur (N)	154	22571	84		
16.	Ghumsur (S)	126	16027	88		
17.	Phulbani	482	30718	0		
18.	Boudh	130	11612	0		
19.	Baliguda	283	20610	26		
20.	Parlakhemundi	518	27510	156		
21.	Berhampur	57	6245	57		
22.	Kalahandi (N)	447	34976	0		
23.	Kalahandi (S)	364	24472	0		
24.	Khariar	403	31459	0		
25.	Sunabeda (WL)	0	0	0		
26.	Bolangir (E)	245	18437	185		
27.	Bolangir (W)	253	27746	253		
28.	Rayagada	759	48822	0		
29.	Koraput	515	27212	426		
30.	Yeypore	404	25381	0		
31.	Malkangiri	202	11695	2		
32.	Nawrangpur	182	23098	182		
33.	Sambalpur (N)	16	3002	16		
34.	Sambalpur (S)	276	24567	63		
35.	Rairakhol	142	13082	83		
36.	Baragarh	244	32345	73		
37.	Bamra (WL)	183	22042	176		
38.	Hirakuda (WL)	0	0	0		
39.	Sundargarh	311	33881	0		
40.	Bonai	105	6519	5		
41.	Deogarh	222	34472	62		
42.	Rourkela	228	21213	0		
43.	Keonjhar	207	21096	0		
44.	Keonjhar (WL)	51	6781	32		
45.	Baripada VSS	298	29734	0		
40	Vipc	82	8980	0		
46.	Karanjia	67	5353	0		
	Vipc	186	17201	186		
47.	Rairangpur	114	14656	114		
48.	Balasore (WL)	100	8667	0		
49.	Bhadrak (WL)	34	2387	34		
Total	· Office of the PCCE Or	9549	843085	2651		

Source: Office of the PCCF, Orissa, Bhubaneswar.

# References

Aplet. G, J. Chuson G.N, Olson J T and Sample V.A (1997) defining Sustainable Forestry (Eds) The wilderness Society, Island Press, Washington D.C, Covelo, California.

Banerjee, U (1989) 'Participatory Forest Management in West Bengal' Malhotra and Poffenferger (Eds) Forest Regeneration Through Community Protection: The West Bengal Experience, West Bengal Forest Department.

Chambers Rebert, N.C. Saxena and Tushar Shah (1989) To the Hands of the Poor, Water and Trees OXFORD & IBH, New Delhi.

Clay, J.W (1996) Generating Income Conserving Resources –20 Lessons from the Field. World Wildlife Fund: Washington, D.C.

CPSW. (1996). Livelihood of Forest Dwellers and NTFP Policy in Orissa, Bhubaneswar.

FAO (1995) Non-Wood Forest Products For Rural Income and Sustainable Forestry. Technical papers, No.-07 <u>FAO</u>, Rome Italy.

Fernandes W, Menon G and Vieges R (1988) Forests, Environment and Tribal Economy: Deforestation, Improvement and Marginalisation in Orissa, ISI, New Delhi.

Fernandes W. (1996). "Drafting A Peoples Forest Bill: The Forest Dwellers-Social Activist Alternative". ISI, New Delhi.

GoO. (1981). Orissa Forest Produce (control of trade) Act, 1981. Forest Department. Bhubaneswar: Government of Orissa.

GoO. (1961). The Orissa Kendu Leaves (Control of Trade) Act, 1961. Forest Department. Bhubaneswar: Government of Orissa.

GoO. (1962). The Orissa Kendu Leaves (Control of Trade) Rules, 1962. Forest Department. Bhubaneswar: Government of Orissa.

GoO. (1964). The Orissa Gram Panchayat (OGP) Act, 1964. Rural Development Department. Bhubaneswar: Government of Orissa.

GoO. (1972). Orissa Forest Act, 1972. Forests Department. Bhubaneswar: Government of Orissa.

GoO. (1976). The Orissa Excise (Mahua Flower) Rules, 1979. Excise Department. Bhubaneswar: Government of Orissa.

GoO. (1977). The Schedule of rate (Forest produce in Orissa) Rules, 1977. Forest Department. Bhubaneswar: Government of Orissa.

GoO. (1980). Supply of Bamboo to Artisans including Cooperative Societies (Orissa) Rules, 1980. Forest Department. Bhubaneswar: Government of Orissa.

GoO. (1980). The Orissa Timber and Other Forest Produce Transit Rules, 1980. Forest Department. Bhubaneswar: Government of Orissa.

GoO. (1983). Orissa Forest Produce (control of trade) Rules, 1983. Forest Department. Bhubaneswar: Government of Orissa.

GoO. (1984). The Sal Seed Nationalisation Act, 1983-84. Forest Department. Bhubaneswar: Government of Orissa.

GoO. (1997). The Gram Panchayat (Amendment) Act, 1997. Rural Development Department. Bhubaneswar: Government of Orissa.

GoO. (2000). Policy on Procurement and Trade of Non-Timber Forest Produce. Resolution No. 5503, 31<sup>st</sup> March, 2000. Forest and Environment Department. Bhubaneswar: Government of Orissa.

GoO. (2000). Procurement of Sal seeds of 2000 crop. Resolution No. 5FC-8/2000.1831/F&E, 22<sup>nd</sup> January, 2000. Forest and Environment Department. Bhubaneswar: Government of Orissa.

ISED (1992). Women and Social Forestry: A Study on the Role and Participation of Women in Social Forestry Programmes in Orissa and M.P., Vol.I, Bhubaneswar.

Kumar. N and N.C. Saxena (2002) India's Forests: Potential for Poverty Alleviation (eds) "Managing a Global Resource: Challenges of Forest Conservation and Development, World Bank (Eds) by U. Lela Series, Vol-5 Transaction Publishers, New Brunswick.

Kumar. N and NC Saxena (2002) India's Forests: Potential for Poverty Alleviation, in, Managing a Global Resource: Challenges of Forest Conservation and Development, World Bank (Eds) by U, Lele Series, Vol-5 Transaction Publishers, New Brunswick.

Mahapatra, L K. (1993). 'Customary Rights in land and Forest and the State' in Continuity and Change in Tribal Society (Ed.) M. Miri, Shimla: Indian Institute of Advanced Study.

Mallik, R.M. (1992). 'Fuel Energy Crisis in the Household Sector', NCDS, Bhubaneswar, Orissa.

Mallik, R.M. (1994), Study of Some Minor Forest Produce in Orissa: An Empirical Investigation, NCDS, Bhubaneswar, Orissa.

Mallik, R.M.(1996), Procurement and Marketing of Kendu Leaves in Orissa: A Study of Economic Deprivation and Benefits to Primary Collectors, NCDS, Bhubaneswar, Orissa.

Mallik,R.M and N. Panigrahi (1998), Non-Timber Forest Produce Collection: Benefits and Management, NCDS, Bhubaneswar.

Mallik, R.M. (1998), Study of Domestic and Commercial use including Marketing of NTFPs, Research Report submitted to SCC, SANDIANCONSULT NATURA, Sweden.

Mallik R. M. (2000) Sustainable Management of Non-Timber Forest Products in Orissa: Some Issues and Options Indian Journal of Agricultural Economics, ISAE, Bombay, Vol-55, No-3.

Mallik, R.M. (2000) Impact of NTFP Policies on Sustainable Livelihood of Forest Dependent Communities in Orissa: An Empirical Exercise, NCDS, Bhubaneswar, Orissa.

Mallik, R.M. (2001), Evolving Mechanism for NTFP-Oriented Forest Management in Orissa: Issues and Options, Forest Usufructs, Vol. 3, No.-1, Dehra Dun.

Mallik, R.M. (2001), Processing of NTFP- based Value added Products in Orissa: Opportunities and Challenges, Journal of Rural Development, Vol. 20(2), Pp. 299-320.

Mallik, R.M. (2002), In Processing Value-Added NTFP-Based Products in Orissa: Opportunities and Challenges" in Agro-Industries and Economic Development: A Vision for the 21<sup>st</sup> Century (Eds) by B. Misra, G.C. Kar and S.N. Mishra, Deep and Deep Publications Pvt. Ltd., New Delhi.

Mallik, R.M. (2003), Forest Resource and Forest Management Policy' in the Orissa State Development Report prepared by NCDS, Bhubaneswar for Planning Commission, New Delhi.

Mallik, R.M. (2004), Forest Management and Tribal Livelihood' in the Human Development Report prepared by the NCDS, Bhubaneswar for submission to UNDP.

Mallik, R.M. (2004), In Sustaining Food Security and Tribal Livelihood in Orissa: Issues and Practices of NTFP Management, Forest Usufructs, Vol. 5 No. ½, Dehra Dun.

Mallik, R.M. (2004), Sustainable Forestry development in Orissa: Some Issues and Policy Options in Reviving Orissa Economy (Eds) by R.K. Panda, APH Publishing Corporation, New Delhi.

Mallik, R.M. and C.R. Das (2004), Access to Forest Resource and Management: A Study of Forest/NTFP Policies and Tribal Livelihood, Poverty Task Force, Government of Orissa.

Mehta A.K. and Amita Shah (2003) Chronic Poverty in India: Incidence, Causes and Policies, World Development Vol.-3, No.-3.

Mishra, R. (1998). Parliamentary Report of Consultant on Item 5.14, Legal Framework and Institutional Arrangement between OFD and Communities in Orissa, Report – submitted to Scandiaconsult Natura AB/ Sweden.

Ministry of Environment and Forests of India (1998) Report of the Expert Committee on Conferring Ownership Rights of NTFPs on Panchayats, New Delhi (Unpublished)

Myrdal G. (1968) Asian Drama: An Enquiry in to the Poverty of Nations vol. 3, Penguin Books.

National Commission on Agriculture 1976, M/o Agriculture, Government of India.

National Forest Policy (1988), M/o Forest & Environment, Government of India.

National Institute of Rural Development (2000), India Rural Development Report Regional Disparities in Development and Poverty NIRD, Hyderabad.

National Institute of Rural Development (2000), India Rural Development Report: Regional Disparities in Development and Poverty, NIRD, Hyderabad.

Roy Burman, B K. (1982). Report of Committee on Forest and Tribals in India, Tribal Development Division, New Delhi, Ministry of Home Affairs.

Sarin Madhu (1997). Gender and Equity Concerns in JFM in Nitrya Rao and Luise Rump (eds), A Just Right, Freidrich Ebert Stifung, New Delhi.

Sarin M. and Rai A (1998) Rational Distribution of Benefits between Communities and Forest Department.

Saxena, (1997) The Sage of Participatory Forest Management in India, CIFOR, Indonesia

Saxena, N C. (1995). "Forest, People & Profit: New equations for Sustainability". Centre for Sustainable Development, Lal Bahadur Shastri National Academy of Admn., Mussorie, Natraj Publishers, Dehradun.

Saxena, N C. (1996). Forest Policy and the Rural poor in Orissa, Jagruti Vani, Vo- II, No. 4 and Vol. 12, No. 1, march.

Saxena, N.C (2000,2002), Forest in India, World Bank Washington D.C., U.S.A

Singh, R.V. (1997) Evolution of Forest Tenure in India-Implications for Sustainable Forest Management, Unpublished Ph.D thesis, The UBC, Vancouver, Canada.

World Bank (1992) World Development Report: Development and Environment, Washington, D.C, U.S.A.