Managing Common Pool Resources for Poverty Reduction in Tribal Areas of Eastern India

With Special Reference to Small Scale Culture Fisheries and Non-Timber Forest Products

R.S. Deshpande, D.K. Marothia, Khalil Shah

INTRODUCTION

Poverty continues to be one of the major challenges of time. Strategies framed by the government could not succeed to the extent that was expected. Review of literature brings out clearly that there is a need for multi-pronged strategy to tackle the multi-dimensional nature of poverty, as poverty calculus changes across regions and time notwithstanding social groups. Earlier attempts towards poverty alleviation (the trickle-down effect, the direct action programs such as IRDP, NREGP etc., of 1980’s) and those of today’s (NREGA and the like) focused mainly on a single solution expected to be fitting all. The effectiveness and necessity of micro level strategies is entirely missing from the policy net. Hence, there is a need to discover such critical areas to tackle the challenges for reducing poverty.

It is a historically established that poor depend upon common property resources for their livelihood. One such micro-initiative can be the efficient use of common property resources. CPRs generally consist of grazing lands, common ponds, common forests providing fuel woods etc. Considering the widespread prevalence of poverty levels in rural and tribal regions and a significant proportion (15 percent of total land) of area under the CPRs, the use of CPRs can really make some difference in the lives of rural poor.

It is argued here that there is a nexus between poverty and CPRs (Table 1) and the poor, being a deprived section. They depend heavily on the natural resources. Usually, natural resources are guarded either by government laws or by the community norms. As a result, poor find it difficult to use even these natural resources.

<table>
<thead>
<tr>
<th>CPRs and Poverty Class</th>
<th>Rural Poverty</th>
<th>Rural Schedule Tribe Poverty</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>ORI, M.P., MEGA, MIZO, UP</td>
<td>RAJ, GUJ, TN, MHA</td>
</tr>
<tr>
<td>Low</td>
<td>BIH, ASS, MANI, NAG, SIKK, TRI, WB, ARUNA</td>
<td>KAR, AP, HP, PUN</td>
</tr>
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Note: 1) States having more than 10% of area under CPRs to the total geographical area are considered for high category of CPRs Classification and below as low category.
2) States having more than 30% of rural and Schedule Tribe population below poverty line are considered for high category of poverty Classification and below as low category.

Source: Based on Planning commission and NSSO 1998.

The relationship between livelihood security and the poverty dynamics has also been a common theme in the literature. Not many studies have highlighted the nexus between poverty and use of Common Property Resources (CPRs). There are a few important studies on management of CPRs as well as on poverty reduction separately, but rarely do they connect at the theoretical and empirical level. It is argued that efficient use of CPRs at grass-root level play an important role in generating and sustaining the source of livelihood for the rural poor and also points out...
that a continuous decline of the CPRs due to lack of proper institutional mechanism in place to sustain them have caused increased deprivation to the poor. The study was conducted to analyse the missing link between poverty and CPRs from the policy perspective, a study was initiated at the behest of FAO and Ministry of Agriculture, Government of India. The focus of the study was to get at the role and process of CPR in poverty alleviation, map the contours of difficulties in this process and arrive at the policy leads needed.

The states chosen for the ground level understanding are Chhattisgarh and Orissa. These two states also represent the regions with high density of poor as well as high dependence on common property resources (Table 1). While in Chhattisgarh the poor depend on Non-Timber Forest products, the sizeable poor in Orissa look for aquaculture as the main support for their livelihood.

The main objectives of the study were to analyze the role of non-timber forest products in poverty alleviation in Chhattisgarh; to examine the system of governance, institutional framework and programs for community based management practices in non-timber forest products of Chhattisgarh; and to examine the leasing policy for common rural water bodies, its positive/negative impact in terms of conflict among different stakeholders in Orissa.

NON-TIMBER FOREST PRODUCTS

National Forest Policy-1988 provided a national perspective on forest management. However, considering the fact that the national canvass is too large and with the creation of the new State of Chhattisgarh on 1st November 2000, it became imperative to review the situation. The State Government declared and adopted a State Forest Policy Resolution in November 2001. Chhattisgarh is one of the pioneering States in the country to frame its own forest policy. The important objectives of the State Forest Policy are: (a) unlocking of the vast array of forest resources on sustainable basis for enhanced well-being of local people by converting these open access resources (OAR) into community controlled, prioritized, protected and managed resources, and (b) attending to the derivation of direct economic benefit from the forests of the State shall be subordinated to the requirements of the environmental stability and maintenance of ecological balance in the State.

To translate the policy into action, the Govt. of Chhattisgarh has passed a Resolution in October 2001 on JFM having a few important features, “(i) every family of the JFM committees will be entitled to avail forest produces subject to their availability; (ii) all the forest committees shall be eligible to get 100% of the forest produces obtained from time to time, from mechanical thinning & cleaning of rehabilitated area and cleaning of bamboo clumps in degraded forests as per the prescriptions of micro-plan/ working plan, on payment of expenditure incurred on harvesting, (iii) forest produces equivalent to 15% value of the amount calculated by (of timber/bamboo) deducting the expenditure (of timber/bamboo) incurred on harvesting from the total value of forest produce or cash equivalent to that shall be given to FPC, (iv) forest produces equivalent to 30% value, calculated by deducting the expenditure incurred on harvesting (of timber/bamboo) from the total value of timber/bamboo obtained on final felling in plantation/rehabilitation of degraded forests, as equivalent to that value, shall be given to village forest committee(VFC)”. These were expected to help the forest dependents largely in their livelihood.

Network of people’s protected area (PPAs) as poor people’s pool of assets for sustainable livelihood security and bio-cultural diversity conservation has been established in the State of Chhattisgarh with special emphasis to utilize the traditional ecological knowledge of the people, capacity building of the stakeholders and up-gradation of local technology with appropriate information technology. While under the Community FP the organizational, administrative and functional structures of Chhattisgarh State Minor Forest Produce (trading &development) Co-operative Federation (CSMFPFED) remain unchanged for collection, processing and marketing of nationalized NTFPs, the processing storage and marketing operations for tendu leaves are now being carried out by the purchaser appointed by SDF for institutional mechanism structures designed for private – public – community based local resource management body-e.g. primary minor forest produce. Under this arrangement, the members of the primary NTFPs societies only harvest the green leaves and the purchaser carries out remaining operations. The society members get their wages from the PMFPCS.

The State has now established a unique distribution mechanism through a network of NTFPs Marts with well-designed chain of Sanjeevini shops
supported by SHGs and main power to promote marketing. There are two gray areas in the CPF. First, there is hardly any policy intervention included in the CPF for managing protected areas and second, wildlife sanctuaries have to be managed with the participation of local communities and coexistence of wildlife and human population. The protocols for the certification of honey, aonla, lac and tamarind are being developed in accordance with NPOP standards. Chhattisgarh Certification Society (CGCERT) is providing necessary guidance to the micro-entrepreneurs for developing their products and getting their products certified.

**SMALL SCALE CULTURE FISHERIES**

Aquaculture on common property water bodies is one of the important survival strategies of poor in Orissa. The State Government has introduced The State Reservoir Fishery Policy, Orissa, with the primary objective of creating employment opportunities through introduction of scientific pisciculture. Economic rehabilitation of the displaced and providing livelihood to the dependent poor are the highlights of the policy. The policy makers also show concern about the current leasing policies and extension of leasing period for sustainability. It is also suggested that the community shall be the centre of such development process, and that must ensure democratic participation of community in planning and decision-making process.

This study located urgent needs to synthesize the traditional ecological knowledge with the contemporary knowledge to transform rainfed areas. Reconciling the system of indigenous ecological knowledge with modern scientific orientation is needed to design appropriate strategies for development of rainfed areas. An integrated view must be taken to redesign the livelihood alternatives and to minimize the distress migration. A comprehensive National CPRs Management Policy needs to be designed involving the individual experts working in various institutions and organizations including NGOs.

Multiuse Common Water (MCW) bodies constitute an important component of community assets in Orissa and significantly contribute towards the livelihood of the poor. The area and productivity of these MCWs is declining, but still these constitute the main source. MCW Common pool ponds/tanks are being administered and controlled under different institutional hierarchy and property rights regimes. The issue related to management of these tanks and ponds is complex due to varied characteristics (scale, size, location, coverage, and output). Therefore, multiple agencies are involved in governing the resources and that hinders the flexibility of the resources to reach their full potential.

To promote culture fisheries based livelihood activities for reducing poverty, the policy makers have to revisit the traditional institutional arrangements of managing these community assets in different parts of the State. The existing institutional arrangements and policies are inadequate to address the issues of sustainable development of multiuse common water bodies in relation to efficient production and minimizing social and economic inequity. Public-private-community-partnership (PPCP) governance structure can be promoted to enhance capacity of community in fish production with workable institutional arrangements supported by effective authority system.

There are several types of institutional arrangements in the state that includes (a) Personal ponds, (b) Individuals taking other ponds on lease, (c) Panchayat ponds, (d) Village ponds leased out to individuals sharing the profit, (e) Panchayat ponds given to individual, (f) SHG taking village or individual ponds or Village ponds sharing with SHG, (g) the reservoir given to Co-operatives. However, no formal leasing policy exists in Orissa. Panchayat ponds have some kind of leasing arrangements. Most of the villagers have consensus over that the village pond will not be given on lease to any outsider from the village, though current return is very low from these ponds.

Orissa’s inland culture fishery has a complex system. The total production is not much, as the size of the ponds is small usually between 0.2 to 0.4 ha. The fish farmers generally sell the produce at the local markets. Poisoning and poaching are two big problems. Substantial amounts of money are spent Fisheries are acquiring the character of an economic enterprise run by the people who have better political connection. Traditional fish farmers are now being marginalised from their trade and are doing netting and other related labour work. They weave and sell fishing net etc.

**POLICY IMPLICATIONS**

1. The ownership rights of non-nationalized NTFPs have been assigned to the Panchayat Raj Institutions (village level institutions) in consonance with some arrangements (a) harvesting of minor forest produce will be on non-destructive basis (b) the members of the gram...
7. In view of the large number of pisciculture tanks for their own consumption, and (c) the manner, frequency and intensity of minor forest produce collection for any use other than bona-fide domestic use by the members of the Gram Sabhas will be free to collect minor forest produce in accordance with the prescription of a management plan prepared by Zilla Panchayat. It will be essential to prepare and put these plans in public domain.

2. The role of JFMCs in promoting the economic development of the people living in the vicinity of the forests should have a holistic approach. Therefore, it is high time for JFMCs and FDAs to design financial planning for utilizing the available fund for value addition activities associated with NTFPs and medicinal and herbal plants. Such plans need to be transparent and available to stakeholders.

3. The Federation need to make all possible efforts to implement its initiatives in these underprivileged and socially excluded areas. There are a few grey areas in CFP, which need to be addressed. Policy related to protected areas and wildlife sanctuaries need to be revisited keeping in view the coexistence of human population and wildlife and biodiversity resources.

4. Institutional arrangements, in case of NTFPs management, need to be redefined keeping in view property rights structures aimed at reducing poverty. This transition of institutional arrangements became a major push factor in transforming the life of poor tribals.

5. Institutions should not only govern the process of production (harvesting) but also need to enhance technology and organize marketing both under NTFPs and CPR fisheries.

6. Panchayati Raj institutions in India are taking shape in most of the states and decentralized development planning has become a key word in the administration. It will be essential to institutionalize the management and use of CPRs through this institutional structure.

7. In view of the large number of pisciculture tanks in some States, creating an enabling environment free of legal hurdles and with clear legal ownership titles is essential. This is needed for tanks under the possession of the GPs. Pisciculture has proved to be a veritable source of income for the GPs. Moreover, it is necessary to see that the existing State policies take into account the views of stakeholders to avoid lapses in policy design. This particularly is important in conservation and sustainable development of existing CPRs in the State. Conservation of resources should be done through promoting responsible fishing behavior and this requires education and trainings to fishermen. Awareness building among all the stakeholders regarding conservation of fish should become priority in CPR management policies and the fishing community should be made aware of the pros and cons of the management and neglect of CPRs.

8. To increase the contribution of small-scale fisheries and NTFPs, which in turn results in poverty reduction, locational specific technical, institutional and policy arrangements are needed that will ensure sustainability of multiple use common water bodies and forest resource base. To achieve this, policy makers must learn from the good governance models.

CONCLUSIONS

The study endeavoured to develop pro-poor policies based on the institutional structure of CPRs and brought forth an in-depth understanding of the policy issues. There is large number of lacunae featuring in the process of institutionalization in use of CPRs and those have direct bearing on livelihood. It was noted that the traditional institutions have faded and the market forces are also betraying the poor due to imperfections. There are infrastructural bottlenecks too. All these indicate a fresh look at policy domain for common property resources, environment and poverty. This study offers institutional solutions in order to get the best out of the nexus between common property resources and the livelihood of the poor. It is true that traditional institutions have been weathering out mainly due to the market forces but then one can utilize the market forces themselves as new avenues to create a new institutional structure. The use of CPRs is not determined by their mere availability, but mainly by their accessibility. The study provides policy leads in a five dimensional interconnected pentagon. First, the present institutional structure has to be strengthened by allowing the power to decide lease rate in the hands of the village stakeholders. Such institutions could be designed on the lines of SHGs with tag on credit. Second, the responsibility of maintaining the CPRs shall rest with the users. Third, the users or lessee must pay towards maintenance and the account shall be maintained by this group. Fourth, the group need to prepare a plan for the use of CPR and it should be publically displayed. Finally, the group formed should be integrated with PRIs, but shall function independently.
ACTION PLAN

Managing Common Pool Resources for Poverty Reduction in Tribal Areas of Eastern India

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INTRODUCTION

It is undisputable that the livelihood of poor is largely dependent on Common Property Resources (CPRs). Interestingly, the density of poor is also high in the regions with larger volume of CPRs. We have chosen two critical regions from the high density poverty & CPRs regions of the country. Non-timber forest products and public domain water bodies are two types of CPRs that support the poor of these regions. Our research points out to a few critical policies as action points emanating out of research and the stakeholders meetings including Field Group Discussions (FGDs).

NON-TIMBER FOREST PRODUCTS

While the Chhattisgarh State Forest Policy has retained the essentials of forest management listed out in the National Forest Policy – 1988 of Government of India, it has prioritized the attributes of forest management in view of States emphasis. The livelihood of tribal and other disadvantageous population is at the center stage of forest management planning. However, the essentials of forest management in the State of Chhattisgarh may include -

a) Existing forests and forestlands should be protected and their productivity be increased. It is necessary to promote efficient methods of harvest of non-timber forest products and utilization to maximize economic returns with the help of stakeholders.

b) Targeting of broad range of goods and services in terms of physical, material, human, social, cultural and environmental assets in conjunction with appropriate entitlement regime. People’s Protected Area (PPA) envisions a proactive and people’s friendly framework to ensure long-term protection and maintenance of biological diversity and providing at the same time a sustainable flow of natural products and services to meet the local community needs. Therefore, a network of PPAs should be established as poor people’s pool of assets for strengthening the livelihood security of forest dwellers.

c) Provision of sufficient fodder, fuel and small timber to local people, especially in areas adjoining forests, is necessary to prevent further depletion of forests beyond their sustainable capacity. To reduce the pressure on forests due to increasing demand for fuel wood, its substitution by alternative sources of energy should be promoted. The existing programme be intensified.

d) Minor Forest Produce (MFP) including medicinal plants provides sustenance to the tribal population and to other communities residing in and around the forests. The productivity of such produce should be enhanced along with improving non-destructive harvesting methods. Income generations along with employment are the key points. Product-wise harvesters groups could be formed to encourage this sector. Efforts should be made, as far as possible, to promote processing and value addition of the same, at the local level.

e) Supply of timber and poles to urban centers from non-forest sources is necessary to reduce pressure on natural forests. Therefore, the State government should encourage agro-forestry, forestry and on-farm cultivation of timber trees.
f) Establishment of appropriate institutions including policy and legislative measures to protect the rich bio-cultural heritage of the State in view of increasing threats of bio piracy infringement of IPR (Intellectual Property Rights) from within and outside the State.

g) Chhattisgarh State Medicinal Plant Board (CSMPB) has started functioning and currently in the process of developing plants for sustainable development conservation and utilization of potential medicinal plants with the active participation of local communities and traditional vaidyas. CSMPB may provide market and price support for non-nationalized NTFPs trade. Chhattisgarh Minor Forest Produce Co-operative Federation (CGMFPFCF) has established NTFPs Marts in the six Forest Divisions. Such Marts should be further extended to district union level. These Marts could purchase and sell raw herbs and herbal products brought by Primary Minor Forest Produce Co-operative Societies (PMFPCSs), FCs, SHGs and micro enterprises.

h) Chhattisgarh Certification Society (CGCERT) is providing necessary guidance to the micro-entrepreneurs for developing certification of their products. This could be linked to the marts and the other institutional structure.

i) The other non-nationalized medicinal and non-medicinal NTFPs (nearly 72) collected, marketed and processed are still traded in the unorganized sector, dominated by traders and traditional middlemen. The extension of marketing network designed by the CGMFPFCF in the remote villages, the disposal pattern and prices spread may be beneficial to the poor gatherers. This lead needs to be incorporated.

j) The collectors are not aware of the formation of SHGs, temporary storage and processing centre facilities and network of Marts and Sanjeevinies retail shops for trading herbal products. Only a few of the collectors have been beneficiaries of the state incentives. The collectors do not know about the existence and functioning of processing units. Organisation of awareness camps in the remote areas will help in getting the poor collectors of NTFPs to harness the benefits.

k) A massive awareness programme has to be designed by CGMFPFCF regarding value addition, financial incentives available for formation of SHGs and empowerment of the NTFPs collectors. The existing links among the VFCs, PMFPCSs, and SHGs have to be strengthened to transfer the benefit of the Federation NTFPs management.

l) The State may also think to establish an umbrella organization (preferably jointly with Forest Policy Institute with research, extension and policy wings) to address the domestic and international contemporary issues in the forestry and interrelated sectors.

m) Public-private-community-partnership (PPCP) governance structure can be promoted to enhance capacity of community in fish production with workable institutional arrangements supported with effective authority system. Recent initiatives of Marketing Federation to establish marts linked with specialised shops network, micro-enterprises, organic certifications and involvement of SHGs have transformed the NTFPs trade in favour of the poor tribal to a large extent. Such initiative hopefully lifts the poor tribals above the poverty line.
SMALL SCALE CULTURE FISHERIES

Orissa State is endowed with brackish water area of 4.18 lakh ha. and fresh water area of 6.70 lakh ha., consisting of tanks/ponds, reservoirs, lakes/swamps/bheelis and rivers/canal. A large workforce in Orissa depends on fish production as part of their only livelihood strategy. Most of the labour forces dependent on fishery sector are migrants from other neighbouring States. The poor socio-economic condition of majority of fisher folk has not changed though fish production and fish exports have increased over the years.

a. The fishing rights (FR) of all the reservoirs of less than 40 ha are presently vested with the gram panchayat while more than 40 ha water bodies are being handled by the Fisheries and Animal Husbandry Department (FARD). The transfer of FR to FARD/GP of new reservoirs has been automatic after impoundment. The FARD takes steps for ensuring stocking in order to enhance fish production. The conditions of such transfer need revisit to increase efficiency.

b. The Water Resources Department and Fisheries and ARD shall jointly prepare “Reservoir Development Plan” in respect of each reservoir for fisheries development. In this matter the services of National Research Institute and other allied institutions could be availed.

c. Industrial effluents/sewerage discharge into the reservoir without proper treatment shall not be permitted. No exotic fish shall be introduced in the reservoir without prior permission of the Fisheries & ARD Department with a view to preserving genetic purity and germplasem of the indigenous strain.

d. Need based evaluation may be conducted at an interval of five years by an independent agency of national repute on the impact of the policy on Reservoir Development.

e. Fresh Water Aquaculture has various components supported by the (FFDAs). These are construction of new ponds, renovation/reclamation of ponds/tanks, cost of inputs, integrated fish farming, aerators/pumps, fresh water fish seed hatchery, fish feed units, establishment of fresh water prawn seed hatchery; setting up of integrated units including hatchery for ornamental fishes, training to fish farmers, establishment of laboratories at State level to improve water quality and fish health investigations, provision of soil and water testing kits to each FFDA, and purchase of vehicle, etc.

f. Rashtriya Krishi Vikas Yojana (RKVY) commenced in 2007-08 as a flagship programme for the development of agriculture and allied activities, which can be used effectively for the fisheries development. The programme is an important window of opportunity to develop and strengthen the fisheries sector.

g. At present, the fishing operation in the minor irrigation tanks is being administered by Primary Fishermen Cooperative Society (PFCS)/SHGs/individuals. The project will intervene at those tanks where operations are undertaken by Fishery Groups (FGs) primarily under aegis of PFCS. This would also include existing PFCS/SHGs. Wherever, FGs do not exist within the tank system the project would support the formation of a FG prior to any field operation. The prerequisites of the project are as follows.
h. There has been greater emphasis on fish production adopting scientific procedures for creating employment opportunities and on private participation for augmenting fish production and creating market potential in the State (The State Reservoir Fishery Policy, Orissa). In this context, the declining share of plan expenditure in Fisheries and Animal Resource Development Sector is an area of concern and that needs attention.

i. The scientists view that the major issues for low productivity of multi-use common water bodies are related to irregular and inadequate stocking of quality fish seeds under proper management practices, lack of control on biomass due to inflow of excess water from catchments and outflow through spillway, and lack of logistics support for supply of quality fish seed at pond/tank sites. These issues can be dealt with demonstration on stocking along with feed supplementation, training and exposure visits on post stocking management and harvesting techniques, construction of sluice gate of the tanks and clearance of stumps in the water bodies. Availability of advanced fingerlings (150 gm) needs to be ensured. This is a critical gap for increasing production in the sector.

j. The small scale fisheries sector needs to be linked with poverty reduction goal effectively. Despite a large number of policies have recently been designed by the State Government, institutional arrangement appears to be weak as it heavily supported by strong authority system. The efforts to be made to strengthens grass-root level (PRIs) institutional arrangement for their sustainability and workable without state support in future.

k. Multiuse Common Water (MCW) bodies constitute an important component of community assets in Orissa and significantly contribute towards the livelihood of the poor. The area and productivity of these MCWs is declining, but still these constitute the main source. Therefore, multiple agencies could be involved in governing the resources and that hinders the flexibility of this resource to reach its full potential.

l. Traditionally village water bodies in Orissa have been used and designated for particular use to minimize conflict across the stakeholders. The policy makers may revisit the traditional institutional arrangements of managing these community assets in different parts of the State. Public-private-community-partnership (PPCP) governance structure can be promoted to enhance capacity of community in fish production with workable institutional arrangements supported by effective authority system.

m. At present, the involvement of bankers in pisciculture is not much. Higher credit flow to this sector should be made by the banks and by promoting the SHG activities. Moreover, SHGs, Co-operative formation should be encouraged and bank linkages to such groups should be strengthened.

n. FFDAs have very crucial roles to play in providing the much needed information and knowledge on aquaculture to the farmers. The state should prescribe, advertise and promote indigenous formulation of feed for all types of fisheries. Development of aquaculture villages adopting cluster approach and providing the required infrastructure and facilities should get attention of DRDA/ Government. The Fisheries department should be in a position to meet the technical needs of the fishermen.