

BUILDING COMMUNITY ASSET

Improving Sanitation

Lack of access to toilets and safe drinking water are major developmental issues in Ganjam district. People of Burubandha village of Berhampur had no toilet or bath-room in their home and defecate in open spaces contaminating soil and water of the area. Open defecation is a big threat to public health. In order to eradicate this social evil, the Village Cluster Committee (VCC) planned and constructed toilets in project villages. To ensure provision of potable water, 4 tube-wells were installed in the project villages. In this venture, name of Brundaban Choudhury needs a special mention. His daughter is a teacher of the village night school and his son is an elected Ward Member of the Khamarigaon Gram Panchayat. He was instrumental in motivating people to set up toilets in the village. He was the first among villagers to dig foundation with his own labour. Subsequently, he worked with masons to install the pit. Though there was limited fund, sufficient only for the floor work, he discussed with many fellow villagers and approached VCC President with demand for erection of walls around toilets. The proposal was agreed to by all members in VCC meeting. He constantly monitored the construction work to ensure timely completion. He utilised this opportunity to construct bath-room besides the toilet thereby saving cost on construction. Upon asked, he replied that using toilet is not only hygienic but also a way of dignified living. It is hoped that action of Mr. Choudhury will set a new trend for others to follow in the project villages. Influenced by his action, Radha Khrushna Choudhury of neighbouring Balighai village has also constructed bath-room besides his toilet.



Efforts of Sri Choudhury explained by her daughter to RCCF & DFO, Berhampur & Project Coordinator, RPRC

RCCF, Berhampur and Range Officer, Digapahandi in Burubandha village



Tube-wells constructed under project in Burudanga and Siripur villages of Berhampur forest division



DFO, Berhampur addressing villagers after rally of students during the visit of Collector, Ganjam

Cultural programme by school students in Khurda



Students of tribal school with placards on biodiversity conservation in Khurda

Villagers watching the cultural programme in Khurda

Improving Quality of Life

One health camp was organised in Khurda forest division on 31st July '09 and it benefited more than 200 people. In Berhampur division 2nd health camp was organised on 24th Sept. '09 where more than 150 patients were treated. In both the divisions the health camps have been held in collaboration with 'National Rural Health Mission'. Since the nearby health centres are far away, villagers of the project area view that more such camps should be organised under the programme.



Registration of villagers in Khurda health camp

Doctors checking patients in Khurda



Second mega health camp in Berhampur

Health check-up & distribution of medicines in Berhampur

BIODIVERSITY CONSERVATION THROUGH COMMUNITY BASED NATURAL RESOURCE MANAGEMENT- A 'GoI-UNDP-CCF II' INITIATIVE

- Newsletter

This half yearly newsletter of the GoI-UNDP assisted Project will provide timely information relating to different project activities with a view to constantly improve quality of programme interventions.

For any comments/suggestions, please write to- Chief Executive, RPRC, E-mail: rprcbs@gmail.com

Published by: Regional Plant Resource Centre (An autonomous organisation of Forest & Environment Dept., Govt. of Orissa) Nayapalli, Bhubaneswar-751015 Ph. : (0674) 2556912, 2557925, Fax : 91- 674- 2550274 E-mail: rprcbs@gmail.com, Web: www.rprc.in

Editorial Board: Dr. Ajay Kumar Mahapatra & Mr. Partha Das

BIODIVERSITY CONSERVATION THROUGH COMMUNITY BASED NATURAL RESOURCE MANAGEMENT

- A GOI-UNDP INITIATIVE



ISSUE NO. 2

APRIL - SEPTEMBER 2009

REGIONAL PLANT RESOURCE CENTRE



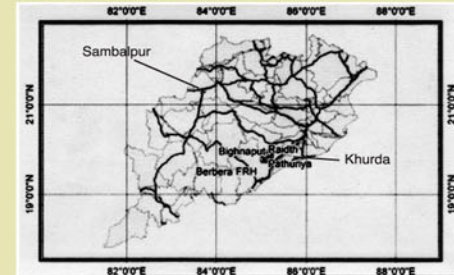
Dr. A.K. Mahapatra, IFS Chief Executive, RPRC

From Project Director's Desk...

The CBNRM project is being implemented by Berhampur, Sambalpur (S) and Khurda forest divisions under the supervision and guidance of RPRC. Our efforts in 2008, the first year of project implementation, were focused towards driving home the message amongst project villagers that community using natural resources also has to care for it, to ensure sustainability. In order to win confidence of forest fringe villagers, who are far away from the mainstream and to forge a partnership with them, so that they contribute time and labour for project activities, several entry point programmes and alternative livelihood interventions were supported under the project. The project villages are in remote locality, therefore, the development impact was minimal. Although nestled in the lap of forests, they were yet to be brought under the network of Joint Forest Management system. During the year several community led livelihood interventions got initiated which strengthened the village institutions and also facilitated in solving the inter-village dispute, particularly in Niladriprasad cluster of Khurda division. The fisherman community of Ghodahada reservoir showed exemplary initiatives contributing voluntary labour for construction of latrines, patrolling boat, to excavating fish ponds. The fisherman community has now become the most committed lot and ready to take the action plan through to its most productive end. The forest fringe villages in Padiabahal cluster, whose dependence on timber extraction used to be intense, are yet to come to terms with the concept of community protection of forests. But after a year, the change in attitude amongst the villagers, many of whom are timber extractors, is beginning to emerge. The recent incidence of community support to forest staff in opposing illicit felling in the area goes on to prove that even die hard timber smugglers can be resisted, if the community jointly puts up a front. The women SHG groups of Beheramal and Mahulpali villages have benefited by rearing poultry and undertaking tailoring, which helped in activating many dormant SHGs of the area who realised the potential of microfinance by initiating microenterprise. Although early to conclude, the commitment shown by implementing staffs of forest department and the VCC members indicate a beginning in right direction for this pilot experiment of biodiversity conservation through community based natural resources management.

BIODIVERSITY ASSESSMENT IN PROJECT AREA

The project areas are rich depositories of flora and fauna. To assess biodiversity of the project areas surveys were conducted in Tamana Reserve Forest of Khurda forest division and Badrama Reserve Forest of Sambalpur (S) forest division to build a database, so that it will be useful in developing suitable strategies for conservation by the forest management. With a view to make a quantitative assessment of plant resources, sample transects of 1000 m X 5 m were laid in 10 selected grids in the reserves and enumeration of all species, no. of individuals, GBH, height, regeneration potential, intensity of biotic pressure etc. were made. The detailed study report is available with the Centre.

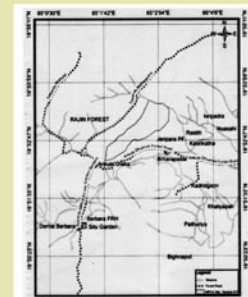


Map of Orissa indicating Biodiversity Survey Sites

Survey Method & Result

(a) Tamana R.F.

The vegetation of Tamana, Aranga, Katwal, Silingpada, Rajin, Khandabola, Badakhola, Pitapania and other forest areas adjacent to Niladriprasad Cluster was surveyed and quantitative assessment of plant resources were made during 2009 and a total of 375 species of plants were recorded.



Map of Tamana R.F.



The dominant forest type of the area is Orissa Semi-evergreen forests with occurrence of Coastal Sal forests and dry mixed deciduous forests at several locations. The vegetation on hill tops was characteristically

dominated by tall grasses with sparsely distributed trees like *Lagerstroemia parviflora*, *Cochlospermum religiosum*, *Diospyros melanoxylon* and *Firmiana colorata*. The dominant forest trees of the area are *Protium serratum*, *Mallotus philippense*, *Homalium nepaulense*, *Polyalthia cerasoides*, *Aphanamixis polystachya*, *Actinodaphne angustifolia*, *Oroxylum indicum*, *Dillenia pentagyna* etc. *Saraca asoca*, *Lasiococca comberi*, *Amoora wallichii* and *Diospyros malabarica* were restricted to fringes of hill streams. Extensive bamboo brakes of *Dendrocalamus strictus* and *Oxytenanthera nigrociliata* were observed on Tamana hills. Of the important climbers and lianas, *Bauhinia vahlii*, *Gnetum scandens*, *Spatholobus roxburghii* deserve special mention.

During the floristic study, populations of some rare and endangered plants like *Lasiococca comberi*, *Polyalthia simiarum*, *Cryptocarya amygdalina*, *Pachystylidium hirsutum*, *Gnetum scandens*, *Licuala peltata* and *Drypetes assamica* were observed. Wild relatives of rice (*Oryza granulata*), coffee (*Coffea benghalensis*) and pigeon pea (*Cajanus cajanifolius*), which are important as germplasm materials for crop improvement, were also found in the study area. Of the 41 species of RET and medicinal plants prioritized for conservation action in Orissa, 14 species were found to occur in the study site. Wild occurrence of 4 species of *Calamus* namely, *C. guruba*, *C. latifolius*, *C. viminalis* and *C. rotang* was reported from here. **Of these, C. rotang is being relocated after its first and only collection from Northern Ganjam of Orissa in 1904.**

(b) Badarama R.F.:

The flora of Kulchera, Rangali Kana, Beheramal, Mahulpali and adjacent forest areas of Padiabahal Cluster of Sambalpur (S) Forest Division was studied during 2009 and a total of 211 species of plants were collected, identified and enumerated. The dominant forest type belong to dry deciduous forests dominated by Sal (*Shorea robusta*) interspersed with degraded miscellaneous forests on several patches. Other than Sal, major tree species include *Anogeissus latifolia*, *Butea monosperma*, *Buchanania lanzan*, *Semecarpus anacardium*, *Chloroxylon swietenii*, *Cleistanthus collinus*, *Phyllanthus emblica*, etc. The ground flora is composed of

Survey team in Badarama R.F.



Map of Badarama R.F.

natural associates of Sal like *Phyllodium pulchellum*, *Flemingia bracteata*, *F. chappar*, *Woodfordia fruticosa*, *Byttneria herbacea*, *Curculigo orchoides*, *Phoenix acaulis*, *Desmodium heterocarpon*, *Isleima spp.* Climbers are not too many and are represented by *Atylosia scarabaeoides*, *Smilax zeylanica*, *Pergularia daemia*, *Symphoremma involuclatum* and few others. The forests are in different stages of degradation and accordingly the species composition varied in different habitats.

BIODIVERSITY CONSERVATION

Community Protection of Eco-system

The six project villages of Khurda forest divisions are located deep inside Tamana and Aranga Reserve Forests (RF), which supports a unique patch of moist semi evergreen forest of Orissa. The forests are bestowed with rich repository of floral wealth and the only habitat in Orissa having good population of cane (*Calamus* spp.) plants. This is also where teak plantation was started since the time of British administration. Luxuriant growth of teak has attracted timber mafia from three adjoining districts surrounding these forests rich with biodiversity. A jungle training camp of CRPF at Dhuwanali was set up by the Government, with twin objectives of training police personnel



CBNRM squad with Forest Guard



Anti-smuggling Squad in Sambalpur (S)

Supporting Communities to Develop Capacity

- With a view to empower night school teachers on teaching process and evoke interest of students to attend the schools, teachers were trained in Berhampur on "joyful learning" by a UNICEF project trained trainer. Attempt has also been made for its convergence with 'Sarva Sikshya Abhiyan' and to take up evaluation of students' performance in due course.
- Training on Poultry management for 67 beneficiaries was conducted in Berhampur forest division with technical support from Animal Resources Development dept.
- Training on incense stick making is being imparted to members of Maa Mahalaxmi SHG Group in Basupali village of Sambalpur (S) division to start household Agarbati production.
- 40 beneficiaries in Sambalpur (S), 18 beneficiaries in Khurda and 15 beneficiaries in Berhampur are given training on tailoring. Sewing machines with accessories have been supplied to the women Self-Help Groups/Common Interest Groups to undertake tailoring enterprises in the project villages of these three divisions.



Chief Executive, RPRC discussing improvement measures for night schools with Ex-CF, Berhampur at inaccessible Mahupada village



Training of teachers of night schools



Tailoring training in Khurda



Tailoring training in Berhampur



Field measurement before excavation of Raidiha Tank in Niladriprasad Cluster



Villagers engaged for excavation of Raidiha Tank



Villagers discussing with DFO, Khurda & Project Coordinator, RPRC at tank site



Renovated & partially filled tank

badly silted and in a dilapidated condition. The VCC also identified that with renovation, the tank would augment water source accessible to villagers. After discussion with project officials the design and plan for tank renovation were prepared with support from technical person. The villagers came forward to lend voluntary labour, when it was found that the site is full of hard rocks that would necessitate more labour incurring higher cost. The villagers worked in unison to complete the work in record time. Using local wisdom they diverted an adjoining perennial 'Nala' (stream) into the tank to recharge it. This ingenious approach resulted in a tank full of water round the year. Stone pitching on the embankment was done by the villagers themselves. They also willingly contributed their labour and time for strengthening the tank embankment. Undeterred by torrential rain they managed to complete the construction work in time by foregoing wage earning work which would have otherwise earned income for family. Had they not worked on a war footing their whole effort would have been washed away, as there was no let up in monsoon as soon as they completed the whole work. Now they believe that if the fog of misunderstanding is cleared by the sunshine of unity, great tasks could be performed. The villagers are now very happy with the tank and have started pisciculture in it.

Mobilising Forest Communities

During Vana Mahotsav, a rally of school students was conducted in Berhampur forest division to increase awareness about rare and endangered plants of Gaida DPF and significance of mugger crocodiles in Ghodahada reservoir. Debate, essay writing and drawing competition as well as students' rally were organised on the theme of biodiversity conservation for students of tribal school in Khurda division. In Berhampur, the rally coincided with visit of the District Collector to the project area.

Community Action – Worth of Unity

Nestling snugly in the midst of Niladriprasad Gram Panchayat of Khurda division, 'Raidiha' is a small hamlet surrounded with luxuriant cashew plants and coconut trees. The hamlet is inhabited by 24 tribal families. The houses are built of bamboo and mud with thatched roof. During micro level planning the inhabitants expressed their priority for renovation of village tank, for the simple reason that for all domestic use it is the only source, especially during summer. The tank was

Fishery dept. was taken in implementing the programme. Fishermen were also provided with improved boats, so that their productivity is increased.

In lieu, the fishermen agreed not to catch fish during breeding season and look for alternative income earning opportunity during lean catch season. This way the fish stock will not get exhausted and the mugger crocodiles in the reservoir will get fish to survive. To support livelihood, the villagers used to prepare traditional food items like rice-puff (*mudhi*) and rice flakes (*chuda*) and sale it in the near-by markets. However due to manual nature of the work, the quantum of production was insufficient to support their families. In order to boost production and improve income, the Village Cluster Committee decided to install rice puff making machine having capacity to produce 200–250 kgs. of rice puff per hour with project funding. This initiative is likely to support livelihood of fishermen during lean period and thereby reduce possibility of fishermen-crocodile conflict.



Rice-puff making machine in Padmanavpur village

Diversifying Agriculture

Project villages of Sambalpur (S) division being in the low rainfall areas of western Orissa have persistent problem of water for irrigation. Though Berhampur division is in the coastal Ganjam district, but the project villages of this division, being located at higher elevation than Ghodahada reservoir also suffers from water stress. The villages get irregular rainfall and due to lack of irrigation facility they survive on rain fed farming. During micro planning exercise, it was viewed that increased availability of water is likely to make new opportunity for farmers of Beheramal and Mahulpali villages in Sambalpur (S) and Balighai and Burudanga villages in Berhampur, who are mostly dependent on dry-land paddy monoculture. On account of their abject poverty and mostly due to their fatalistic attitude, diversification or intensification of farming is yet to take root in these areas. While interacting with project staffs and NGOs, farmers of these four villages expressed their willingness to try their hand on vegetable farming and intensive rice cultivation. Pond renovation, check-dam and micro irrigation channel construction therefore was taken up during 2009 with project support. Two pump-sets were supplied for irrigation and farmer groups of both the villages in Sambalpur (S) division were provided with agricultural implements, HYV seeds and fertiliser. After getting new tools and armed with new ideas, farmers in Sambalpur (S) were able to grow



Check-dam in Beheramal village of Sambalpur (S) forest division



Micro irrigation channel in Berhampur forest division

tomato, beans, ladies-finger, brinjal, cucumber, water melon etc. in their fields. Due to soaring vegetable prices, each of them has been able to earn about Rs.1,500/- in a season. Debananda Sahu of Beheramal village was benefited the most with earning of Rs.3,000/- in the first season itself. The water channel is irrigating 200 acres of agricultural land of more than 80 families in Berhampur. In spite of low rainfall during this monsoon, the farmers have been able to protect their Kharif crop.



RCCF & DFO, Berhampur seeing irrigated agricultural fields of Balighai & Burudanga villages



Irrigated vegetable fields in Sambalpur (S) forest division

EMPOWERING COMMUNITY

Setting Eyes on New Horizons

Exposure visits were conducted for more than 45 project stakeholders, viz. VCC members, NGO and forest officials of Berhampur and Khurda forest divisions to various villages in Gumma block of Gajapati district where on-farm, off-farm and non-farm livelihood activities have been taken up by people with support from "Orissa Tribal Empowerment & Livelihoods Project". The participants got first-hand knowledge of participatory rural development initiatives successfully implemented in similar projects.



VCC member of Berhampur Division during their exposure visit



CBNRM squad patrolling in Tamana RF



Patrolling path in Khurda division

and to provide enforcement support to Forest Department for protecting this verdant forest from illicit felling. The CRPF station is now in the process of being shifted to other location, which has brought back the pressure of timber smuggling. Protection of trees and conservation of biodiversity of this unique eco-system is only possible, if Forest Department actions are actively supported by the locals, few of whom also benefit from timber smuggling. This was a thorny issue raised by project staff which was debated by the Village Cluster Committee (VCC), who were ultimately convinced to initiate community protection of biodiversity. A group of 5 members, pooled from five project villages, was formed, who are now successfully operating as 'CBNRM Squad'. At the moment, their effort is compensated partially by paying them honorarium from VCC fund. With supplies of identity card, khaki dress, torch, shoes and other uniform, the squad not only looks, but also feels and acts like an extension of forest enforcement. Working in odd hours and tough conditions, the squad's endeavour has resulted in booking of 14 forest cases with arrest of 2 smugglers and seizure of 493.43 cu. ft. timber. The CBNRM squad has also unravelled that smugglers use specific jungle route, from Mudulidaha to Silingpada for their illegal activities. Getting their tip off, a 'Patrolling Path' of 5 km., between Mudulidaha and Silingpada has been created to facilitate their patrolling. Similar community protection has also resulted in forest protection work in Padiabahal area of Sambalpur (S) division, where forest staff continuously battle against timber smugglers.

Conserving the Vanishing Canes

In Orissa, cane viz. *Calamus* a keystone species, is found in Tamana, Rajin, Aranga, Bankard and Katwal Reserve Forests of Khurda division. The growth of cane symbolises occurrence of several other species growing in its habitat and extinction of cane would automatically indicate loss of other species. Extraction of cane culms is restricted by forest department. However, manufacturing of furniture and handicrafts from cane culms in Banapur area of Balugaon forest range has led to its extraction, often illegally from forest. Further, due to lack of awareness about NTFP policy 2000 of Orissa, Gram Panchayats are giving permission to traders for procurement of cane berries, which is not in the 68 listed Non-Timber Forest Products (NTFP). In this context, the project undertook an assessment of the four available cane species. The objective is to inform forest management about their current status, especially the extent of extraction of cane berries and culms, and its effect on regeneration, as well as the livelihood dimension associated with cane furniture and handicrafts enterprises thriving in adjoining locality. The study aims at helping forest managers to formulate policy guidelines for sustainable conservation and harvest of the valuable bio-resource. In addition to questionnaire survey, this study used participatory methods to gather data from forest dwellers



Cane viz. *Calamus* of Balugaon



Villagers going in groups to forest to extract cane berries



Cane berries of Balugaon forest range



Different species of Cane culms (*Calamus*) collected from Tamana forest

collecting cane berries and culms, traders engaged in cane berry business and artisans manufacturing various items from cane culms. It was revealed that majority of the 47 revenue villages of two Gram Panchayats i.e. Damia Berbera and Niladriprasad, are engaged in extraction of cane berries and culms. On a conservative estimate, about 658.3 quintals of cane berries were collected by forest dwellers from 20 revenue villages in the year 2009. This indicates total harvesting of cane berries to be very substantial and can be detrimental for species survival in the long run. Respondents were hesitant to speak about extraction of culms. People from only 5 villages responded to extraction of culms of length about 12-15 ft. as well as 8-10 ft. and more than 1/5th of them mentioned of having collected "1200 to 3000 number of cane culms" in a year per household. An integrated and inclusive approach would be essential to regulate the cane extraction without compromising livelihood of cane dependent population. The detailed study report is available with the Centre.

Restoring Degraded Habitat

Being located inside forest and un-electrified, the six project villages of Khurda division are dependent on fuel-wood for their energy need and therefore, attempt to prevent felling has been unsuccessful in these villages. Over-exploitation of woods for fuel often surpasses the pace of natural regeneration. To address this problem, the VCC of Niladriprasad decided to take up plantation of high density energy species which are fast growing and high calorific. 5 ha of eucalyptus plantation was done in Niladriprasad village during 'Vana Mahotsav' of this monsoon. The planting was attended by local Member of Legislative Assembly (MLA), Banapur amongst others to generate awareness in the project area.



Plantation of sapling by MLA, Banapur in presence of DFO, Khurda & Range Officer, Balugaon



Plantation site at Niladriprasad in Khurda

LIVELIHOOD IMPROVEMENT

Wings of Opportunity

Villagers of Burubandha and Siripur villages in Berhampur division and Beheramal and Mahulpali villages in Sambalpur (S) division are so poor and illiterate that they are unable to visualise livelihood option other than traditional subsistence agriculture, they are familiar with. Lack of irrigation, electricity and access to market has limited their on-farm and off-farm livelihood options. Wage earned by young people migrating to different places during lean season supplements household income, but it adversely affects family life in many ways. Though exploitation of forest adds to their livelihood, it creates conflict with forest dept. and denudes natural resources. The alternate ways available to get away from such sticky situation is to start other means of livelihood which would be less capital demanding, easy to start with and paying in short run as well. During village meetings, possibility of taking up household level poultry enterprise was discussed with the people by project staff and NGO personnel. Though some people had earlier raised chickens, it was on a very small scale. So rearing chicks on a large scale, as an alternative livelihood, was viewed with skepticism. However their confidence grew, when CBNRM personnel brought Chief District Veterinary Officer with them and made detailed discussion with villagers. Seeing an opportunity and assured by technical support to be provided by the Animal Resources Development (ARD) dept., villagers came forward to walk on a new road to prosperity. Under Backyard Poultry initiative, VCC members were provided with Banraj breed chicks, vaccination for two months and feed of 50 kg. A customized chicken shelter, with thatched and raised shed having protective wire-mess, was provided to each of the 62 households in Berhampur and 72 SHG members in Sambalpur (S) for rearing of chicks. Training on 'poultry management' was conducted for beneficiaries by experts of ARD dept. Due to intensive management, within a short span of 4 to 6 months, the chicks gained saleable weight and each family has now been able to earn around Rs.500/- to Rs.1,000/- from sale of chicks and eggs in about 6 months.

A number of households have now expressed interest to take up poultry business which could provide additional income engaging idle household labour.



Banraj chicks in customized shelter at Berhampur



SHG members with chicken reared in Sambalpur (S)

Sambalpur (S) forest division is a dry area where regeneration of forest species in degraded area is scanty. In order to enrich the existing stock, plantation of 50,000 plants of Teak, Sisoo, Amla, Khair, Accacia and Chakunda species over 250 hectare was done with due weeding, soil work and manuring in Kulchar RF, Beheramal RF, Laida DPF and Ushakoti RF of the division. Large part of Gaida DPF in Berhampur division was affected by shifting (*Podu*) cultivation. 100 ha of area has been taken up for regeneration of degraded forests where 30,000 seedlings of indigenous species like Amla, Bahada, Ashoka, Piasal, Redsander, Teak, Kaitha and medicinal plants like Satabari, Patalagaruda, Aswagandha, Harida etc. have been planted to re-establish the natural forests.



Plantation site at Beheramal RF in Sambalpur (S)



Plantation site at Gaida DPF in Berhampur

Income from forest floor

Tamana and Aranga reserve forests (RF) of Khurda division are well known in Orissa for having quality stock of teak trees. Since teak is one of the valuable commercial species, other forest divisions buy teak seeds from Khurda division. Considering this, villagers of the project area decided to join hands with Forest dept. for collection of this non-timer forest product (NTFP). People of 6/7 neighbouring villages got motivated and were involved in this effort. In the last season, about 39 quintals of teak seed was collected. The villagers were paid at the rate of Rs.30 per kg. The teak seeds were sold to Phulbani forest division, Tangi and Khurda forest ranges of Khurda division. Since the seeds were being collected during the lean season, it substantially supported livelihood of the seed collectors and helped them appreciate that this benefit would accrue, till teak trees exist in the forest.

Water as Means of Livelihood

The tribal population of six project villages in the interior of Khurda division depends on subsistence agriculture and NTFP collection. In spite of their abject poverty, the villagers have not been able to find off-farm income from other sources. Remoteness of the villages is also an impediment to successful implementation of developmental schemes. Further, some of these gullible villagers get easily duped by outsiders into timber smuggling. Various livelihood options were discussed during village meetings with VCC members who suggested starting pisciculture to create employment and generate income for needy households, so that they do not have to depend on timber smuggling. It was decided to renovate some of the water tanks to increase their storage capacity prior to release of fish fingerlings. People of Raidiha, Dolagobinda Nuasahi, Niladriprasad and Krushnataru villages joined hands and with project support renovated four ponds. 62 kg fish fingerlings of 3 local varieties were released in these four renovated ponds as well as in four other existing ponds in Mudulidiha, Silingpada, Dolagobinda Nuasahi and Krushnataru villages. A new beginning has been made for the needy households and once they successfully harvest the catch, it may unlock a new opportunity for them.



Chief Executive, RPRC discussing about possible livelihood options with Village Cluster Committee in Khurda



Pond renovated in Raidiha village of Khurda

Resurgent Women SHG

Most women folks in the five project villages of Padiabahal cluster, besides doing household chores, work as agricultural labourers. They also collect fuel-wood and NTFPs from Tampargarh Reserve Forest to supplement family income. Dual role of these women, at home and outside, takes its toll on their health and psyche. While these issues were discussed in the village meetings, the idea of starting some micro enterprise was raised by the project and NGO officials. Women volunteered to form Self-Help Group (SHG) and members of few existing ones came forward to activate the old ones. And thus, Laxmi SHG, with 12 women members, was formed in August '08. The forest & NGO officials also educated the SHG members about the government policies. The women SHG members were apprised of possible opportunities like managing Fair Price Shops (FPS), Mid Day Meal in schools etc. After getting feedback from project officials, Laxmi SHG decided to take up dealership of a FPS. Subsequently, they discussed with Sarpanch of Tampargarh Gram Panchayat and met Block Development Officer (BDO) of Jujumara Panchayat Samiti and applied to BDO. The SHG was allotted to run FPS in their village and to supply rice to BPL families. Currently, Laxmi

SHG is selling about 20 to 25 quintals of rice and earning Rs.2,000/- to Rs.2,500/- every month. Now, this SHG has been successful in contributing substantially to the members' family income and has become an example for other dormant SHG of the areas. During the visit of Chief Executive to the site, the members demanded that they should be given fund to set up rice de-husking unit, so that they can expand their enterprise.



Members of Laxmi SHG displaying the rice sold by them

Sailing on Hopes

Fishing is the second major occupation in six project villages of Berhampur forest division. Reservoir fishing is mainly carried out by canoeing and netting. The fishermen have formed "Maa Bankeswari Primary Fishing Cooperative Society" and have fishing rights in Ghodahada reservoir. They practise very crude fishing system and over the years, their fishing canoes have been badly damaged, which they could not repair due to financial hardship. Inefficient fishing method also adversely affects their income. Moreover, round the year, fishing also pose threat to fish population in the reservoir which is a habitat of riverine mugger crocodiles. The crocodile population has increased in the meanwhile without corresponding increase in fish stock of the reservoir. Nevertheless, both fishermen and crocodile depend on available fish. Although no direct conflict between fishermen and crocodiles has been noticed, depleting feed stock is a constant source of worry both for wild life staff and fishermen. To continue harmony between man and animal and to obviate the possibility of conflict in future, fishermen are to be involved in participatory conservation without completely dislocating them from their age old avocation. After long discussion, it was decided that the best option is mutual cohabitation for which the fish stock in the reservoir has to be increased and regulation on fishing during the breeding season is to be ensured. A pond was constructed near the reservoir and 0.12 million fish fingerlings of two local varieties were reared in the pond for 2 months after which those were released in the reservoir. The support of state



New country boats for fishing in Berhampur



Release of fish fingerlings for rearing in pond