Abstract

Chilika is one of the important commons recognized globally for rich biodiversity and being home to numerous migratory birds. Mangalajodi is one among the 132 villages situated on banks of Chilika. Due to vast area a large number of birds migrate from different parts of world to spend winters and breed. A decade long Community Conservation efforts initiated by Wild Orissa has resulted in establishing Sri Sri Mahabir Pakshi Surakshya Samti (Literally: Bird Protection Committee). Bird Protection committee is active in taking conservation activities in Mangalajodi since over a decade now, which has resulted in regular increase in number of Birds. Looking into the Ecotourism potential of the area a Community based Ecotourism Project was initiated at Mangalajodi with vision to sustain livelihood of local community members involved in conservation. Project involved mobilizing the local community and constituting Mangalajodi Ecotourism Society to take care of Ecotourism activities. Project if successful in long run can act as a model for providing solution to many wildlife habitats sharing space with local communities.

Paper attempt to analyse and share experiences from a yearlong experience in initiating Ecotourism activities at Mangalajodi and, suggesting it as an alternate livelihood option for other villages in Chilika, its role in management and conservation of biodiversity and required policy and institutional mechanisms from forest and other concerned departments.

Key words: Eco-tourism, Community, Conservation, Fisherman, Livelihood, Chilika.
INTRODUCTION

Chilika Lake is a jewel in the ecological treasure of India. It's the largest brackish water lagoon of Asia and declared as wetland of international importance under Ramsar Convention (1971) in Egypt on account of its rich biodiversity (Kishore S. and Shibalal M. 2003) which qualifies it to be an important common globally. The area covered by the lake is 1055 sq. km which swells to 1165 sq. km during rainy season and shrink to 906 sq km during summers. Mangalajodi is a village situated in the Northern sector of Chilika Lake. Mangalajodi is an Important Bird area (IBA) as designated by Birdlife International which identified a total of 2,293 IBAs in all 28 countries and territories in the Asia region. IBA cover a total area of 2,331,560 km², equivalent to 7.6% of the region’s land area (Birdlife International) and are considered as priority sites for conservation. Being an important bird habitat specially for waterfowl and a forgotten but sustainable village life style highlighting minimal dependence on external resources qualify it to be an important ecotourism destination supporting conservation initiatives and local livelihoods.

ECOTOURISM- A BRIEF INTRODUCTION

The term "eco-tourism" was originally defined as "travelling to relatively undisturbed or uncontaminated areas with the specific objective of studying, admiring and enjoying the scenery, its wild plants and animals, as well as any existing cultural manifestations found in these areas" (Ceballos-Lascurain 1988). However, since then different definitions have been put forward, some of which do not clearly demarcate between different forms of nature based tourism. The most appropriate appears to be the International Union for the Conservation of Nature's definition, which describes ecotourism as being "...environmentally responsible travel and visitation to relatively undisturbed natural areas in order to enjoy and appreciate nature (and any accompanying cultural features, both past and present); that promotes conservation; has low visitor impact; and provides for beneficially active socio-economic involvement of local populations" (Ceballos-Lascurclin, 1996).

Conservation Biology is “A new synthetic discipline that addresses the dynamics and problems of perturbed species, communities, and ecosystems”. It was called a crisis disciplines which requires inputs from both science and art (Michael E. Soule 1985). Ecotourism also to a great extent is a crisis discipline evolved to combat the ill effects of conventional tourism and protect the remaining destinations from its ill effects, but it can prove to be a long awaited answer to help the local communities while protecting the ecological and cultural treasure. If we treat our national parks, nature reserves and protected areas as ‘islands set aside from human use’ they will come under increasing…risk of submergence in a human sea (Martin Holdgate, IUCN Director General, 1989). In India as of April 2007, there were 96 national parks encompassing a combined area of 38,029.18 km² which further represent only 1.16% of India’s total surface area (anonymous). Surely there is larger area which requires protection but everything can’t be protected like National Parks and Sanctuaries due to lack of resources and individuals residing inside the boundaries of protected areas, it’s in such cases where the sustainable coexistence of human and wildlife is the only answer.
MANGALAJODI ECOTOURISM PROJECT- CASE IN POINT

Mangalajodi, a village on the banks of the Chilika Lake (Second largest lagoon in the world) hosts more than 150000 birds (BirdLife IBA Factsheet) which jostle in its marshes, especially in winters. Mangalajodi is not only home to birds but also represents a critical, one of its kind ecosystem whose protection is epitomized by a sustainable lifestyle that is at brink of extinction in urban settings. Mangalajodi was known as a Poachers village due to rampant poaching activities in the area. The Bird population dwindled to a great extent, but the efforts of Mr. Nand Kishore Bhujbal representing Wild Orissa, a Bird Protection Committee was constituted known as Sri Sri Mahabir Pakshi Surakshya Samiti (literally: Sri Sri Mahabir Bird Protection Committee) on 12Dec, 2000 which started regular patrolling in the Bird habitat and left poaching forever. Evolution from poachers to conservationists was not easy rather a quite arduous task. Mr. Bhujbal took the entire village in confidence and started regular patrolling in Mangalajodi area. "While I was telling poachers to stop poaching and protect the birds, many times I became the victim of hatred as I was poaching their livelihood" said Mr. N. K. Bhujbal. Poachers turned conservationists were also involved in regular bird census, habitat management and other scientific studies conducted by State Forest Department and Other conservation organisations, which in the process made the locals to know more about birds and their habitats. Protection has benefited not only Manglajodi’s birds, but all of its aquatic biodiversity like fishes, snakes, monitor lizards and the elusive Fishing Cat. Bird protection committee was bestowed with prestigious state "Bijju Patnaik Pakhee Mitra" (Friends of Birds) Award for conservation and has been designated the status of ‘Important Bird Area’ by Birdlife International for its importance as a significant global waterfowl habitat. Conservation of natural resources or their sustainable use has often been regarded as a characteristic of many traditional Asian cultures (Kalland and Persoon, 1998).

Eight years later Mangalajodi Ecotourism evolved to support the continuous community conservation initiative. It is a community owned and managed Ecotourism initiative started with a vision to support the livelihood of local community without hampering the fragile wetland Ecosystem. Mangalajodi Ecotourism aims to inspire, inform and enable communities to turn ecosystems into a sustainable source of livelihood through well managed tourism instead of exploiting them for short term profits. Project involved working in three key areas- Capacity Building of the local community through training in domains like Eco-Guiding, Hospitality and catering, Infrastructure Development and Marketing the venture through different mediums. This initiative involved establishing another community based organization called Mangalajodi Ecotourism Society to cater to larger village needs and involving the youth from the village to manage ecotourism activities professionally. The institution is further divided into different teams taking care of different project domains. By protecting, reconnecting and restoring the life of the Mangalajodi Marshes, this community owned venture is giving a paradigm shift in the way communities world over relate to wetlands. It adheres to principles of Ecotourism, by making a positive contribution to Ecology, Environment and Economic upliftment of the local community. Project is able to build partnership with different organizations to initiate development work in different areas.
Why Eco-tourism?

Different organizations have intervened in the past with diverse livelihood options for communities residing on the bank of Chilika with vision to improve the economic condition and decrease dependence on the limited fishery resources, but failed due to lack of interest from the local communities. Chilika is an important support system for the local communities residing on its bank and influence their lifestyle, culture and environments. Eco-tourism is a potential livelihood option for communities due to following reasons:

- **Birding and Responsible Tourism- Untapped opportunities:** In the last decade a movement was initiated by Chilika Development Authority and local NGOs to stop poaching activities by motivating and transforming poachers to conservationists. Poachers turned conservationists have the knowledge of Birds- their habitat, spatial distribution and breeding cycles which make them suitable for generating awareness to bird lovers through Eco Guiding. The National Survey reported that, in 1996, Americans spent approximately $29 billion on observing, feeding and photographing wildlife (The Texas A & M University System 1996). Similarly India has an emerging class interested in visiting Birding, Photography & Responsible Tourism destinations.

- **Strengthening Conservation Efforts:** The Bird Protection committee consists of poachers turned conservationists who were earning hefty amounts from bird poaching. Presently committee members are involved in conservation through regular monitoring and patrolling in the area. Since there is always a threat of their reverting back to earlier profession of poaching, if conservation efforts are not supported by adequate income generating activity.

- **Community Based Ecotourism- Opportunity to diversify livelihood activities:** Villagers are involved in availing livelihood through fishing in Chilika lagoon, which is proving as an ecological threat due to depletion of Biodiversity available in Chilika. There are around 132 fisherman villages in and around Chilika. Total Fisherman population in the area is 1, 04,040 out of which 27,200 are active fisherman (Kishore S. and Shibalal M. 2003). Ecotourism will help in diversifying the livelihood and decreasing undue pressure on Natural Resources of Chilika. Lake Chilika has its own ecological, cultural, social, economic and physiological balance (Pattanaik S.). Economic incentives through Ecotourism resulting in conserving the ecosystem can help in shaving Chilika which if deteriorated is a true ecological loss globally.

**EXPERIENCES FROM FIRST TOURIST SEASON**

Project team was apprehensive whether Mangalajodi will receive enough tourists in its maiden tourist season. Fortunately as the birds started arriving in the November 2009, tourists also started coming in a great number with 80 tourists on New Year eve. Feedback from the tourists also highlighted the satisfaction not only due to the birds, but also due to witnessing the diehard conservationists, who tell their stories of transformation.
The erstwhile poachers today actively patrol and protect Mangalajodi from bird poachers. Born naturalists, they monitor the bird population, co-ordinate with the forest department, assist in research and take tourists around on birding trips into the marshes. For Mangalajodi Ecotourism Project protection of Mangalajodi wetland comes first, they have apprehended poachers in past and even in the current season and handed over it to the forest department, as well as provided hospitality to approx. 611 tourists from India and abroad (South Korea, France, New Zealand, USA etc.). The current conservation experience at Mangalajodi changes perception of tourists towards Nature and help them in transforming to become a Responsible tourist. Maiden tourist season helped the project team in answering different questions.

First tourist season help in answering a lot of queries and helped in formulating new strategies for tourist season. First notion was who should be our Target market? Is it High end tourists/ Nature lovers or only Birders? Majority of tourists visited last season were keen birders who want to see new bird species and not looking for leisure tourism. Their feedback always appreciated the bird life and community conservation efforts and desire to visit Mangalajodi again.

Secondly, other areas came into picture which can help in providing employment to more number of individuals from the village. Hospitality and catering is the new addition in the project which is supporting young individuals from the village.

Third, State tourism Department and Chilika Wildlife Division are coming forward to help Mangalajodi in relation to Tourism and Conservation initiatives respectively. This will help in linking the project to mainstream and providing continuous resource and policy support. Moreover improving the traditional livelihoods of fisherman by adopting the sustainable fisheries practices is coming up as a promising step in saving the larger Chilika ecosystem. There are approx. 100 fisherman boats who go to Chilika lake for fishing and using kerosene for lighting purpose. Provision of solar lanterns is helping in providing clean affordable energy solutions.

RECOMMENDATIONS

1. **Keep Community conservation initiative in focus**: Community based tourism activities in Wildlife habitats should be initiated only if the local communities/ inhabitants advocates and practice the conservation activities in the area. Investment in infrastructure etc. should come second to investment in capacity building of local communities. This will help in sensitizing tourists to conservation practices. Naturalist/ guides are heart of Ecotourism (The Nature conservancy 2004) which is true to a greater extent in Mangalajodi case which is testified by the regular mention of poachers turned conservationists in published literature by visitors and researchers. They act as interpreters by helping tourists in identification of birds as well as conservationists by educating tourists on responsible tourism and taking part in research and monitoring projects conducted by various organizations.
2. **Innovative Livelihood strategy:** Since community conservation initiatives are initiated mostly with livelihood and conservation in focus, innovative livelihood strategy to include maximum number of people should be adopted.

3. **Let the locals decide:** In case of even trivial issues let the communities find the solution. It will help in establishing democratic processes in decision making. Project staff should act as facilitators to take decision in the right direction.

4. **Ecotourism as a tool for sustainable development:** Ecotourism is an innovative tool to bring holistic development to the destination and help locals in generating livelihoods and supporting conservation activities. It may not include a considerable number of people directly but surely will bring a change in the larger village context.

5. **Prohibition of Construction in Mangalajodi Bird Habitat:** First and second NEERI (National Environmental Engineering Research Institute, Nagpur) report of 1995 recommended “Prohibition on conversion of agriculture lands and salt farms into commercial aquaculture farms”. Majority of land in Mangalajodi bird habitat are either encroached or owned by individuals from the local village. Individuals initiate construction activities in the important breeding area for initiating commercial aquaculture practices which is a threat to bird population. Regulation prohibiting such construction should be in place to protect the important bird habitat used by many birds as breeding ground.

6. **Adopting Ecotourism Policy:** Ecotourism policy highlighting different conservation measures should be adopted to mitigate effects of tourism on local biodiversity. Mangalajodi is adopting ecotourism principles like prohibiting use of motor boats, not allowing tourists without local guide, discouraging littering, following a designated route etc. Moreover there are few important bird breeding areas where tourism activities are prohibited.
7. **Promoting Sustainable Fisheries Practices:** As DA-JICA study (2009) based on fishers opinion revealed that Fishery resources are reduced due to using of zero nets, killing of juveniles, constructing Gheris for prawn culture, using of pesticides at close land areas, and fishing operation by a large number of motorized boats. The Orissa Fishing in Chilka (Regulation) Bill, 2002 say "traditional method of fishing" shall include methods of catching fish which are locally known as Banani, Jano, Uthapani, Dian, Bazza, and Dhaudi, but shall not include any method of fishing which involves artificial stocking external feeding and application of drugs and chemicals. Traditional equipments use locally available materials like bamboo and are practiced since ages. They give the option of harvesting the palatable species and leaving the ones trapped but not consumed by human. Wetlands like Chilika are providing ecosystem services to human population dwelling on the banks of Chilika since ages but introduction of modern fishing gears like zero nets (Nylon nets) which even capture juveniles pose a threat to its aquatic and avian biodiversity. There is another concern which involves shrinkage of Chilika Lake area, which is decreasing by 1.45 to 1.6 sq. km per year (NEERI’s second Report, 1995).

Wetlands and the ecosystem services they provide are hugely valuable to people worldwide has been a key finding of the Millennium Ecosystem Assessment report. Ecotourism potential zones in Chilika should include improvement of Chilika biodiversity through promoting sustainable fisheries can prove to be a promising idea.

8. **Policy level support from Government:** Chilika Development Authority and Chilika Wildlife Division can help in providing policy level support in putting right policies in place. All recommendations mentioned above need help from policy formulators to implement them with help of civil society organizations working in the area.

**CONCLUSION**
Ecotourism destinations where communities and biodiversity exist together need to change the perspective from being “Tourist centric” to “Community conservation centric” wherein number of tourists, revenue and facilities can be compromised to protect the native culture and environment. Country like Costa Rica is proving to be ecotourism destinations where tourism is helping in protection of various wildlife habitats and local communities. Ecotourism is a double edged sword and needs stringent regulation while managing ecologically and culturally sensitive destinations.

Mangalajodi Ecotourism Project is in infancy stage and final conclusions can only be drawn after experiences from a few more tourist seasons. But surely it’s on the right path where communities are moving ahead on the learning curve. It also convey a message to the communities and policy makers across the world that Community Conservation and tourism can work, provided the communities are sensitized to work for Conservation and conservation can bring sustainable economic benefits than poaching. Approaching tourist season is again a test for this social venture to prove itself and come up with new learning to practitioners and people round the globe who believe “If given a chance, Communities can also lead themselves better."

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