



## Community Stewardship in Conservation, Restoration and Sustainable Management of Mangroves in Odisha coast



## Background:

The coastal state of Odisha has become a ground zero for natural disasters. Communities and their sources of livelihoods have been dismantled and destroyed by an unholy mix of these disasters. The communities of *Satavaya* clusters of this region witness the gradual disappearance of their assets, agricultural lands into the bottomless belly of the adjoining Bay of Bengal. Aptly described as 'Climate's First Orphans,' they have been left to fend for themselves in these hostile and uncertain conditions. Repeated occurrences of severe cyclones along the coastal region with the recent super cyclone, 1999, taking a heavy toll around 20,000 human lives and many thousands livestock caused a massive loss of property (e.g. US\$ 2802.16 million). However, where there were mangroves it saved lives of many people, animal and natural resources. Needless to mention that this phenomena have demonstrated and reinforced the ecological importance of the mangroves as wind barriers for shore line protection and coastal erosion control.

Mangroves, the life supporting system (fisheries, aqua bio-diversity, storm and cyclone savior) are critical to economic activities for many coastal communities. Mangroves are described as "the kidneys of the landscapes" because of the functions they perform in hydrologic and chemical cycles and function as the downstream receivers of wastes from both natural and human sources. Realizing the importance of this mangrove ecosystem for coastal stabilization, protecting communities from cyclones, tsunami and storm, maintaining critical habitats for many common, threatened and endangered species, fish production, generating economic opportunities and providing community with products for subsistence and survival, their sustainability and protection becomes truly critical. Thus, effective measures to reduce over dependency of fringe communities on mangroves have been focused activities of many initiatives of government as well as NGOs. APOWA is one amongst them which is working with the community, mostly below poverty line, living in the close proximity of buffer zone mangroves of Bhitarkanika National Park. With active stewardship of community APOWA is trying to facilitate the process of protecting the ecologically sensitive and fragile coastal system while helping people to explore and create alternative livelihood systems thereby reducing the over dependency of people on mangrove eco- system.

## Project Summary:

The focus of this particular initiative is on empowering and capacitating local communities to sustainably manage and conserve the mangrove ecosystem in partnership with other stakeholders in an institutionalized way making all accountable for the resulting outcome. The village level institution, such as Village Mangrove Council (VMC) will be formed and strengthened for sustainable management and conservation of mangrove resources. It will check erosion due to flooding and carbon sink as a part of global climate changes and reduction of the environmental disasters. The interventions will lead to massive reduction in mangrove over-use and creation of new mangrove forest, minimize the dependency of people on mangrove forest, and improve the skill development on alternative livelihoods of mangrove dependant families. Restoration of mangroves will protect of the hinterland from periodic cyclones, super cyclones and tsunami, etc., which is very common in this region. Besides, it will help in increased fish, crab population and other biodiversity as well as check soil erosion.

Our experience in facilitating the community involvement in restoration of mangroves and creating alternative livelihoods for reducing pressure on mangroves has brought reasonable level of success and in the long run it will further strengthen. This has really given us confidence to take up more and more such activities. Our experimentation on VMC (Village Mangrove Council) has also been quite rewarding as an appropriate institutional design for taking the initiative forward. Thus, successful implementation of the project will bank upon this experience. VMC is represented by all sections of the community, which will take the lead in the project planning, awareness and education programs, management plans, consultations with different stakeholders, anti-litter & cleanup campaign, mangrove replanting program and security, upkeep and maintenance of mangrove resources and mobilising resources available for alternative livelihood options.

## Location of our Action:

The project villages are selected based on the immediate threat to the communities from; cyclone, flood, tsunami and saline surges. This area is the most cyclone prone region of India and the annual cyclone probability of this area is nearly 1, implying that it faces at least one cyclone (of different intensity) every year. These villages are situated in Rajnagar and Mahakalpara Blocks of Kendrapara district, Odisha.

## Objective:

The goal of the project is to strengthen and sustain community stewardship in conservation, restoration, and sustainable management of mangroves and creating alternative livelihoods thereby reducing pressure on coastal ecosystem and disaster risks of the community. The objective of this project is to reduce the vulnerability of communities by strengthening the mangrove ecosystems. This also will minimize the impacts of climate change-driven flooding, storm surges, cyclones and soil erosion through improved mangrove resource management. The project aims to:

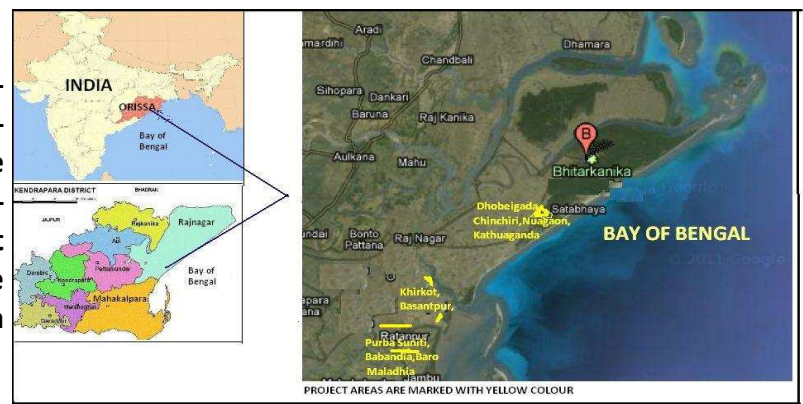
- ⇒ To generate critical awareness amongst the community and other stake holders about the life saving and biodiversity value of mangroves
- ⇒ Facilitate community led mangrove resources restoration and protection
- ⇒ To build capacity amongst communities on mangrove conservation
- ⇒ To promote a sustainable model for community management of mangroves
- ⇒ Reducing coastal vulnerability and impact of climate change
- ⇒ Enhancing community resilience
- ⇒ To develop integrated management plans with all stakeholders including all sections of the community to help implement these programs in a sustainable manner
- ⇒ To promote the engagement of vulnerable communities in decision making processes in order to influence policy change and increase self sufficiency
- ⇒ To tap resources available under flagship poverty reduction/employment generation programmes of the government and promote skill development training on alternative sustainable livelihoods for mangrove dependent communities
- ⇒ Institutionalizing the village level mangrove council to manage the affair

## Target group and local community participation:

Since most of the activities and planned strategies are community led, communities will play a significant role in this process by providing timely inputs, volunteers, contribution in kind, involvement in monitoring and assessment and implementation. The proposed VMCs, comprising representatives of youths, women groups, fishermen communities, mangrove users' communities etc and its overall engagement in the project process will develop their capacities and hence build up community ownership. The skill development training on alternative livelihood opportunities and benefits arising out of it will further strengthen community participation and group cohesion. Information needs of the community will be systematically addressed and made available through the project. Community led plantation and conservation of mangroves will ensure their ownership and sustain their association.

## Key Stakeholders:

- ✦ Community members of the selected project area (including SHG, Village Headman etc)
- ✦ Mangrove Forest Division, Rajnagar
- ✦ Government Agencies
- ✦ Civil Society Organizations, NGO networks, NGOs, CBOs etc
- ✦ Ecologists
- ✦ Village Mangrove Councils
- ✦ Fishermen Societies and Associations
- ✦ Members of PRI (Panchayati Raj Institute)
- ✦ Local Academic Institutes
- ✦ Media personnel



RESULT AREAS	MAJOR ACTIVITIES
Restoration of degraded Mangrove Forest Areas	Mangrove plantation/ restoration in degraded areas of tidal rivers , creeks and mudflats in village area
Formation of Village Mangrove Councils for sustainable management of mangrove resources	Strengthen management and technical capacity of membership of VMCs
Community Awareness and Education	Awareness raising materials meeting local conservation needs are prepare and disseminate  Organize workshops and education programme and mobilise community, school children, and youth, motivate and involve them in restoration and conservation exercise
Best practices on mangrove conservation management	Organize skill development training of mangrove dependant families on promotion of alternative sustainable livelihoods

### Organization Background:

The mission of APOWA (Action for Protection of Wild Animals) is to preserve the plants, animals, and communities that represent the diversity of life on Earth by protecting the natural resources they need to survive. APOWA is dedicated to reversing the degradation and loss of mangrove forest ecosystems and Olive Ridley sea turtle conservation in coastal Odisha. APOWA's goal is to promote the rights of traditional and indigenous coastal communities, including fishers and farmers, to sustainably manage their coastal ecosystems. Through its grass root network and stakeholder participation, APOWA is stimulating the exchange of ideas and information on the conservation and restoration of mangrove forests, while promoting sustainable utilization of mangroves by rural coastal communities. Working with local communities is a strong thread that runs right through field activities. Our grass root level networking efforts are bearing good results and today a more widespread awareness exists as to the importance of mangrove forests and the seriousness of their loss. APOWA (Action for Protection of Wild Animals) was established in the year 1999 under the societies registration Act 21 of 1860. It is recognized by the Animal Welfare Board of India, Ministry of Environment & Forests, Government of India and affiliated to Nehru Yuva Kendra Sangathana, Govt of India.

### Collaborator:

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