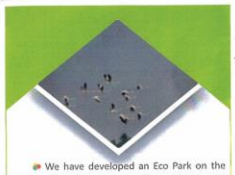
MANGROVE FOREST BROCURE



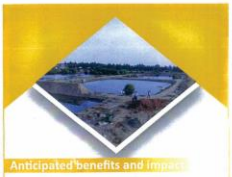
We have developed an Eco Park on the western side of the bank to educate the tourists and the fishermen community in the 42 coastal villages and the school children on the importance of the coastal eco system to protect their lives and improve their livelihood.

This park is part of the Eco Tourism initiative and a pond will be developed as a model fish hatching and breeding pond in technical collaboration with the Department of Fisheries. A back water fingerling seed bank needs be developed to replenish the fish stock in the local ponds and estuary.

There are 325 hectares of marshy land available on the either sides of the estuary to plant at least 5, 00,000 to 10, 00,000 mangrove saplings.

Before planting the saplings, it is imperative to destroy the deadly Prosopis Julifora from the area

Another important felt need is to remove the accumulated sands from the estuary mouth with machines and local community participation to ensure free mingling of sea water with estuary water.



Anticipated benefits and impact

The thick growth of mangroves in future will be habitat for migratory birds to roost and breed. Moreover, endangered species will find their habitat here.

The estuarine eco system with their evergreen canopy will improve and it will contribute to mitigating the global warming.

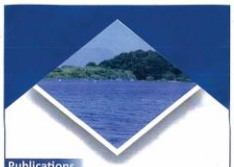
The leaf litters falling from the mangrove tress will feed the estuarine fish and it will improve the quantity of fish stock, thereby considerably improving the livelihood of the estuary dependent families.

The Eco Tourism Center will attract eco tourists and the area will emerge as a marine eco tourism spot in future. The local economy will get a boost through eco tourism and the local community will get conservation linked livelihood income.

Eco Park will be a community education center for tourists, local community and school children.

It will contain information on marine fish stock. It will protect and conserve the Anguilla (eel) which is under endangered species.

Thick mangrove forest cover will act as a bio shield to protect the local community in the event of natural disaster like Tsunami in future.



Publications

- A Manual for community Workers: Medicinal Plants of Maruthuvazhmalai.
- Veethikku Vantha Nikazhvugal – A book in Tamil containing street plays and songs on common problems faced by the people.
- A Training Manual for Parents on the Care of CP and MR (in Tamil) originally published by WHO.
- Consumer Rights Manual (in Tamil).
- Coastal Sand dunes in English and Perumanal Ulagam, a hand book in Tamil.
- Climate change, a hand book in Tamil Paruvanilai Mattram.
- Hand Book on Disaster Awareness Education for Children
- Vaandukalin Reengaram a Quarterly Children's Magazine
- Hand Book on Kitchen Garden.
- Eradicate Prosopis Julifera a hand book on Environment.
- A hand book on **"Good bye to Solid Waste"**

Awards

- Thanga Mamani Award for the Best Social Worker in the year 2006 by the Cultural Academy of Chennai, Tamil Nadu.
- Gold Star Millennium Award and Gold Medal for Star Achiever 2012 presented by National Integrity and Cultural Academy Chennai.

CHILDREN

COMMUNITY ENVIRONMENT

HEAL MOVEMENT

22C, Scott Nagar, Near Scott Christian College, Nagercoil - 3,Kanyakumari District, TN, India.
Tel: 04652 228496,

Email : **heal_m@hotmail.com**
siluvaivasthian@gmail.com
Web : **www.healmovement.org**

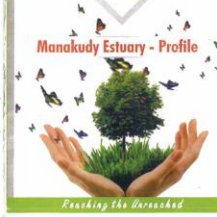
www.healmovement.org

HEAL MOVEMENT

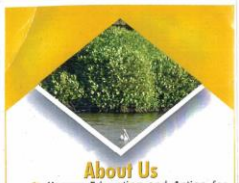
CHILDREN

COMMUNITY ENVIRONMENT

Manakudy Estuary - Profile



Reaching the Unreached



About Us

Human Education and Action for Liberation Movement abbreviated as HEAL Movement is a non profitable grass root level voluntary organization with its activities focusing on community empowerment of disadvantaged people and environment protection since 1984 in Kanyakumari and Tirunelveli Districts.Networking activities going on throughout Tamil Nadu

Vision:

HEAL visualizes an egalitarian society based on equality, justice and opportunity to all irrespective of caste, religion and socio economic status.

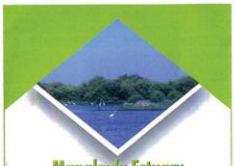
Mission:

Facilitating people's organizations at the grass root level and coordinate to find solutions for the betterment of their life marching towards egalitarian society.

Target group / Issues:

Women and children, Youth, Disabled, Dalit, Widows, Fisher folk, Sea Shell Collectors / Workers and other Marginalized community.

Environment, Water And Sanitization, Child Labour, Alternative Energy, Natural Forming Partices, Coastal Eco System.



Manakudy Estuary

Manakudy estuary covering an area of 145 hectares with a depth of 6 to 10 meters is the largest estuary in Kanyakumari district, Tamilnadu. Pazhayar river originating from Western Ghats mountains converges at Manakudy to create the estuarine water system.

There is rich estuarine fish stock – , 38 species of fin and shell fishes of commercial importance are found in the Manakudy estuary. Average fish catch is 80 to 280 kg/day. Etroplus Suratensus (Pearl spot), Gerres abbreviates (milk fish), Arius maculates (cat fish), Sillago sihama (silver whitting), Lates Calcarifer (Sea boss) etc. The 38 fish species shall be grouped as fishes (30), shrimps and prawns (5) and crabs (3). They are residents and transients. The 38 species of fishes are further classified under 13 families and 23 genesus.

They provide livelihood to 46 estuary dependent vulnerable fishermen families.

More than 80 wetland bird species are found in Manakudy estuarine system. These birds belong to about 50 genera and 20 families, exhibiting a high degree of avifaunal diversity. Prominent among them is gorgeous Greater Flamingo.

Other birds include; Dabchick, two species of Pelicans, three species of Cormorants, Snake Bird, over ten species of Egrets and Herons, Open bill Stork, Painted Stork, Spoonbill, Black Ibis, Glossy Ibis, Blockheaded Ibis, Plovers, Sandpipers, Black winged Stilt, Gulls, Terns, Kingfishers and Wagtails..

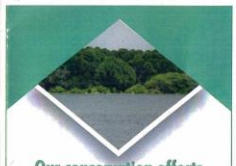
Manakudy Estuary is declared as the **"Estuary Birds Sanctuary"** by Tamilnadu Government in 2012.

However, the estuary is facing a threat from the following sources; the thick growth of Prosopis Julifora on either side of the banks has been posing a threat to the estuarine eco system as this poisonous bush tree destroys any eco system under its shade.

The disposal of solid waste, particularly plastics into the estuary by tourists and local population pollutes the water and causes depletion of the fish stock.

The coir retting units located around the estuary release poisonous effluent called ret liquor into the estuary. Heavy concentration of Hydrogen Sulphide in the effluents reduces the oxygen in the water and thereby causing the depletion of the fish stock.

The estuarine mouth on the southern side is blocked by sands washed ashore by sea waves and hence it prevents the mingling of sea water into the estuarine water. The free exchange of sea water into the fresh water in the estuary is vital to maintain the salinity of the estuary water system where fish breed and flourish.



Our conservation efforts

One of our Board members, Dr. G. Santhana Kumar planted about 10,000 mangrove saplings in a patch of land on the western side of the estuary in 1992. Now it is thick mangrove forest cover for estuarine based birds and bats.

Since 2005, Heal has been implementing the following programs/activities to improve the estuarine eco system. Sensitized the local community on the importance of estuary and mangroves for their livelihood and protection against sea based disasters, thereby securing their involvement and participation in the restoration and conservation of the estuary.

The local community gathered Rhizopora propagules and raised a nursery. Dr. G. Santhana Kumar trained them to raise the nursery in an innovative KEM method – an environment friendly method with minimum casualty.

12,000 Rhizopora saplings planted on the eastern bank of the estuary with the participation of the community.

Reed bed management system was established at the entry points of ret liquor effluents through Reed Bed system which is Typha and Cyper grass the roots of which breaks the sulphur from the effluent water coming from the retting ponds. The Reed bed treatment teaches the local community about bio filtration. The roots absorb the sulphur and thereby reduce the pollution of the estuary.

Kayal Development Committee was Formed to Monitor and Protect the estuary with members from Manakudy Estuary Development.

The needs

It is a felt need to develop Eco Tourism Center near estuary to popularize the Bird Sanctuary and the Mangrove Forest. Eco Tourism will promote / strengthen the conservation activities as it will improve the local livelihood options of the community.

Eco Tourism, thus will be a conservation linked livelihood initiative. It will have a watch tower to view the birds and a boat service to ferry along the backwaters.

The Bird Sanctuary is the felt needs of the hour for the following reasons; For example, Grey Pelican, Snake Bird, Painted Stork, Black headed Ibis and the Black tailed Godwit are listed as near threatened species by Bird Life International. The migratory birds visiting this estuary breed in the northern latitudes as far as the Arctic Circle. The smallest migratory species is Little Stint which weighs about 25 gram.