

LiFE in Indian Fisheries: Practices from Yesterday and Today





Prime Minister Shri Narendra Modi jointly launched Mission LiFE (Lifestyle for Environment) with U.N. Secretary-General Antonio Guterres

Concept & Presentation
M. Sri Hari & Rajdeep Mukherjee

Let's Turn to LiFE

Unveiled at UNFCCC COP26 by the Prime Minister of India and UN Secretary General, Mission LiFE (Lifestyle for Environment) is a clarion call for transcending the 'use-and-dispose' culture to a circular economy of mindful coexistence. Through the lens of LiFE, the fisheries sector can metamorphose from a livelihood source to a community of guardians, cradling the blue heart of our planet while nurturing its bounties for the tapestry of life ahead.

As this initiative anchors in the fisheries sector, it unveils a treasure trove of sustainable practices. It beckons a return to time-honoured community-shepherded fisheries activities while embracing the modern-day compass of behavioural nudges towards eco-conscious seafood choices. It envisions a seascape where participatory governance is the norm and fisheries waste is valorised into organic fertilizers or aquafeeds, opening new economic vista.

In this humble publication, random snippets on India's rich tapestry of socio-cultural and traditional practices are presented, enlightening the path towards sustainable living with Mission LiFE. From the spiritually significant month of Shravan to the embrace of boundless solar energy and the sustainable promise of aquaponics, the narrative intertwines ancient wisdom and modern sustainability. We present the continuity of the practices ingrained in the fabric of the nation, transcending from the past to present.

By documenting and recognizing simple good environment-friendly behaviours across the sectors, we can collectively champion the cause of harnessing greater environmental outcome, catalysing widespread adoption of environment-friendly lifestyles.

Team BOBP-IGO



Swachh Sagar, Surakshit Sagar is a pathway to **LiFE**



*Coastal cleanup
drive in Mumbai,
Maharashtra*

The beach clean-up drive by Government of India has been hailed as one of its kind. It will be the longest-running drive with the highest amount of participation and spreading awareness.

The coastal regions rely on tourism and fisheries. Hence, beach clean-ups are essential for local livelihood and improving the local economy.

Conservation is a way of **LiFE** for Indian fishers



Fishers are constructing fish sanctuary using bamboo poles in Vembanad lake, Kerala

Traditional ecological knowledge (TEK) can play a key role in providing information related to biology of fishes which helps in adopting conservation measures.

The traditional fishing community of Vembanad lake construct fish sanctuaries to protect fish resources.

LiFE is not only for environment but also for conflict management



*Fishing boats in
Palk Bay, Tamil Nadu*

Conflicts between traditional and mechanized fishing vessels were prevalent in the Palk Bay and Gulf of Mannar region of Tamil Nadu.

To address the issue, a 3-4 day rule was introduced in 1993, allowing mechanized fishers to fish for three days and traditional fishers for four days.

This innovative co-management system has been effective in maintaining law and order and preventing conflicts in the region's fishing grounds.

LiFE provide for community-based management of resource by fishers



Pulicat Lake , where Padu system is being practiced

Community-based fisheries management (CBFM) is an approach to managing fisheries resources that involves participation of local communities in decision-making processes.

Padu system of community based management is being practiced in Kerala and Tamil Nadu, which addresses several problems by devising collective action.

Symbiotic relationship between mangroves and fishers is a case of **LiFE**



*Mr. Murukesan,
known locally as
Mangrove Man,
working relentlessly to
restore mangroves
in Kerala*

Mangroves provide protection for fishers against cyclones, storm surges and other natural calamities.

They are spawning and nursery grounds for important fish and shellfish apart from providing habitat for many aquatic fauna.

Fishers are traditionally known to preserve wetlands and mangrove forests.

Fish vendors being conscious about plastic pollution is a case of **LiFE**

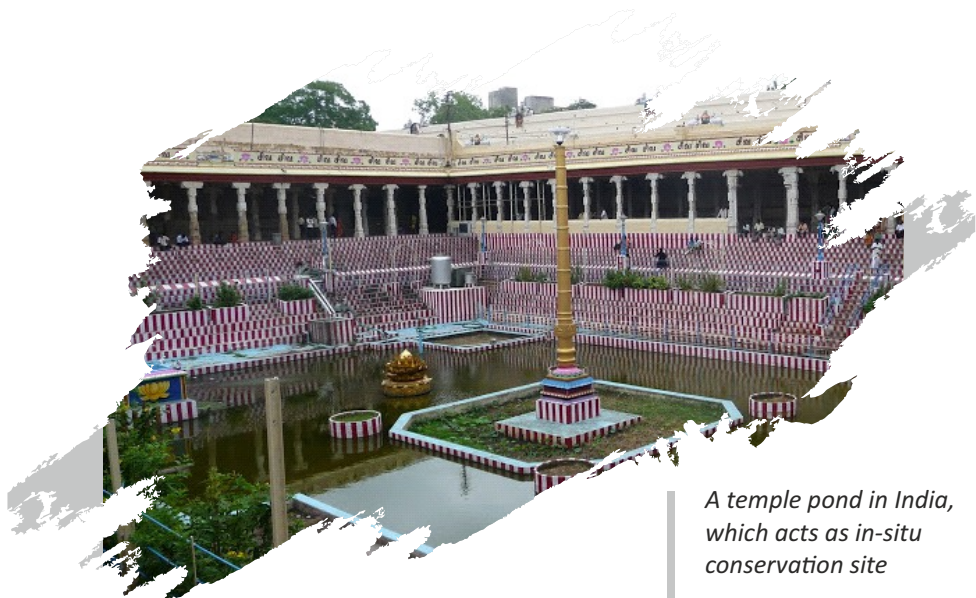


Fish vendors in India

Small fish vendors in the countryside of India use eco-friendly packaging materials like paper and leaves which reduces the environmental impact of their operations.

They avoid the use of single-use plastics, which can harm aquatic life and pollute the environment.

LiFE is integral to religious beliefs and culture in India



A temple pond in India, which acts as in-situ conservation site

Temple ponds in India which are often important sites for religious worship are also home to a variety of fish species. Some of them are considered sacred by the local communities.

The Government has declared Amboli region in Western ghats as a Biodiversity Heritage site.

This comes at the backdrop of *Schistura hiranyakeshi*, a rare fish species from a local temple pond.

Meeting of ancient tradition
with modernity is integral to

LiFE



*Devotees near a river
in the month of
Shravan*

Shravan is one of the holy months in some parts of India. Every day of this month is laden with religious significance.

Shravan coincides with the breeding season of fishes in the rivers. Fishing during this time is prohibited by traditional norms as the female fish would carry eggs. There are laws that prohibit the catching of fish during monsoon to protect and conserve riverine fishes.

Greening is a **LiFE** for Indian way of fishers



Fishermen of Thoothoor village in Tamil Nadu have fitted solar panel on top of wheelhouse

Solar energy is considered a promising energy source due to its limitless supply, widespread availability, and environmental friendly nature.

In recent years, a growing number of fishermen in India are adopting innovative and sustainable practices to reduce environmental impact of fishing.

One such practice involves the use of solar energy in boats, which has emerged as a promising alternative.

Integration of agriculture and aquaculture is **LiFE**



Aquaponics is a sustainable and environmentally-friendly method of growing food.

Adoption of aquaponics culture practices will contribute to the conservation of natural resources, promote food security, and support the livelihoods of small-scale farmers.

*Women labour force
in India's largest
aquaponics farm in
Maharashtra*

Conservation of endangered animals is way of **LiFE** for Indian fishers



Fishermen releasing sea cow back into the sea in India

Sea cows and sea turtles are provided with legal protection against hunting and commercial exploitation under the provisions of the Wild Life (Protection) Act, 1972.

Indian fishers are traditionally aware and conscious of the importance of endangered species to the environment. Even when these species are caught in fishing gears, fishers release them back into the sea.

LiFE advocates sustainable diving and responsible exploration



*Scuba diving in
Malvan,
Maharashtra*

Diving is a great underwater experience to explore the beauty and nature that lie beneath the ocean. Ecotourism, when done correctly, can create positive environmental and social impact.

Using mooring buoys instead of anchoring;
no-touch policies for aquatic life and
maintaining good buoyancy to prevent
accidental knocking, kicking or stepping,
can protect the corals.

Modern Quarantine facilities are testimony to **LiFE**



Aquatic Quarantine
Facility in Chennai,
Tamil Nadu

Litopenaeus vannamei, the Pacific whiteleg shrimp accounts for 95% of farmed shrimps in India.

As the broodstock is imported from abroad, a robust quarantine framework and institutional mechanism is in place to check escapes and invasion to water bodies.

Modern effluent treatment facility in shrimp farms represents **LiFE**



A Shrimp hatchery in India with modern facilities

In India, there are legal provisions mandating appropriate control on the discharge of wastewater generated by shrimp farms and hatcheries.

Farmers in India incorporate an effluent treatment system as a part of a shrimp farm to improve wastewater quality and establish longterm sustainability strategies for shrimp farming in the country.



“This word is LiFE, which means ‘Lifestyle For Environment’. Today, there is a need for all of us to come together and take Lifestyle For Environment forward as a campaign. This can become a mass movement towards an environmentally conscious lifestyle.”

Prime Minister Shri Narendra Modi at COP 26

The Bay of Bengal Programme Inter-Governmental Organisation (BOBP-IGO), set up in 2003, is a unique regional fisheries body, specifically mandated to assist the member countries in increasing the livelihood opportunities and improving the quality of life of the small-scale/ artisanal fisher folk in the Bay of Bengal region. The current members of the Organisation are Bangladesh, India, Maldives and Sri Lanka while Indonesia, Malaysia, Myanmar and Thailand are cooperating non-contracting parties.

The core objectives of the BOBP-IGO are to increase awareness and knowledge of the needs, benefits and practices of marine fisheries management; enhance skills through training and education; transfer appropriate technologies and techniques for development of the small- scale fisheries; establish regional information networking; and promote women's participation in marine fisheries value chain.

The Organisation evolved from the erstwhile Bay of Bengal Programme of the Food and Agriculture Organization (FAO) of the United Nations (UN) founded in 1979. Over four decades of operation, the Organisation has worked closely with the whole range of the stakeholders including the R&D Institutions to develop pathways to capacity enhancement for a sustainable future of the region. It has set international benchmarks in execution of programs and activities in the field of small- scale fisheries that has translated into measurable benefits for the member countries.

For further details, please see: www.bobpigo.org.



Bay of Bengal Programme Inter-Governmental Organisation

91, St. Mary's Road, Abhirampuram, Chennai - 600 018. INDIA