

**Friends of
Marine Life**



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FML Annual Report 2015-2016

About Us

Since 2000 Friends of Marine Life (FML) has been undertaking seabed ecosystem studies through oral history. FML activities have **formally instituted in the year of 2010 when UN declared international year of biodiversity. In this year we particularly concentrated on** seabed mapping and the results were presented in Hyderabad, India as Conference of Parties (COP)-Convention Biological Diversity (CBD). **Now FML is a registered organization under the** the Travancore Cochin Literary, Scientific and Charitable Societies Registration Act XII (1955) – Registration number TVM/TC/1244/2015 with the status of Non-Governmental organization. **The main purpose of the organization is to safeguard the marine biodiversity and coastal ecosystems services in South India. FML is also engaged documenting and sustaining the traditional and local knowledge of the coastal communities in India especially in Kerala and Tamil Nadu.** Under seabed studies, we have so far covered the Gulf of Mannar, Kanayakumari district in Tamilnadu, Trivandrum and Quilon districts in Kerala, around 2000 sq km area of near inshore and up to 43 m depth of the sea area. These studies led by a team of experienced academic and citizen marine researches, scuba divers and with the support of most knowledgeable traditional fishermen or ILK holders.

Most recently, in a response to UN Sustainable Development Goal 14: Conserve and sustainably use the oceans, seas and marine resources FML dedicated its services in the area of conservation and sustainable use of the coastal and marine resources.

FML also works with organisations with similar aims and objectives and institutions that involved in marine and coast related activities and trainings including the Kerala State Biodiversity Board (KSSB), Aquatic Biology and Fisheries Department (University of Kerala), Higher Education Institutions in the Coastal Areas, Higher/Senior Secondary Education Institutions in the Coastal Villages, Coastal Students Cultural Forum (CSCF), Venad Education and Social Services (VESS) and Coastal Watch.

FML has now 50 members and most of them are from the coastal communities who are above 18 years old and willing to contribute in the fields of marine and coastal ecology and biodiversity. FML conducts bi-annual General Body meeting for all members and

other interested people. It has 7 members Governing Body that undertakes the responsibilities of the execution of the activities in the coast. The Governing Body has 3 year term. The Governing Body conducts meeting every month and discusses income and expenditure of the organisation. As per the Bye-Law, the FML account will be audited by the Auditor appointed by the General Body every year.

Executive Committee

Robert Panipilla (President)

Harison B. (Vice President)

Benny S. (Secretary)

Metilda Cicil (Joint Secretary)

Rosamma V. (Treasurer)

Shrinivaasu S. (Executive Member)

Aneesha Ani Benadict (Executive Member)

Programme Team

Dr. A. Biju Kumar (External Scientist)

Mr. Robert Panipilla (Citizen Marine Scientist and Indigenous Marine Knowledge Expert)

Dr. Johnson Jament (Educationist and IPBES Contributing Author on Marine and fisheries issues)

Ms. Lisba Yesudas (Coastal Language Expert)

Dr. D. Sherly (Zoology and Fisheries Expert)

Mr. Shrinivaasu S. (Marine Biologist)

Ms. Aneesha Ani Benadict (Junior Marine Scientist)

Ms. Sindhu Nepolean (Indigenous Media Person)

Mr. Kumar S. (Junior Marine Bio-technologist)

Ms. Princy James (Junior Physical Oceanographer)

Main Activities

1. Seabed Ecosystem Studies
2. Indigenous & Local Knowledge (ILK)
3. Raising Awareness regarding Marine Sustainability through photo and video exhibitions
4. Ocean Environment Education
5. Dialogue Workshops
6. Member Capacity Building
7. Participation in Regional, National and International Events
8. Media Involvement (including Facebook discussions)
9. International Ocean Day Celebration

Seabed Ecosystem Studies

Under water documentation of seabed ecosystems: Since 2000 FML has been undertaking underwater studies of seabed ecosystems in South India, particularly Kanyakumari district of Tamil Nadu and Trivandrum-Quilon districts of Kerala. A unique feature of these studies is the use of indigenous and local knowledge (ILK) of Mukkuva communities in the regions. The studies are led by experienced marine researchers, scuba divers and citizen scientists.

Key and relevant findings in 2015-16 are:

- Eco Sensitive Areas or biodiversity hotspots are subject to destructions through mega port development projects (Vizhinjam International Transshipment Seaport construction has started in 2015, which has already destroyed important biodiversity spots including Neosebellaridae colony, which is conserved and protected by traditional fishing communities as their main livelihood locations in near inshore rocky reefs. Another proposal for the mega project-Kolachal port project- is in an area where comparatively better biodiversity hotspots.)
- In accordance with the nearest terrestrial features, Paravoor in the Quilon region of Kerala has different and varied ecosystem services where limited studies have been conducted where sea slugs are reported in the first time in the history of India.
- The study confirmed the traditional knowledge of fishermen that bottom trawlers (regional, national and international) has deteriorated the rich biodiversity in off shore platform reef ecosystems.
- Most importantly, FML study identified three sunken ships in these areas, which possess the history of more than three centuries of the regions.

These studies are supported by the expertise of organisations including the Kerala State Biodiversity Board (KSSB), Aquatic Biology and Fisheries Department (University of Kerala)

The study necessitates the sustainable use of the oceans, seas and marine and coastal resources. The implication of this should consider most urgently and importantly in the context where India's 70000 km coastal area has been subject to large and mega port and harbour constructions under the present Government's blue revolution agenda. This involves higher level of break water constructions and dredging activities, no concern or whatsoever to the marine and coastal environment. The coastal regions are the most important livelihood areas of traditional fishermen in India. Not many studies have been conducted here to explore and identify the marine and coastal biodiversity in these areas and not

much attention has been taken into account of the potential dangers of such activities and thereby informing conservation efforts in these areas.

Indigenous & Local Knowledge (ILK)

Documentation of ILK (Indigenous and Local Knowledge) of marine fisheries communities is another important activity was undertaken by FML. The final report had been submitted to UNESCO-IPBES institution to include in the Biodiversity Assessment of Asia-Pacific Region. (The report is attached in a separate document).

Raising Awareness regarding Marine Sustainability

FML conducted numerous and various Awareness programmes for the public and for the educational institutions of Senior Secondary level and Higher Education centres. The important agenda for these were marine sustainability and ocean health. This is started with a Photo and Video exhibition in the Trivandrum City for the public, 2500 people from different field participated in the programme, some media reported the event with some interests.

Ocean Environment Education

FML worked with local schools and colleges to develop curriculum interventions through Education for Sustainable Development. The curriculum content does not cover many aspects of ocean and marine related ecosystem services. In order to fill this gap, FML conducted workshop activities with the students in Higher Education and Higher Secondary Students in collaboration with coastal organizations such as Coastal Students Cultural Forum and Venad Education and Social Services. This activity has encouraged much attention and enthusiasm local educational institutions to continue such programme there.

Capacity building in marine sustainability

Capacity building in marine sustainability science is another programme that FML runs successfully over the years. FML activities such as coastal walk, engagement in the production of learning materials for the schools on marine matters encourages young people and youths to undertake course in marine and sustainability sciences. All these activities are deployed in collaboration with other similar interested organisations.

Dialogue workshops

With the funding from the UNESCO-IPBES, FML organised Local Dialogue workshops for the coastal communities in Trivandrum and Kanyakumari. A noteworthy feature is the participation and contribution of the coastal elder groups-*Chelaalikkoottam*

Participation in International Events

FML founding President, Mr. Robert Panipilla has participated and contributed to the international workshops in Thailand and Nepal. He was also shortlisted for the Indigenous Peoples Fellowship Initiative under the GEF Small Grants Programme (SGP) by the United National Development Programme (UNDP) in 2016-17 for the field of biodiversity conservation which has a Global component as well as National component.

Two of the FML Programme Team members were able to gain exposures, training and opportunities to work with scientists and other activists abroad; namely, Ms. Aneehsa Ani Banedict in Darwin Scholars Programme in the UK in August 2016, Ms. Sindhu Nepolean in a media exchange programme by Asian Indigenous People Pact (AIPP) in Thailand in connection with UNESCO during October.

These participations reveal the fact that there is limited representation of marine and fisheries related representation in these international events, trainings and workshops.

World Ocean Day Celebration

The world ocean day was observed on 8th June and FML volunteer took part in beach cleaning up activities. The public participation was also encouraged.

Way Forward

1. Continue the previous works...
2. Discussions are underway about documentary constructions on Ocean Sustainability Education with Trivandrum Planetarium and Asianet TV Channel
3. Discussions are underway for funded research projects with Kerala State Biodiversity Board (KSSB) about Seabed ecosystem studies.
4. Ocean Day Celebration: Ocean day celebrations will be conducted with an intention of implementing the outcomes of UN conference May 2017
5. Module preparation on Biocultural diversity of coastal communities are developed with the support of Sahapedia, online media intervention
6. Preparations are in place in terms of visual education series regarding seabed ecosystems and challenges through The Indian Express Online Edition.