

1ST DRAFT FOR MARINE LITTER POLICY

PREAMBLE

Government wants to show leadership

We are called to leave a legacy of care for the most important resource on the planet – the Sea, that is exceedingly endangered now and the impacts and costs of inaction on Fisheries & Aquaculture, Shipping, Tourism, etc. become environmentally unbearable.

Taking up the UN concept, marine debris comprises any anthropogenic, manufactured or processed solid material, irrespective of its size, discarded, disposed of or abandoned in the environment, including all materials discarded into the sea, on the shore, or brought indirectly to the sea by rivers, sewage, storm water or winds.

The aim of this draft is to address the adverse impacts of litter on the marine and coastal environment through the identification of its sources, prevention, reduction and removal, namely

- to prevent marine litter from entering marine and coastal environments
- to reduce marine litter's environmental impact and costs

1. Sources and types of marine litter (land and sea based)

Regrettably data on the amounts, types and origins of marine litter in the Indian coast is inexistent or very limited and parochial.

Sea-Based sources of marine debris, include solid waste such as lost cargo, abandoned, lost, or otherwise discarded fishing gear (ALDFG), derelict vessels, aquaculture, merchant shipping, fishing vessels, recreational boating, military fleets.

Land-Based sources of marine debris include municipal waste, riverine dumping, waterways dumping, discharge of untreated individual, collective sewage, industrial facilities and particularly tourism.

2. Impacts of marine litter – ecological, sanitary, social, economic and health.

REGULATORY PRINCIPLES to be adopted by a MARINE LITTER DIRECTIVE

- **ecosystem approach**
- **precautionary and preventive stance**
- **best available clean & eco-friendly technology**
- **polluter pays principle**
- **PAYT scheme** (pay as you throw)
- **EPR** (Extended Producer Responsibility)
- **IPP** (Integrated Product Policy)

A. COASTAL REGULATED ZONES

1. LOCAL BODIES

Rules on Solid Waste Management are comprehensive, but, implementation and enforcement is lacking. A strict implementation at urban & rural levels of Waste Management Rules (Solid, Liquid, Plastic, E-Waste, Bio- Medical, Construction and demolition Debris, Hazardous, etc.) is mandatory.

a) It shall be the responsibility of the concerned **Municipal Body and Grama Panchayats** to ensure that the Solid Wastes are handled as per respective SWM rules and no untreated sewage is discharged on to the coast or coastal waters.

- Properly design, and compel, that on the banks of water bodies, the sewage of all

toilets/septic tanks is periodically shifted by suitably equipped vehicles.

- Establish a centralized common Faecal Sludge Treatment Plant (FSTP) for Local Bodies of villages and small towns where all the sewage produced from that zone will be collected by suitably equipped vehicles.
- b) Annual reports on implementation of these Rules in their respective jurisdiction for the previous financial year shall be submitted to the respective Executive Officer of Taluk Panchayat in case of all Grama Panchayats and to the Deputy Commissioners in case of all Urban Local Bodies within 30th April of every year.
- c) All Taluk Panchayats in turn shall submit the compiled annual reports to their respective CEOs of Zilla Panchayats within 31st May of every year. All CEOs of Zilla Panchayats and the Deputy Commissioners of the respective Districts shall submit the annual reports giving the compiled status of implementation of these Rules to the Director, Municipal Administration or Secretary, Rural Development Ministry, with a copy marked to the regulatory bodies like State Pollution Control Boards within 30th June of every year.
- d) All state Pollution Control Boards/Pollution Control Committees shall submit the compiled annual reports of the state of the previous financial year to the Central Pollution Control Boards within 31st July of every year
- e) MLAs will submit yearly an Action Plan dressed by Panchayat Raj Engineers, to block, in all possible ways, leakage of litter from waterways, water bodies, rivers, envisioning the most efficient ways to capture debris before their reaching the sea

2. TOURISM DEPARTMENT

will tackle waste produced by tourism and recreation in coastal areas

- a) It shall be the responsibility of the concerned **Tourism Department** to ensure the compliance with the Waste Rules by all registered and non-registered Tourism service providers, as well as ensuring that no untreated sewage is discharged on to the coast or to the coastal waters by way of tourism.
- b) Old licence will be cancelled and no new licence be given for a period of 5 years, if the operators do not show evidence of provisions to strictly manage all solid and liquid waste (sewerage included) from the visitors, guests, hosts, lodgers.
- c) No permanent or temporary tourism operators shall be allowed to run any kind of business on the beach if facilities for the treatment and disposal of different waste streams are not provided including cigarette butts, sanitary pads and diapers.
- d) On the beach, common bins for previously agreed joint operators can be accepted within a no longer distance than 200mts
- e) An environmental tax is to be levied to tourists and tourist operators, to be used for clean-ups.
- f) A comprehensive penalty scheme is to be strictly affected to visitors and operators who litter.
- g) Take-back facility should be made available in outlets and shops. (For instance, return is given for items such as plastic bottles, sachets, electronic stuffs, etc., when given back to any similar item-selling units. Periodically, companies or gleaners should collect all the items and transport it to recycling units.

3. DEPARTMENT OF RELIGIOUS AND CHARITABLE ENDOWMENTS

- a) The concerned Temples will report to the Deputy Commissioners of respective districts on the provisions of these Rules. All temples, registered and non-registered,

to strictly manage all solid and liquid waste (sewage included) from the visitors, guests, hosts, etc.

- b) Non-compliance with the Rules will imply the closing of the temple for the time required to lawfully implement the management of their wastes.

4. PORTS, HARBOURS, MARINAS, ANCHORAGES - Undertakings and Reception Facilities

- a) Ports (fishing, boating, sporting...) must submit bi-annually Waste Handling Plans and have to offer PRF to any vessel compelled to land any waste produced/collected offshore, monitoring the discharges.
- b) install operational equipment in port facilities for the storage and recycling of litter
- c) provide training for fishers, seafarers, port agents and in charge officers
- d) create schemes for waste collection for all seafarers
- e) boost all stakeholders to participate in projects to remove lost fishing gear
- f) Special provisions for fishing harbours are to be given:
 - Single flat fee for fishermen to deliver garbage in port
 - Deposit return systems for key waste items such as buoys and fish boxes

- 5. **COAST GUARD** will take all the required measures to preserve and protect the maritime environment and to prevent and control marine pollution, such as:

- a) The **Commandant of the Coast Guard** shall monitor and enforce compliance with MARPOL, Annex V
- b) In coordination with key stakeholders, craft and implement a plan to manage vessels waste at ports reception facilities (keeping track record)
- c) remove lost fishing gear from the sea

6. POLLUTION CONTROL BOARD

The state Pollution control Boards/Pollution Control Committees as the case may be, shall be responsible for enforcing the said Rules in the state through their Regional Offices.

B. FISHERIES AND SHIPPING

1. GAPS IN LEGAL FRAMEWORKS AND INFRASTRUCTURES to be tackled

- Exceptions in regulations for most fishing boats
- Ports lack vital role in waste handling facilities and activities
- Lack of inspections and enforcement
- Lack of a Strategy for Sustainable Development of Fishing and Port activities
- Lack of regulatory corpus for the mounting impact of fisheries waste mismanagement

2. GENERAL ACTIONS TO REDUCE FISHERIES WASTE:

- Maritime States must fix as priority to fight gear loss and fisheries related waste
- Create operational framework for an integrated recycling scheme for major sorts of fisheries waste: nets, packaging polystyrene, lighting devices, buoys, etc.
- Compel companies to eco-design their products in line with the EPR
- Address the prior stages of products design to succeed waste reduction
- Address litter originating from aquaculture and industrial activities

- 3. **UPSTREAM PREVENTION** is preferable to downstream removal (in terms of resources and expenditures) so, stringent strategies to prevent lost/abandoned nets in the marine

environment have to be set, namely:

- Gear marking system at source to identify ownership
- Technology to avoid unwanted gear contact with the seabed
- Technology to track gear position
- Gear designs and materials that reduce the risk of gear loss
- Identify hotspots of gear tearing or/and prominent dumping sites
- Favour less-durable and degradable gear to reduce ghost fishing duration
- Buy-back facility for fishnets is to be provided by fisheries department or selling points.
- Marine spatial and temporal planning, (isolate passive and mobile gears to avoid gear conflicts and gear loss)
- Incentives for proper disposal of unwanted fishing gear
- Penalties for ALDFG at sea or seashore
- Adopt **Best Practices for Fisheries** waste management
- End of life options for fish gears are to be defined and certified by Fisheries Department
- Reward fishers for the nylon dolly ropes collected
- Suitable and accessible port reception facilities for retrieved fishing gear

4. COMERCIAL VESSELS DUTIES:

- The **Fishing for Litter Scheme** (ships collect marine litter during their fishing activities) mandates waste management on board for litter collected in fishing gear
- install equipment on board for the collection and storage of litter
- pay a proportional/tons fee for landing their waste in port
- have equipment on board to retrieve lost gear
- attempt to retrieve any ALDFG as soon as possible and, if cannot retrieve, immediately inform competent authority of gear type and location

5. CIRCULAR ECONOMY, applied to fisheries sector, calls for various innovative tools, namely IPP and EPR

- Design the product for its entire life-cycle
- Implement strict deposit/return schemes for key waste items (e.g. buoys, fish boxes)
- Choose reusable packaging
- Replace plastic petrol based material wherever possible
- Develop market for recycling fisheries waste items
- Ban products clearly designed to litter, such as polystyrene.

6. STRATEGIES TO IMPLEMENT

- **Extended producer responsibility:** Rules must explicitly force manufacturers to comply with EPR
- **Deposit/refund schemes:** Infrastructure for a national recycling scheme is necessary to support the return scheme – whichever be the condition of the gear when returned
- **Reward schemes:** Regulations must specify which authority will provide rewards or incentives (local/municipal gov't, etc.).
- **Environmental tax:** is to be regulated and applied to the most damaging alternatives
- **Gear marking at source:** Gear registration databases are to be created. Regulations for

gear marking are needed.

- **Good practices charts** for port authorities (civil and military), fishermen and fisherwomen (household and fish markets level)
- Simple **engineering waste catch system** fixed at rivers/backwaters outlet just before monsoon

C. CENTRAL & STATE GOVERNEMENT

1. Ministries of Commerce, Consumer and Corporate Affairs, will

- Create a legally binding framework for **Packaging and Packaging Waste** to highly impact on reducing marine litter, namely stopping all-India packaging under 50micron, and constrain to sustainably redesign individual sachet products which are hard to recollect and recycle.
- Force manufacturers to practice return/'take back' facility (with the possibility to keep deposits while selling huge quantity of goods in retail form)

2. Ministry of Science and Technology, as the National Institute of Design, will compel companies to eco-design their products in line with the EPR

3. Ministry of Human Resource Development shall implement **Ocean Literacy** frameworks across India at the formal and informal sectors to raise the required public awareness for civic society to solve marine debris.

4. **MARITIME STATES** are to develop and implement Plans of Action to address the negative impacts of marine debris in their waters, particularly tackling plastics and ALDFG.

5. An **INSTITUTE for MARINE HEALTH** (in coordination with GOs, NGOs and corporations) will be created with the mission to fix a timeframe for implementation, monitoring and assessment of the following strategies:

a) Land-based Marine Litter

- Strict implementation of Solid and Plastic Waste Management Rules in urban and rural areas
- Inclusion of Marine Litter Management in Local Bodies Waste Plans of Coastal Talukas
- Affect **Extended Producer Responsibility** Strategies to all producers and importers

b) Sea-based Marine Litter

- Strict enforcement of ratified international laws
- Reliable/Suitable Port Reception Facilities
- EPR schemes or deposit systems for fishing gears
- Strict fines for littering at ocean

c) Downstream litter removal

- Organize fishing for litter schemes
- Identify current or historic abandoned, lost and discarded fishing gear (ALDFG) hotspots
- Retrieve ALDFG

d) Education and Public Awareness on Marine Litter

- Launch educational drives for fishermen & fisherwomen on their lawful and civic duties
- Promote ocean literacy for all, including the tourism sector
- Create environmental awareness programs for fishermen fisheries sector
- Raise public awareness on the impact and prevention of marine litter

GLOSSARY

ALDFG – Abandoned, Lost, or otherwise Discarded Fishing Gear

EPR – Extended Producer Responsibility

FSTP – Faecal Sludge Treatment Plant

IMO – International Maritime Organization

IPP – Integrated Product Policy

PAYT – Pay As You Throw

SDG – Sustainable Development Goals

SWM – Solid Waste Management

UNCLOS – United Nations Convention on the Law of the Sea