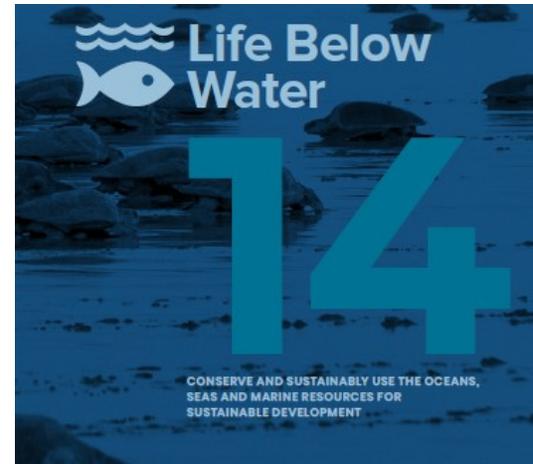


SUSTAINABLE DEVELOPMENT GOALS

SDG-14 LIFE BELOW WATER





WHAT IS LIFE BELOW WATER?

- Life below water is an issue in relation to fisheries, and other living organisms underwater.
- Over three billion people depend on marine and coastal biodiversity for their livelihoods
- Oceans contain more than 200,000 identified species, but it is estimated that 91 per cent of ocean species have yet to be classified and that 95 per cent of the ocean remains unexplored.
- Oceans absorb about 40 per cent of the carbon dioxide produced by humans, buffering the impact of global warming.
- They also serve as the world's largest source of protein, with more than three billion people depending on them for their primary source of protein

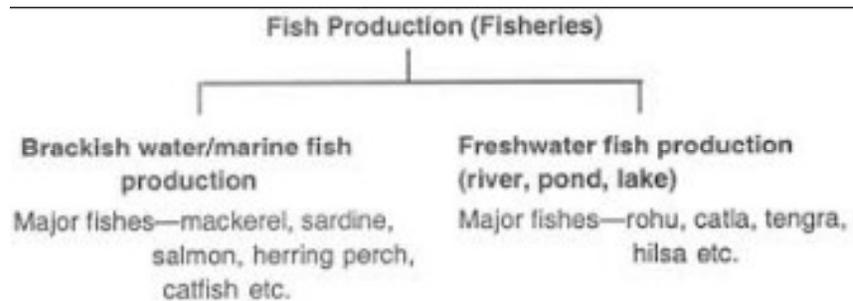
WHY GOAL 14?

- Illegal and unmonitored fishing threatens many fish species and prevents efforts to save and restore global fisheries and related jobs.
- Goal 14 commits countries to conserve and sustainably use oceans, seas and marine resources.
- It focuses on preventing marine pollution, ending illegal and destructive fishing practices, and sustainably managing and protecting marine and coastal ecosystems while increasing scientific knowledge, research and transfer of marine technology to improve marine health.

THE INDIAN APPRAOCH

- India is a signatory to MARPOL (International Convention on Prevention of Marine Pollution). Levels of marine pollution are being monitored at various locations along the country's coastline through the Coastal Ocean Monitoring and Prediction System.
- The blue revolution is a turning point to ensure marine life is protected in India was essential for the sustainable development of life below water.
- This includes traditional and small farmer which use Capture fisheries which comprise complex human activities within the overall national economy and within society in general.
- Overfishing is probably the most important problem facing capture fisheries.
- Coastal fisheries get affected drastically by environmental degradation of the adjacent land, which can affect life cycles of fish stocks, migration of fish from fresh water systems to the sea and by population pressures leading to increased coastal subsistence fishing.

The term “Blue revolution” refers to the remarkable emergence of aquaculture as an important and highly productive agricultural activity. Aquaculture refers to all forms of active culturing of aquatic animals and plants, occurring in marine and fresh waters.



Many Species of freshwater and marine organisms are being cultivated as highly productive and nutritious crops for consumption by humans.

It is the rapid expansion of intensive, commercial aquaculture, It Came in a decade after the Green Revolution (1970s; chemical-based agriculture)



Transforming Fisheries Sector - Supporting Livelihoods



Creation of Department of Fisheries

- To provide sustained and focused attention towards holistic development of fisheries and welfare of fishers and fish farmers
- To provide requisite impetus towards economic empowerment of fishers and fish farmers

Major Schemes and Programmes

- Centrally Sponsored Scheme "Blue Revolution" implemented with Central outlay of Rs. 3000 crore
- "Fisheries and Aquaculture Infrastructure Development Fund" (FIDF) to the tune of Rs. 7522 crore created in 2018-19
- Benefits of 'Kisan Credit Cards' (KCC) extended to fishers and fish farmers to meet their working capital needs
- Empowerment of traditional fishermen in Deep Sea Fishing by providing requisite skills and assistance for purchase of vessels
- National Policy on Marine Fisheries, 2017 announced

Significant Growth in Fisheries

- Fish production registered all time high at 126.14 lakh tonnes (2017-18) with an average annual growth of 7.14% for the last 4 years
- Export earning from fisheries sector registered at Rs. 45,106.89 crore during 2017-18 with an impressive average annual growth of 11.31% in last 4 years



**NAMUMKIN AB
MUMKIN HAI**

Government of India
Ministry of Agriculture and Farmers Welfare
Department of Fisheries



- Blue Revolution scheme to bring 42,632 hectares of land under aquaculture in both fresh water and saline water areas
- India ranked second in world for aquaculture production; exported fish and fisheries products valued at Rs 46,589.37 crore in 2018-19
- Rs 20,500 crore Pradhan Mantri Matsya Sampada Yojana (PMMSY, Fisheries and Aquaculture Infrastructure Fund (FIDF), extension of Kisan Credit Card scheme to the fisheries sector
- Massive technological support through ISRO's NAVIC systems and fishing area exploration have helped boost India's fish production
- Rs 1 lakh crore of fisheries' export target for 2024-25 set by the Modi government
- 3,477 Sagar Mitras and 500 Fish Farmer Producer Organisations conceptualized and approved involving youth in fisheries extension





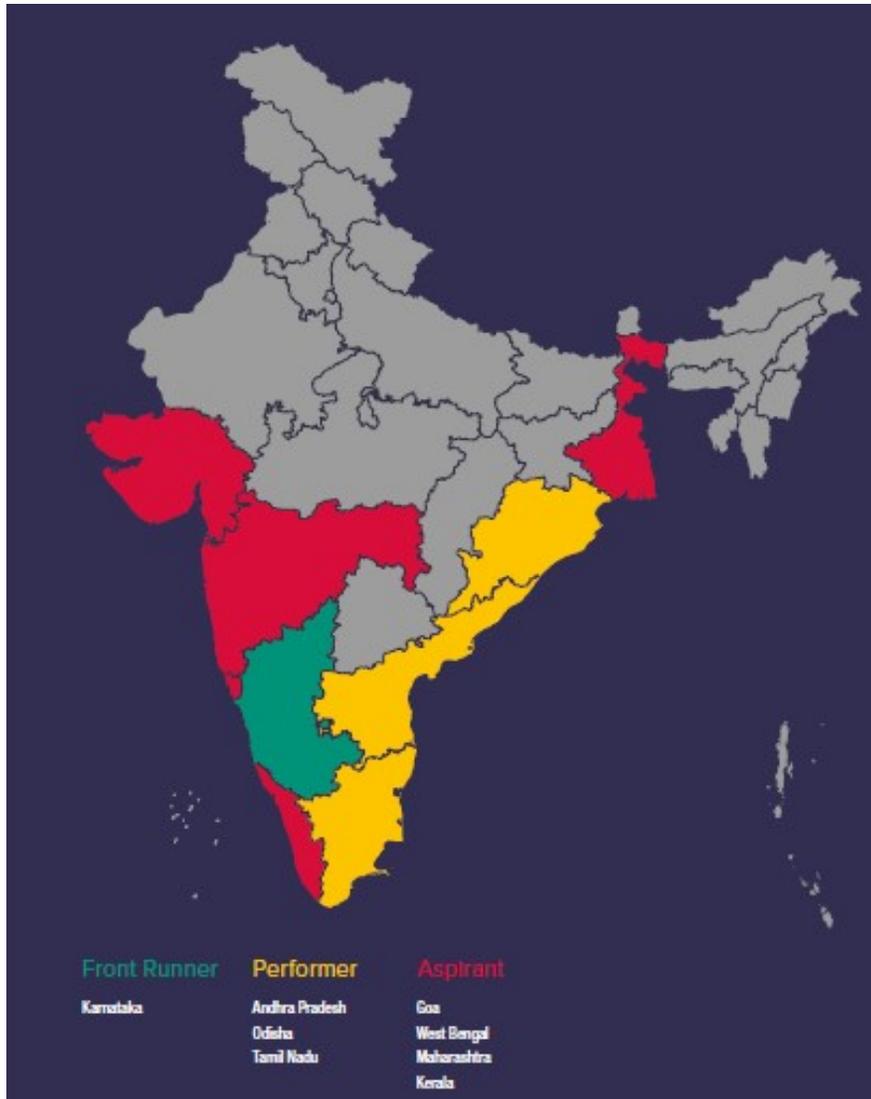
ACTION TAKEN

- Establishment of a Potential Fishing Zone Advisory programme, modernization and up-gradation of fishing centres as well as banning of mechanized fishing in certain areas have been set up for sustainable fishing with an emphasis on livelihood creation.
- The Integrated National Fisheries Action Plan connects 15 million beneficiaries for livelihood opportunities through various interventions.
- In 2017, the National Marine Fisheries Policy was notified for the first time, highlighting the challenges of overfishing and climate change, with greater emphasis on monitoring and control of coastal fishing to improve stakeholder participation and regulation.

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- 25 Marine Protected Areas (MPA) have been set up and used as units for protection of marine and coastal natural resources and biodiversity conservation as well as the wellbeing of people dependent on them for their livelihoods.
 - Further, in June 2019, the government created the first Ministry for Fisheries, Animal Husbandry and Dairying.
 - A Mangrove For the Future (MFF) is a unique partner-led initiative to promote investment in coastal ecosystem conservation for sustainable development. Co-chaired by IUCN and UNDP, MFF provides a platform for collaboration among the many different agencies, sectors and countries which are addressing challenges to coastal ecosystem and livelihood issues.

THE SUNDARBANS

- Since the advent of modern technology, the prawn industry has only continued to grow in size but is a volatile industry.
- The prawn industry has contributed significantly to deforestation, salinification, and loss of biodiversity in the Sundarbans.
- Landowners wanting to break into the prawn business clear their plots of any vegetation and construct perimeters like bunds around pools of saline water. Excess saline in soil renders the soil infertile for agricultural growth.
- Clearing of native vegetation, only to be replaced by a monoculture of one species of tiger prawn, is a devastating blow to the number of species found on the islands.
- It is a loss of a source of food and habitat for many creatures, leaving them vulnerable to starvation and death .



PERFORMANCE INDICATOR

11%
of available potential area
developed under coastal
aquaculture



Icon of a fishing boat and fish.


0.35% ↑
Increase in nitrogen
fertilizer usage in
coastal states

ONLY 2 OUT
OF 9 MARITIME
STATES FALL IN

good
CATEGORY

Coastal Water
Quality Index



Icon of fish.

FACTS


3.82% ↑
area under mangroves

Icon of mangrove trees.


7.8 -8.2
Median pH of coastal
waters in shore zone

Icon of coastal water with fish, jellyfish, and coral.

CHALLENGES

- The implementation of the policies that have been introduced is the biggest challenge to this goal as the targets are diverse. Given the diversity of needs and challenges India faces, it is essential not only to identify additional and new ways of enhanced finances along with ensuring appropriate and timely deployment of finances.
- The graduation from artisanal vessels to mechanized boats has not fetched sustained better earnings and working conditions, greater control over the market dynamics, or lower levels of indebtedness.

CONCLUSION

- Life below water is an essential element of our ecosystem and needs to be addressed and taken care of to ensure a sustainable future for people depend on it but also for the marine life.
- The blue revolution in India if monitored and implemented to attain optimum results will be a ray of hope to this endangered sphere.
- Being home to two of the most important water bodies i.e the Sundarbans and Lake Chilika along and many others, preserving and efficiently utilizing these resources whilst ensuring productivity through effective policies and scheme is of utmost importance.