Needs on Disaster Preparedness *(Perspectives on Marine Biology)*

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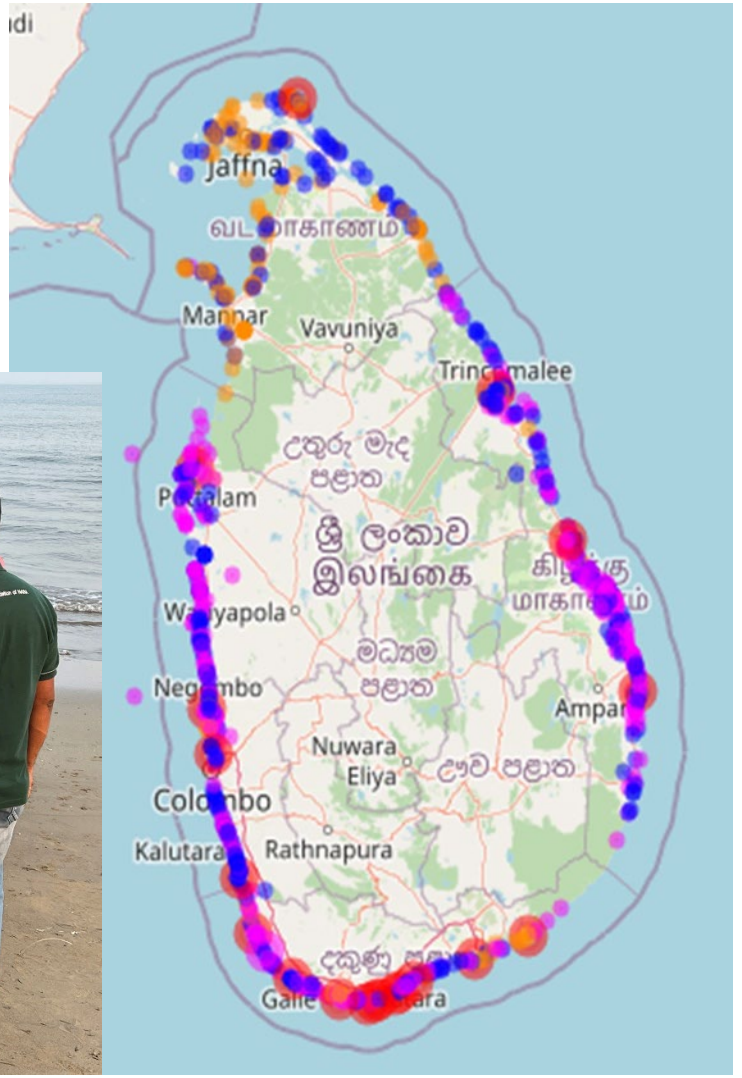
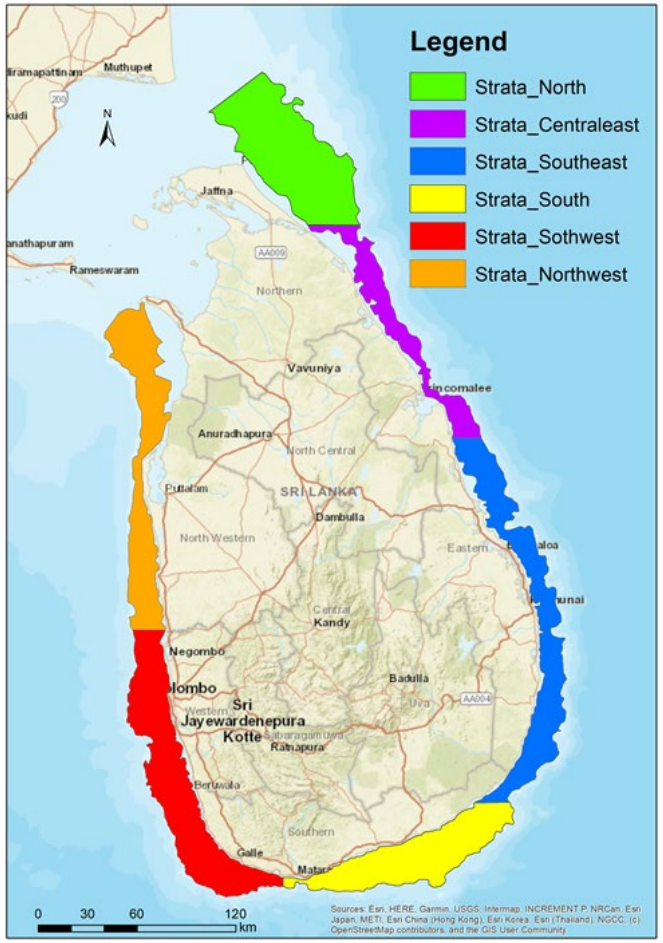
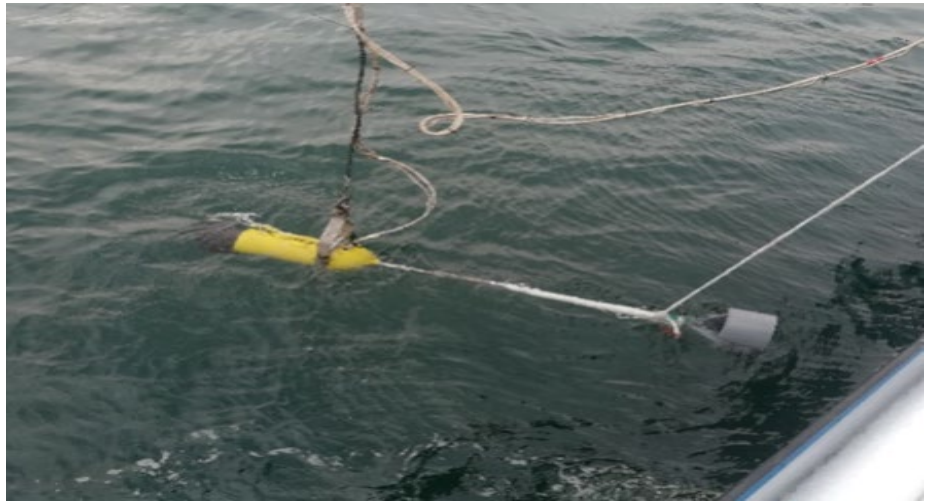
Fisheries monitoring programmes (Port monitoring)

1. Large pelagic fish
2. Small pelagic fish
3. Demersal fish



Acoustic and Ichthyoplankton surveys using R/V Samuddrika





Coral reef monitoring programme

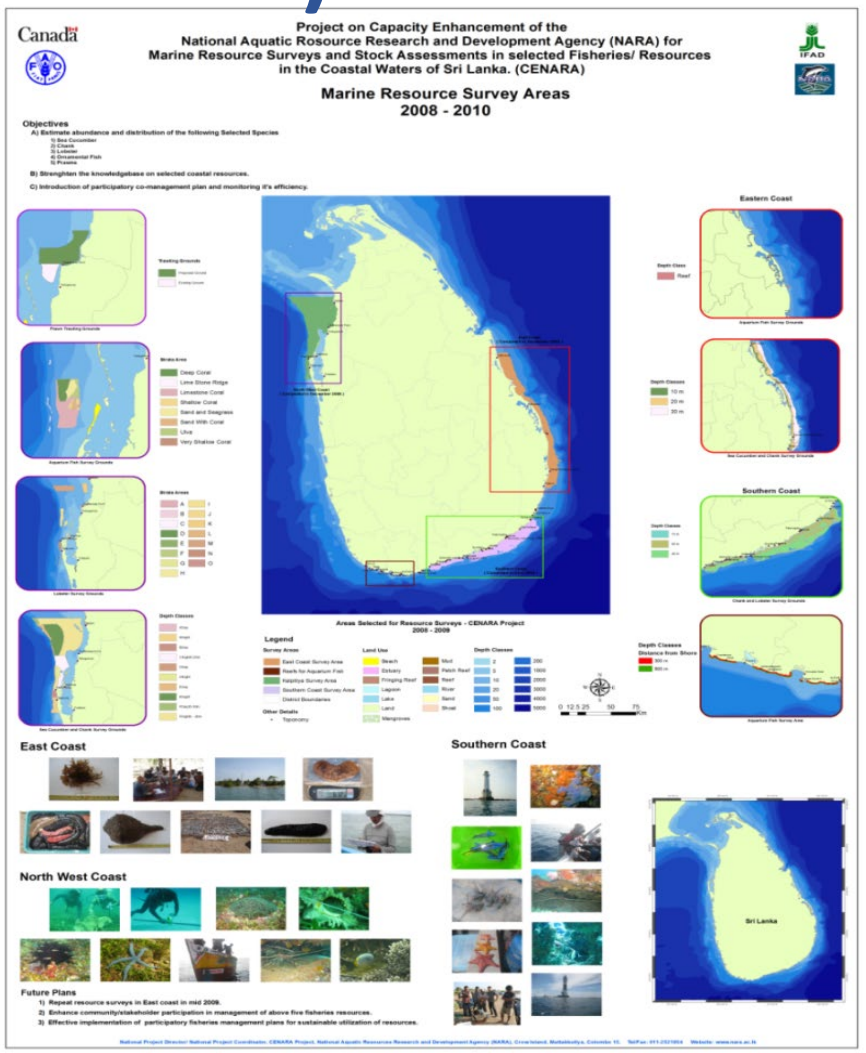
Assessing of coral species/ fauna diversity, climate change impacts

Method : Under water visual survey

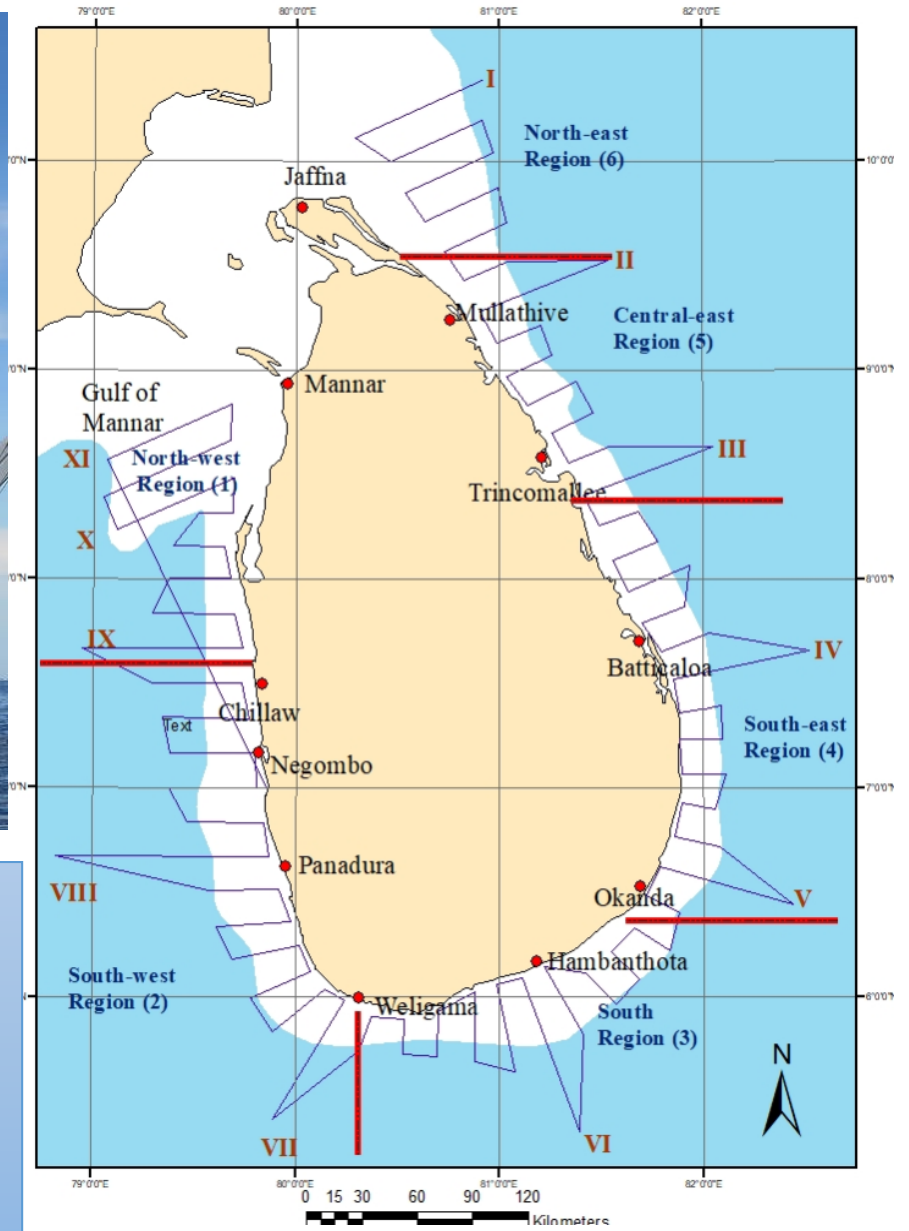
Marine Mammals monitoring programme

- Sighting record through commercial whale watching operators
- Stranding data including dead and live
- Photo for individual identification of blue whale (update whale catalogue)
- Marine mammals and fisheries interactions

Marine Resource Surveys and Stock Assessments for Selected Fisheries/Resources in the Coastal Waters of Sri Lanka (CENARA)



Dr. Fridtjof Nansen Survey (2018)



Biodiversity, Oceanography, Fish stocks, Plankton (phytoplankton, zooplankton, Ichthyoplankton)Water Chemistry, Pollutants (micro and macro plastics) and Marine mammals

What we expect from this training programme?

- To prepare sampling plans, sample size and frequency for collecting fish (fin fish & non-fin fish) samples, surveying, and monitoring
- To know on standard storage/ preservation techniques for specific tests
- To know how maritime disasters would impact on fish stocks, fish larvae and breeding grounds
- To explore techniques in histopathology to understand possible acute and chronic toxicity in fishery resources (both fin fish and non-fin fish).

What we expect from this training programme?

- To understand procedures for on long term monitoring of fish for bioaccumulation in order to share the knowledge on total duration and frequency needs in the damage assessments.
- To plan experimental fishing in terms of sampling locations, sampling frequency, sample size and other required variables
- To study how pollutants would affect the fish stocks in relation to their dynamics, behavior and migratory patterns governed by physical, chemical & biological parameters of the marine environment.
- To assess the impacts on sensitive habitats; corals, seagrass beds, mangroves and associated species as well as ETP species such as marine mammals and turtles.

What we expect from this training programme?

- To know qualitative and quantitative methods for environmental contaminants in biological (fish, molluscs, sea grasses, sea weeds, plankton) and environmental samples (water and sediment) and use of accepted instrument to detection/analysis
- To develop sampling, selecting target species, quantity requirements for specific testing, sampling frequency and duration for testing seafood for contamination, sea food risk assessment and safety.
- To assess the suitability of fish for consumption and thereby to provide necessary recommendations for decision making.
- To identify harmful algal blooms (HABs) and qualitative and quantitative analysis of algal toxins, using of novel techniques for rapid detection.

What we expect from this training programme?

- To understand the environmental damage cost (the cost incurred by repercussions of direct and indirect environmental impacts)

Also, share your experience/idea on…

- How to deal with non-research communities (such as media, politicians, general public, fishing communities, legal bodies etc).
- Being a court case what we must kept for evidences, what we can discard and what would be accepted accuracy levels in international courts?
- Safety issues during sampling? Eg. Accidental inhaling of fumes? Underwater diving for visual surveys?


THANK YOU