



INSTITUTE OF MARINE RESEARCH



Needs for Capacity Building in Marine Science and Sustainable Fisheries Management

by

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UN/ICP/Oceans & Law of the Sea; N.Y. 21-5/06/10

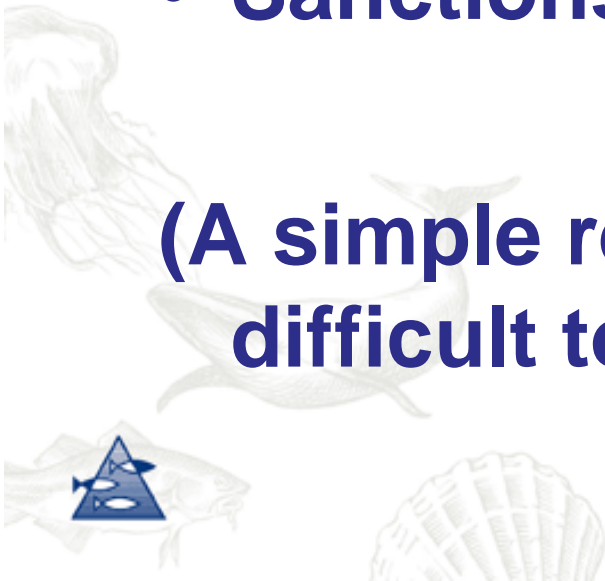


Sustainable Fisheries

Management rests on 4 Pillars:

- **Science – knowledge for management advice**
- **Fisheries Laws and Regulations**
- **Control of fishing activities**
- **Sanctions for violations**

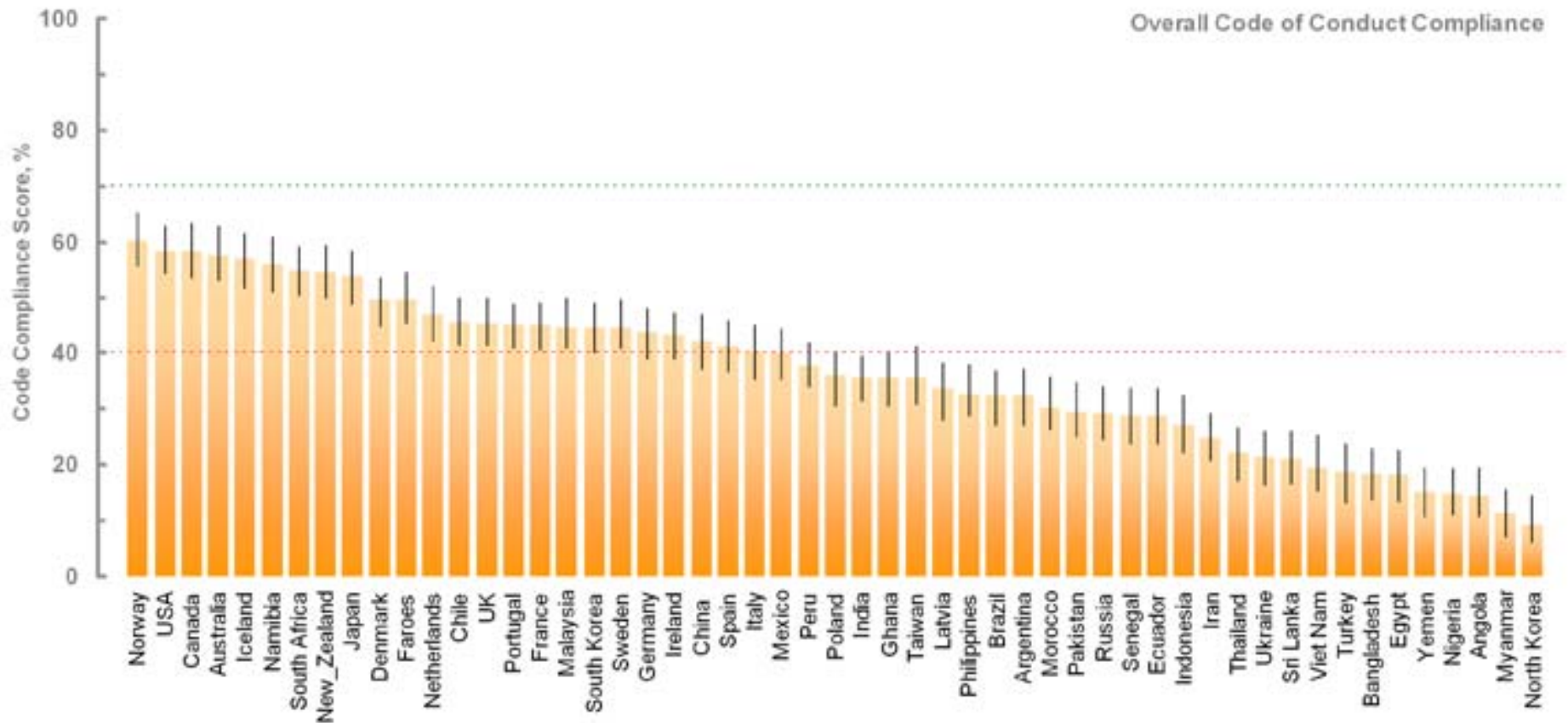
(A simple recipee, but the cake is difficult to make)



Norway, a "coast and ocean nation":
Coastline: 58 000 km, Ocean: 6 times land area
Leading nation in fisheries and aquaculture




"Nature"(Feb-09): Compliance with the FAO Code of Conduct



SUSTAINABLE FISHERIES

- Norway: world leading in fisheries and fisheries management.
- But: WE HAVE LEARNED IT THE HARD WAY – FROM SERIOUS MISTAKES WITH OVERFISHING AND STOCK DEPLETION IN THE 1960-70ies.



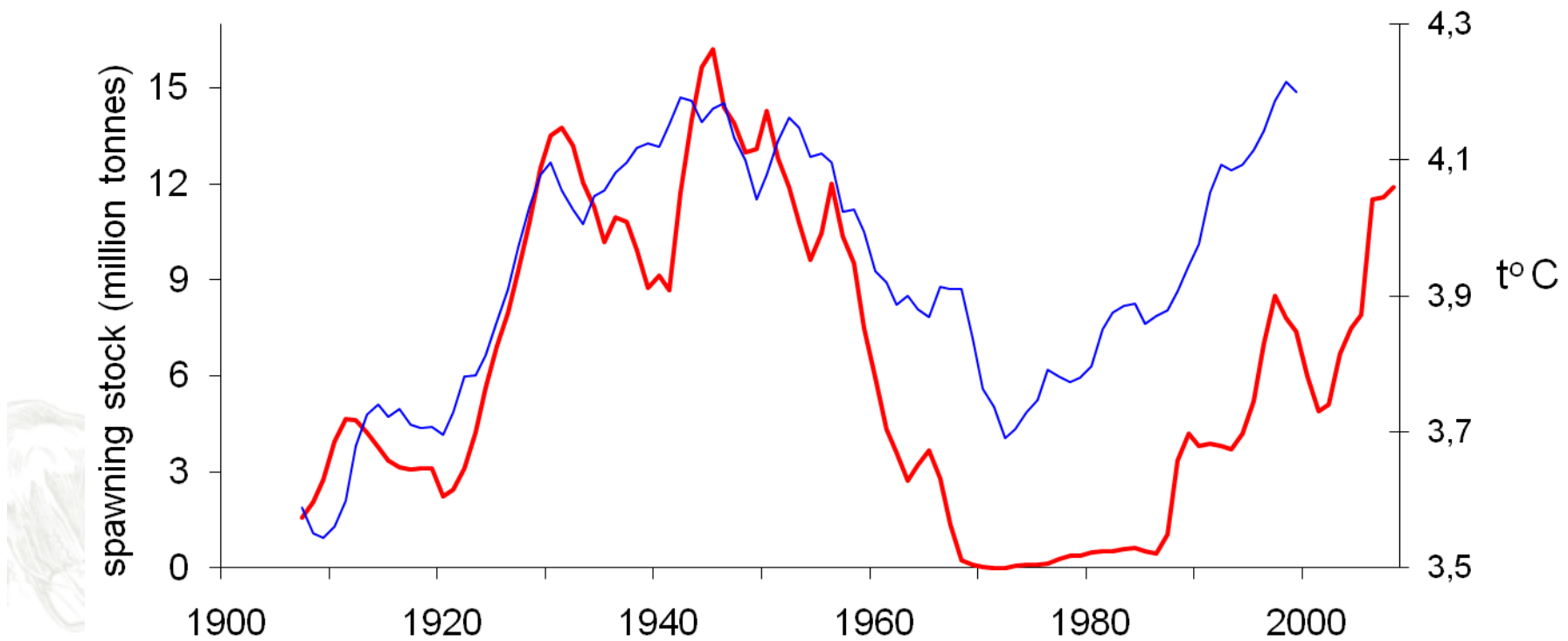
An underwater photograph showing several herring swimming in clear blue water. In the upper left, there is a cluster of small, translucent plankton or larvae. The herring are silvery with dark, wavy patterns along their sides.

Norwegian spring
spawning herring – the
largest herring stock in
the world

The largest fish stock in
the North Atlantic



Depletion of the largest fish stock in the N. Atlantic (NSS-Herring): an eye opener and point of departure for sustainable fisheries management



(Toresen and Østvedt 2000)



DEVELOPMENT COOPERATION IN FISHERIES

- Norway has since the early 1950-ies shared its experience in fisheries sector with developing countries – with success and failure,
- The most long lasting activity is the "Nansen program" for competence building in marine science



The Nansen Program

The original idea, conceived in the 1960s:

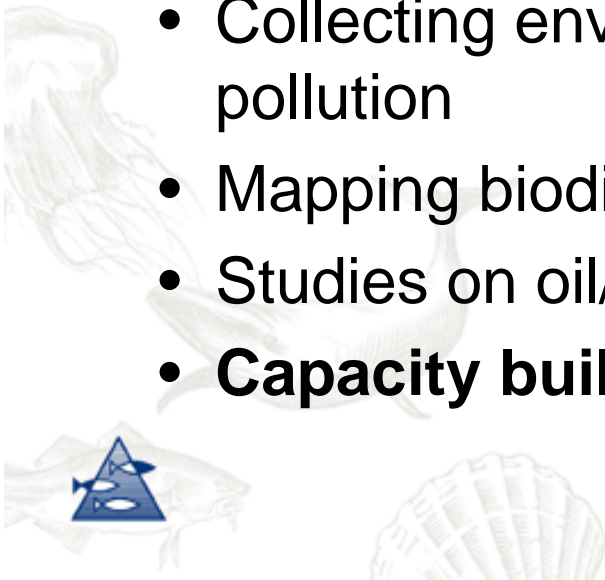
- A research vessel available for developing nations.
- Operated from Norway with Norwegian crew and core scientific staff
- In close cooperation with FAO, uncoupled from Norwegian fishery interests, flying the UN-flag
- First vessel left Norway in 1974



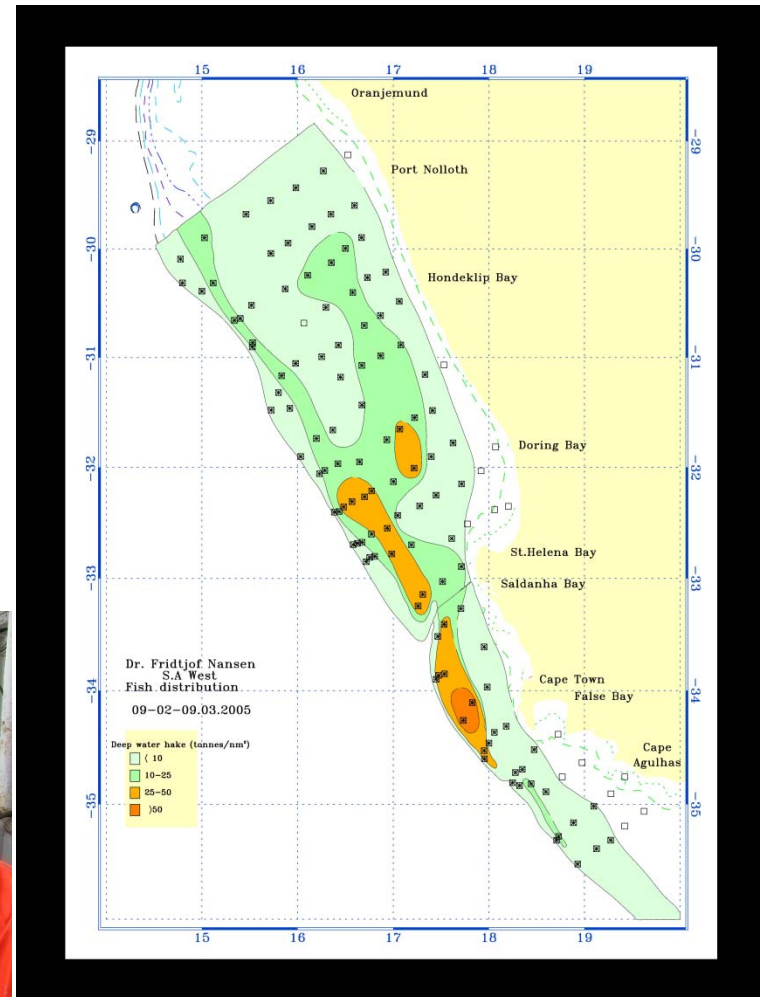
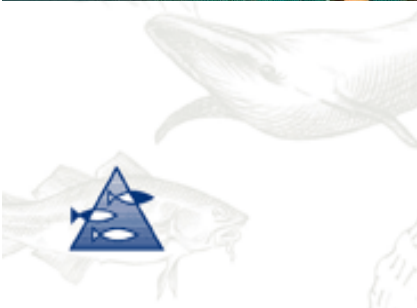
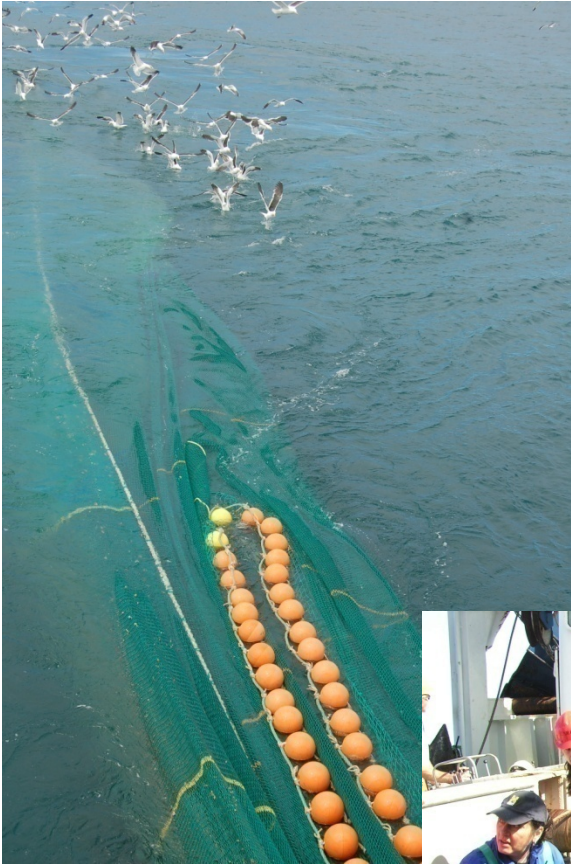
The new EAF-Nansen program:

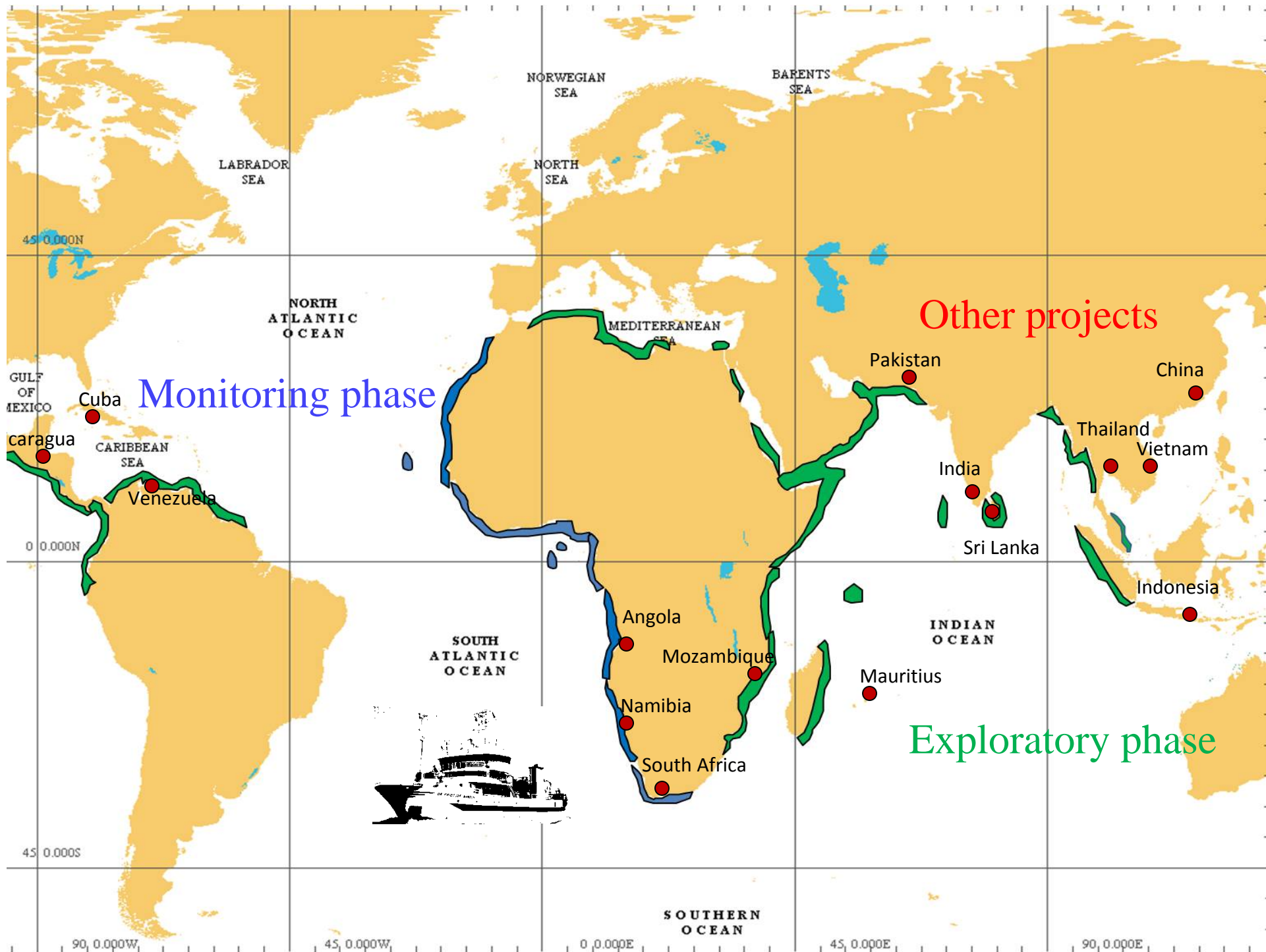
Title: Strengthening the Knowledge Base for and Implementing an Ecosystem Approach to Marine Fisheries in Developing Countries

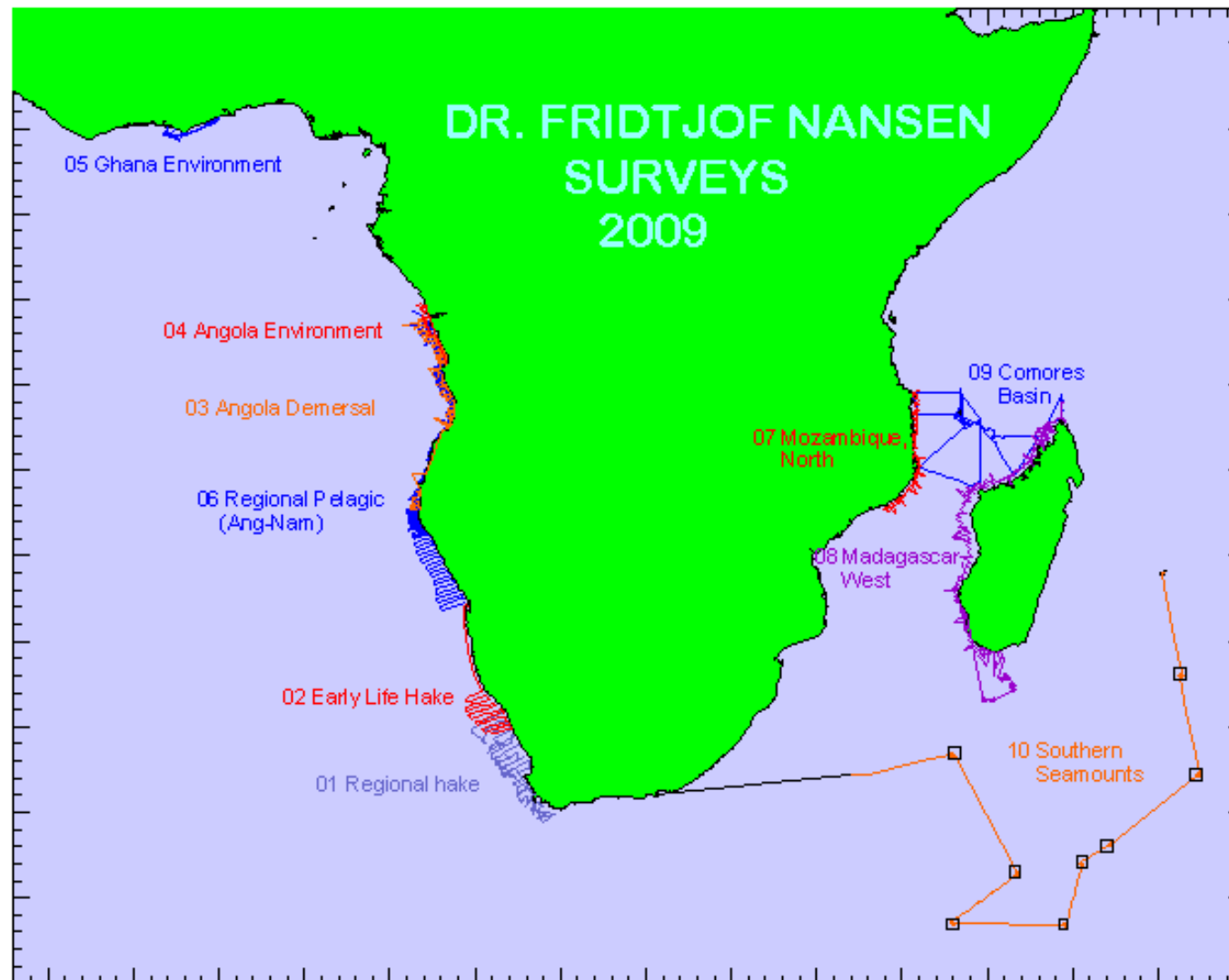
- Assessing fish resources by acoustic methods and trawl sampling
- Collecting environmental/ climate data (hydrography, pollution)
- Mapping biodiversity
- Studies on oil/ecosystem interactions
- **Capacity building/ On-the-job training**



The Nansen EAF programme









A 30 years paradigm shift:
From finding new fish resources to preserving the
reproductive capacity of the ecosystem during climate
change . The EAF-Nansen research contribution.



NEEDS FOR CAPACITY BUILDING

- **MARINE SCIENCE:** continued need in general – in particular to convert scientific knowledge to management advice.
- **LAWS & REGULATIONS:** continued need – particularly in "bringing the law to life"
- **CONTROL:** need for considerable strengthening – particularly in IUU
- **SANCTIONS:** strengthening



SUSTAINABLE FISHERIES FOR HEALTHY ECOSYSTEMS (or v/v)

- Fishing is a (the) major human activity in marine ecosystems
- SUSTAINABLE FISHERIES: A (THE) MAJOR CONTRIBUTION TO A HEALTHY MARINE ENVIRONMENT
-): COMPETENCE BUILDING IN MARINE SCIENCE AND FISHERIES MANAGEMENT IS VITAL FOR GLOBAL OCEAN HEALTH

