The sustainable development of the Oceans

Conserving the marine environment for the benefit of humankind

The Duty to Protect

- The development of science and the evolution of technology have enhanced knowledge of the ocean, its biodiversity, biotechnological and energetic potential as well as of the mineral resources of the marine soil and subsoil.
- To protect and preserve the marine environment is not only a goal but a General Obligation under Part XII of UNCLOS (Art. 192)
- "States have the right to exploit their natural resources pursuant their environmental policies and in accordance with their duty to protect and preserve the marine environment"

Some meaningful numbers

- Ours is an ocean planet: **70**% of it is covered by the sea
- Projected coastal population by 2025 : 6 billion
- Number of people who rely on fisheries for direct employment, of which 87% are in Asia and the Pacific: 38 million
- Marine pollution originating from land based sources:
 80%
- Factor by which the exploitation of West Africa's fish resources increased, by distant waters fishing fleets, between 1960s and 1990s : 6

Caring for what sustains

- 61% of the world's total economic output comes from areas within 100 kilometers from the coast
- Marine tourism, marine fisheries, and acquaculture are estimated to provide global economic benefits worth \$161 billion, \$80 billion and \$57 billion, respectively

Challenges

- Overfishing is the #1 challenge to the health of the marine ecosystem; species, as well as entire ecosystems are being lost.
- As a result, the overall ecological unity of our oceans are under stress and at risk of collapse.
- We are in risk of losing a valuable food source many depend upon for social, economical or dietary reasons.

- Loss of habitat: Marine ecosystems are experiencing high rates of habitat loss and degradation, and these processes are considered as a critical threat to marine biodiversity, second only to overfishing.
- Approximately 20% of the world's coral reefs were lost and an additional 20% degraded in the last several decades of the twentieth century, as well as approximately 35% of mangrove area
- **Invasive species**: invasions harm not only the environment but also have industrial, social, recreational, and economic impacts

Unsustainable Fisheries

- Overcapacity: oversized fishing fleet take more than our oceans can sustainably support.
- Unsustainable fishing methods impact on the basic functioning of our marine ecosystems.
- Unselective fishing practices and gear cause destruction on non target species.
- Bycatch / discards and bottom trawling are examples of those practices.

Subsidies

- •Subsidies allow fleets to fish longer, harder and farther away than would be otherwise possible.
- •Eliminating harmful subsidies is the single greatest action that can be taken to protect the world's oceans.

IUU Fishing

- Illegal fishing: conducted by national or foreign vessels in waters (1)under the jurisdiction of a State, without the permission of that State, or in contravention of its laws and regulations; (2) conducted by vessels flying the flag of States that are parties to a relevant regional fisheries management organization but operate in contravention of the conservation and management measures adopted by that organization and by which the States are bound, or relevant provisions of the applicable international law; or (3) in violation of national laws or international obligations, including those undertaken by cooperating States to a relevant regional fisheries management organization.
- **Unreported fishing** refers to fishing activities: which have not been reported, or have been misreported, to the relevant national authority, in contravention of national laws and regulations; or undertaken in the area of competence of a relevant regional fisheries management organization which have not been reported or have been misreported, in contravention of the reporting procedures of that organization.
- **Unregulated fishing** refers to fishing activities: in the area of application of a relevant regional fisheries management organization that are conducted by vessels without nationality, or by those flying the flag of a State not party to that organization, or by a fishing entity, in a manner that is not consistent with or contravenes the conservation and management measures of that organization; or in areas or for fish stocks in relation to which there are no applicable conservation or management measures and where such fishing activities are conducted in a manner inconsistent with State responsibilities for the conservation of living marine resources under international law.

Pollution

- Nearly 80% of marine pollution originates on land; pollution accompanies most kinds of human activities, including offshore oil and gas production and marine oil transportation.
- Traditional shipping and oil transportation routes are more exposed to the impacts of oil-polluted discharges from tankers and other vessels than other areas.

Ocean Acidification and Climate Change

- Caused by the ocean uptake of anthropogenic CO₂ from the atmosphere
- Stringent CO₂ mitigation measures would limit ocean acidification and global warming.
- The increase in acidity in the surface waters of the ocean is a consequence of the CO₂ emissions may severely threaten the existence of various marine species.
- Most of the world's coastal cities were established during the last few millennia, a period when global sea level has been near constant. Since the mid-19th century, sea level has been rising, primarily as a result of human-induced climate change.

What can be done to protect the ocean?

- Implementation is the key word
- Eliminating harmful subsidies is the single greatest action that can be taken to protect the world's oceans.
- Complete negotiations underway since 2001 at the WTO, which comprises dedicated negotiation on fisheries subsidies as part of the Doha round.

- Principles 5 and 6 of the Rio Declaration on Environment and Development focus on poverty eradication and reinforce the need to ensure that overfishing and habitat destruction do not deprive developing countries and the poor of the marine resources they are dependent upon
- Principle 15: "In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing costeffective measures to prevent environmental degradation."

A matter of principles...

- Principle 17: "Environmental impact assessment, as a national instrument, shall be undertaken for proposed activities that are likely to have a significant adverse impact on the environment and are subject to a decision of a competent national authority."
- GA in Resolutions 61/105: "Calls upon States to take action immediately, individually and through regional fisheries management organizations and arrangements, and consistent with the precautionary approach and ecosystem approaches, to sustainably manage fish stocks and protect vulnerable marine ecosystems, including seamounts, hydrothermal vents and cold water corals, from destructive fishing practices, recognizing the immense importance and value of deep sea ecosystems and the biodiversity they contain;"

- Implement the FAO International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (IUU) by 2004
- Implement the FAO International Plan of Action for the Management of fishing Capacity;
- Eliminate subsidies
- Maintain and restore depleted fish stocks to levels that can produce their maximum sustainable yield on a urgent basis and where possible no later than 2015

- Encourage the application of ecosystem approaches
- Promote integrated coastal and ocean management
- Advance the implementation of the Global Program of Action for the Protection of the Marine environment from Land Based Activities

And last but certainly not least...

Define the regime for biodiversity abnj

- The protection of biodiversity in areas beyond national jurisdiction needs legal certainty hence the need to define the legal regime applicable to those resources.
- UNCLOS provides the legal framework for the conservation and sustainable use of marine biological diversity beyond areas of national jurisdiction.
- The role of the International Seabed Authority, established by UNCLOS, relating to marine biological diversity, including environmental protection and marine scientific research, is reflected in the Codes which have been developed to regulate mining in the AREA

- Although the Convention on Biological Diversity has a complementary role, its jurisdictional scope applies only in the case of processes and activities undertaken by its Parties, regardless of where their effects occur
- The symbiotic relationship that genetic resources have with non-living marine resources and other living resources in the surrounding water column should be noted
- A regulatory mechanism, including the adoption of improved norms and/or an implementing agreement to the Convention, may become necessary to clarify matters such as the relationship between marine scientific research and bioprospecting.

- The definition of a regime applicable, under UNCLOS, to biodiversity in abnj would enable the application of area based tools for the conservation and management of such resources.
- A regulatory mechanism could also address the question of access to those resources and legal options for benefit-sharing, including non-monetary benefits, international cooperation in marine scientific research through the exchange, sharing and dissemination of information on research programs, their objectives and results, and cooperation in the transfer of marine technology.

A final thought

"The sea, the great unifier, is man's only hope.
 Now, as never before, the old phrase has a literal meaning: we are all in the same boat"

Jacques Yves Cousteau

Flagship species of marine biodiversity

