Message from

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on the occasion of

The 2009 World Maritime Day Parallel Event

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This year's celebration of the World Maritime Day with a particular focus on climate change, which is now at the top of the international agenda, gives us a chance to revisit our understanding on the role of the ocean and impacts on marine biodiversity in addressing the threat of global climate change.

Despite significant progress made in countries for the conservation and sustainable use of marine biodiversity since 1993 when the Convention on Biological Diversity entered into force, most of the global marine and environmental assessments that have been conducted during the last few years have found serious declines in marine living resources, losses of coastal habitats, elevated pollution levels, poor water quality in many areas, and overall deterioration of the marine environment. These declining symptoms are further exacerbated by the effects of climate change.

Coastal communities and local economies are adversely impacted by such trends as poverty, land-use changes, overfishing, nutrient loading, sewage, and coastal developments, which put the capacity of the marine environment beyond its sustainable limit. In general, pressures on coastal and marine biodiversity are increasing. Some fifty per cent of the world's population will live in coastal areas by 2015, putting unsustainable pressures on coastal resources. These human pressures will combine with the impacts of climate change, which will become more severe in the future.

The ocean is one of the largest natural reservoirs of carbon, with an estimated daily uptake of 22 million metric tonnes of carbon dioxide, and thus plays a critical role in climate change. The gas equilibrium at the ocean-atmosphere interface facilitates the constant exchange of gases in both directions, making the oceans of considerable

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importance in the global carbon cycle. There are important interactions and feedbacks between changes in the state of the oceans and changes in the global climate and atmospheric chemistry, which can influence the ability of the oceans to absorb additional carbon dioxide from the atmosphere, thus affecting the rate and scale of global climate change.

The interlinked atmospheric and oceanic biogeochemical system is clearly reflected in the change of acidity of marine waters. The global atmospheric concentration of carbon dioxide has increased from a pre-industrial value of 280 parts per million to 384 parts per million, leading to a 30 per cent increase in the acidity of the oceans. This significant increase is 100 times faster than any change in acidity experienced in the marine environment for the last 20 million years and represents a rare geological event in the Earth's history.

Rising concentrations of carbon dioxide in the atmosphere will result in sea water becoming more acidic, hence reducing the biocalcification of tropical and cold-water coral reefs, as well as other shell-forming organisms, such as calcareous phytoplankton, with resultant impacts on the entire marine food chain. By 2100, 70 per cent of cold-water corals will be exposed to corrosive waters. Cold-water coral reef ecosystems provide habitat, feeding grounds and nursery areas for many deep-water organisms, and support characteristic and commercially important fauna several times as diverse as that found on the surrounding seabed. Tropical coral reefs provide in excess of US$ 30 billion annually in global goods and services, such as shoreline protection, tourism and food security. In view of valuable goods and services provided by these precious ecosystems, the potential threat by ocean acidification deserves a serious attention by policy makers on the road to the Copenhagen negotiation on climate change.

Moreover, sea-water temperature increases due to climate change will cause more frequent and severe coral-bleaching events. Climate change may also affect ocean circulation, including potentially reducing the intensity and frequency of large scale water exchange mechanisms, impact both nutrient and larval transport and increase the risk of pollution and dead zones.

In the midst of predicting looming threats of climate change, the United Nations Environment Programme (UNEP) has provided a worrisome report indicating rapid increase of dead marine zones (marine waters without enough oxygen), from 149 areas in 2003 to over 200 areas in 2006. Most of these dead marine zones are observed in coastal waters, which host important fishing grounds. The increasing outbreaks and infestation of invasive species, which are being accelerated by climate change, add additional stresses to marine biodiversity, fishery productivity and overall ecosystem health.

In contrast to rapidly worsening pressure to marine biodiversity, our efforts to address all these challenges are lagging behind our agreed commitments. Currently, the world's oceans are seriously under-protected, with only approximately 0.8% of the oceans and 6% of territorial seas being within protected area systems. At current rate, the Johannesburg target on marine protected areas will not be achieved before 2048. If current trends continue, coral reefs may disappear in 2050 owing to the predicted warming of the oceans and seas.

Since 1995, when the Parties to the Convention on Biological Diversity adopted the "Jakarta Mandate on Marine and Coastal Biological Diversity" as a new global consensus on the importance of marine and coastal biological diversity, the Convention has been a

driving force for addressing the issues concerning the conservation and sustainable use of marine and coastal biological diversity by providing guiding principles, operational framework, tools and case-studies, and facilitated immediate and long-term actions at national, regional and global levels.

The tenth meeting of the Conference of the Parties to the Convention will be held in Aichi-Nagoya in October 2010 and will adopt a new Strategic Plan for the Convention for the period 2011-2020. The new Strategic plan will integrate Aichi Nagoya 2020 and 2050 biodiversity targets, including a revised Jakarta Mandate integrating the impacts of climate change. 2010 will also coincide will the celebration of the International Year of Biodiversity (IYB). This unique event in the life of the Convention will also highlighted by the high-level meeting at the sixth-fifth session of the United Nations General Assembly to be held in New York in September 2010 with the participation of Heads of State and Government.

I therefore invite all of you to join hands with us to make collective efforts in raising the awareness of policy makers on the critical role of ocean in addressing our common challenge of global climate change and renewing our commitments to Jakarta Mandate.
