

Marine species threatened by pollution, climate change – UN report



19 October 2010 – Pollution, over-fishing and climate change are having an increasingly damaging impact on the world's oceans, threatening a growing extinction of native marine species across all regions, a new United Nations report warned today.

Productivity, and with it fish catches, is projected to decrease in nearly all areas by 2050 and worldwide, fisheries will be heavily dominated by smaller species lower down the food chain, according to the UN Environment Programme (**UNEP**) report – Marine Biodiversity Assessment and Outlook: Global Synthesis.

Climate change, if unchecked, could see surface sea temperatures rise by 2100 with important implications for coral reefs and other temperature-sensitive marine organisms, while other predicted changes include a continued and widespread increase in nitrogen levels due to discharges of wastewaters and agricultural run-off from land and emissions from vehicles and shipping.

Nitrogen can trigger algal blooms which in turn can poison fish and other marine creatures as well as contribute to the development of so-called dead zones – areas of sea with low oxygen concentrations.

The report also flags concerns over the rise in marine invasive species, transported to regions from elsewhere, often in ballast water of ships or attached to its hull, highlighting that the cumulative impacts of all of these factors will have serious consequences in the rise of extinctions of native marine species across all regions.

The continuing decline in marine biodiversity will compromise the resilience of marine and coastal ecosystems to the impacts of climate change, as well as their ability to mitigate the effects of climate change, the report said.

“Decoupling growth from rising levels of pollution is the number one challenge facing this generation,” UNEP Executive Director Achim Steiner said. “This is nowhere more starkly spotlighted than in the current and future health of the world's sea and oceans. Multi-trillion

dollar services, including fisheries, climate-control and ones underpinning industries such as tourism are at risk if impacts on the marine environment continue unchecked and unabated.

“Governments are rising to the challenge through actions under the Regional Seas Conventions and Action Plans. This global report, based on 18 regional reports, underlines that ambition and actions now need to match the scale and the urgency of the challenge.”

Given that the nature and dynamics of oceans are transboundary, actions must be taken by all regions, with countries working together to find solutions, and must include cross-sectoral approaches such as ecosystem-based management to address activities affecting marine ecosystems, since the combination of increasing human uses and the expected effects of rising temperatures and sea acidification threaten marine biodiversity and human activities that depend upon it.

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