



Growing ocean acidification threatens marine life, says UN-backed report



2 December 2010 – A new United Nations-backed report <u>warns</u> that unless governments cut carbon dioxide (CO₂) emissions, ocean acidification will continue and have wide-ranging impacts on the health of the seas and the fish living in them.

The <u>report</u>, entitled "The Environmental Consequences of Ocean Acidification," was launched today by the UN Environment Programme (<u>UNEP</u>) at the UN climate change conference in Cancun, Mexico.

It confirms concerns about the effects of increased ocean acidity on the marine environment, warning that the future impact of rising emissions on the health of seas and oceans may be far greater and more complex than previously supposed.

"Ocean acidification is yet another red flag being raised, carrying planetary health warnings about the uncontrolled growth in greenhouse gas emissions. It is a new and emerging piece in the scientific jigsaw puzzle, but one that is triggering rising concern," said Achim Steiner, UNEP's Executive Director, urging governments to take action to address the issue.

"The phenomenon comes against a backdrop of already stressed seas and oceans as a result of over-fishing to other forms of environmental degradation. Thus the public might quite rightly ask how many red flags do governments need to see before the message to act gets through," he said.

Ocean acidification is the result of increasing concentrations of dissolved carbon dioxide finding their way into ocean water and lowering the water's pH level. Such changes threaten the very

survival of many marine organisms, including fish and coral, and together with other environmental effects, such as over-fishing and ocean warming, could impact massively on the marine food chain, which is a main source of protein and livelihood for billions of people.

To produce the report, UNEP worked together with the UN Educational, Scientific and Cultural Organization's (<u>UNESCO</u>) Intergovernmental Oceanographic Commission, as well as with the Plymouth Marine Laboratory and National Oceanography Centre in the United Kingdom.

The report's lead author, Dr. Carol Turley, pointed out the negative impact that rising ocean acidity was having.

"We are seeing an overall negative impact from ocean acidification directly on organisms and on some key ecosystems that help provide food for billions. We need to start thinking about the risk to food security," she said.

Although the report notes that there may be some 'winners' within marine ecosystems, with photosynthetic life, such as seagrasses benefiting from acidification, Ms. Turley pointed out the vulnerabilities of many sea organisms.

"It is clearly not enough to look at a species. Scientists will need to study all parts of the lifecycle to see whether certain forms are more or less vulnerable," she said.

Urging policy makers to cut CO₂ emissions and to reduce pressure on the oceans through marine spatial planning and aquaculture, the report recommends that governments embrace the science of ocean acidification into the way they manage fisheries.

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