



Oceans acidifying rapidly due to carbon dioxide emissions, says UN-backed study



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14 December 2009 – The levels of carbon dioxide in the atmosphere would be much higher if oceans did not absorb the amount they do, but this has led to their rising acidity levels, according to a new United Nations-backed study issued today.

Approximately one quarter of the emissions resulting from human activities – including deforestation and the burning of fossil fuels – are taken in by oceans.

Without absorption by oceans, atmospheric concentrations of carbon dioxide would be far higher, amplifying the effects of climate change worldwide.

But as a result, the chemical balance of oceans has changed dramatically, with scientists predicting acidification will occur at a rate 100 times faster than any change in acidity

experienced in the marine environment over the past 20 million years. The rapid pace has left little time for evolutionary adaptation within biological systems.

"Substantial damage to ocean ecosystems can only be avoided by urgent and rapid reductions in global emissions of carbon dioxide," said Ahmed Djoghlaif, Executive Secretary of the UN Convention on Biological Diversity.

"Attention must be given for integration of this critical issue at the global climate change debate in Copenhagen," he said, referring to the historic UN summit under way in the Danish capital that is set to conclude on Friday with negotiators wrapping up talks on a new agreement.

Some 70 per cent of cold water corals, which serve as a feeding ground for commercial fish species, will be exposed to corrosive waters by 2100, the study found.

In a related development, another UN-backed report issued in Copenhagen today underscored that any agreement reached there to provide funds to curb emissions could generate multiple benefits so long as resources target sites that are both carbon and biodiversity-rich.

But it also found that safeguards are also vital to ensure that funding for **UN-REDD** – an initiative aimed at combating climate change by creating incentives for poorer countries to reverse the trend of deforestation and invest in more sustainable forms of development – could displace and intensify activities such as agriculture into lower carbon but equally biodiversity-rich areas, such as parts of East Africa and Brazil.

The publication is said to be the first map-based analysis of the distribution of carbon and biodiversity, showing areas where the double benefits could be reaped, including the Amazon, Sumatra and Borneo.

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