

## Climate change on oceans: the Namibian perspective

The Namibian coast benefits from one of the most biologically productive areas in the ocean. Longshore southerly winds that power the Benguela marine upwelling system are most intense along Namibia's southern coast, recognized as the strongest coastal upwelling region in the world. This wind-driven productivity translates socio-economically into benefits to the Namibian nation, mainly from fishery harvests. Natural features in this marine environment include high variability and low oxygen. Predicted climate change scenarios to date, include both increased or decreased upwelling that could affect a multitude of environmental parameters that modulate Namibia's marine ecosystem, such as water temperature, nutrient regimes, oxygen levels and acidification. Resultant changes could impact on the marine life in various ways, so resilience of the marine system to climate change scenarios must be scientifically addressed, and policy instruments developed to respond to expected changes. Already Namibia's Ministry of Fisheries and Marine Resources actively collects the necessary basic oceanographic and fishery data relevant to these parameters, and participates in national, regional and international programmes, projects and fora that address climate change in the oceans\*. Limited public awareness campaigns have been carried out in the coastal towns, but the relatively complicated concept of climate change adversely affecting all human lives via the ocean, requires persistent effort and clear, simple explanation to the public. With oceans comprising 70% of the world's surface, the role of the ocean in absorbing heat, regulating the air we breathe, and sequestering carbon, is especially relevant to people's daily lives and activities. As further anthropogenic exploitive pressures on the ocean diversify and increase in tandem with climate change, there is urgent need to update our knowledge on the limits of our ocean systems to such pressures, and to act speedily to restrict damage. Repeatedly over the last decades we have seen that damage to marine environments is slow to present, but slower, if not impossible, to remedy. The marine waters off Namibia are exceptionally rich in resources, so vulnerable to multiple human pressures. Forward-thinking science-based marine policy is urgently required to knowledgeably manage development, to include climate change predictions for the oceans. Therefore Namibia supports the global efforts led by the United Nations, to do so.

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- IAEA Ocean Acidification International Co-ordination Centre (OA-ICC) supporting the OA African Network
- BCC project: "Enhancing Climate Change Resilience in the Benguela Current Fisheries System"
- Namibian National Climate Change Strategy and Action Plan 2013-2020