

Climate change impacts countered by stricter fisheries management

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A basket full of paddle-tail snappers. A newly published 17-year study by the Wildlife Conservation Society has found that implementing stricter fisheries management overcame the expected detrimental effects of climate change disturbances in coral reef fisheries badly impacted by the 1997/98 El Nino. Credit: Tim McClanahan

A new study has found that implementing stricter fisheries management

overcame the expected detrimental effects of climate change disturbances in coral reef fisheries badly impacted by the 1997/98 El Niño, according to the Wildlife Conservation Society.

The 17-year study led by WCS fisheries scientists found that rapid implementation of fisheries restrictions countered adverse climate effects and actually increased fisheries catches, counter to predictions and findings in other studies without stricter management. This is good news for the millions of people who depend on coral reefs fisheries, as it provides a management solution for fisheries predicted to decline with global warming.

The authors examined the environment and fisheries catches before and after the severe El Niño event of 1997–1998, an unprecedented climate disturbance that killed half of the corals in the Indian Ocean. A comparison of catch rates in southern Kenya found a preliminary decline in catches that was followed by an increase of catches. This increase was closely associated with improved fisheries restrictions that were implemented shortly after the disturbance.

The study titled appears in the current edition of the journal *Marine Ecology Progress Series*. The study's authors are Tim McClanahan and Caroline Abunge of the Wildlife Conservation Society.

The authors concluded that reducing fishing intensity and restricting fishing gear known to be destructive to corals and fish populations were the likely causes for the rise in catch rates and fishers' revenues. The authors note that this positive response may not occur in all coral reef fisheries but, because the fishery was composed of fast-growing, generalist species with broad diet and habitat needs, they may be less sensitive to reef conditions than to direct fishing mortality. These findings indicate that [coral reefs](#) management restrictions can override the detrimental effects of [climate](#) disturbances in heavily fished reefs.

"The response suggests we can do something about countering lost fisheries production even in poor countries," said lead author Tim McClanahan of WCS. "Common sense [fisheries](#) restrictions can increase the capacity to adapt to [climate change](#) and should be accelerated to mitigate losses arising from inaction."

More information: To access the study, click here:
www.intres.com/articles/meps_oa/m513p201.pdf

Provided by Wildlife Conservation Society

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