

Failing fisheries and poor ocean health starving human food supply

September 16 2015



Father and son fishermen in dugout canoe bringing in net at sunset, Ohoidertutu Village, Kei Islands, Moluccas, Indonesia. Credit: Juergen Freund / WWF

Populations of fish critical to human food security are in serious decline worldwide with some at risk of collapse according to the emergency

edition of a WWF report released today. WWF's Living Blue Planet Report finds that much of the activity threatening the ocean is avoidable and solutions do exist to turn the tide.

The updated study of marine mammals, birds, reptiles and fish shows that populations have been reduced on average by half globally in the last four decades, with some fish declining by close to 75 percent. The latest findings spell trouble for all nations, especially people in the developing world.

To reverse the downward trend, global leaders must ensure that [ocean](#) recovery and coastal habitat health feature strongly in the implementation of the UN's [sustainable development](#) goals that will be formally approved later this month. Negotiations on a new global climate deal are also an important opportunity to forge agreement in support of ocean health.

"We urgently published this report to provide the most current picture of the state of the ocean," said Marco Lambertini, Director General of WWF International. "In the space of a single generation, human activity has severely damaged the ocean by catching fish faster than they can reproduce while also destroying their nurseries. Profound changes are needed to ensure abundant ocean life for future generations."

Research in the WWF report indicates that species essential to commercial and subsistence fishing – and therefore global food supply – may be suffering the greatest declines. Underscoring the severe drop in commercial fish stocks, the report details the dramatic loss of 74 per cent of the family of popular food fish that includes tunas, mackerels and bonitos.

"We are in a race to catch fish that could end with people starved of a vital food source and an essential economic engine. Overfishing,

destruction of marine habitats and climate change have dire consequences for the entire human population, with the poorest communities that rely on the sea getting hit fastest and hardest. The collapse of ocean ecosystems could trigger serious economic decline – and undermine our fight to eradicate poverty and malnutrition," said Lambertini.

The report shows a decline of 49 per cent of marine populations between 1970 and 2012. The analysis tracked 5,829 populations of 1,234 species, making the data sets almost twice as large as past studies and giving a clearer, more troubling picture of ocean health.



Green turtles swimming in the Great Barrier Reef, Queensland. Credit: Troy Mayne

The findings are based on the Living Planet Index, a database maintained and analyzed by researchers at the Zoological Society of London (ZSL). In response to alarming statistics raised in WWF's Living Planet Report 2014, this special report studies how overfishing, damage to habitat and climate change are affecting marine biodiversity.

Adding to the crisis of falling fish populations, the report shows steep declines in [coral reefs](#), mangroves and seagrasses that support fish species and provide valuable services to people. Over one-third of fish tracked by the report rely on coral reefs, and these species show a dangerous decline of 34 per cent between 1979 and 2010.

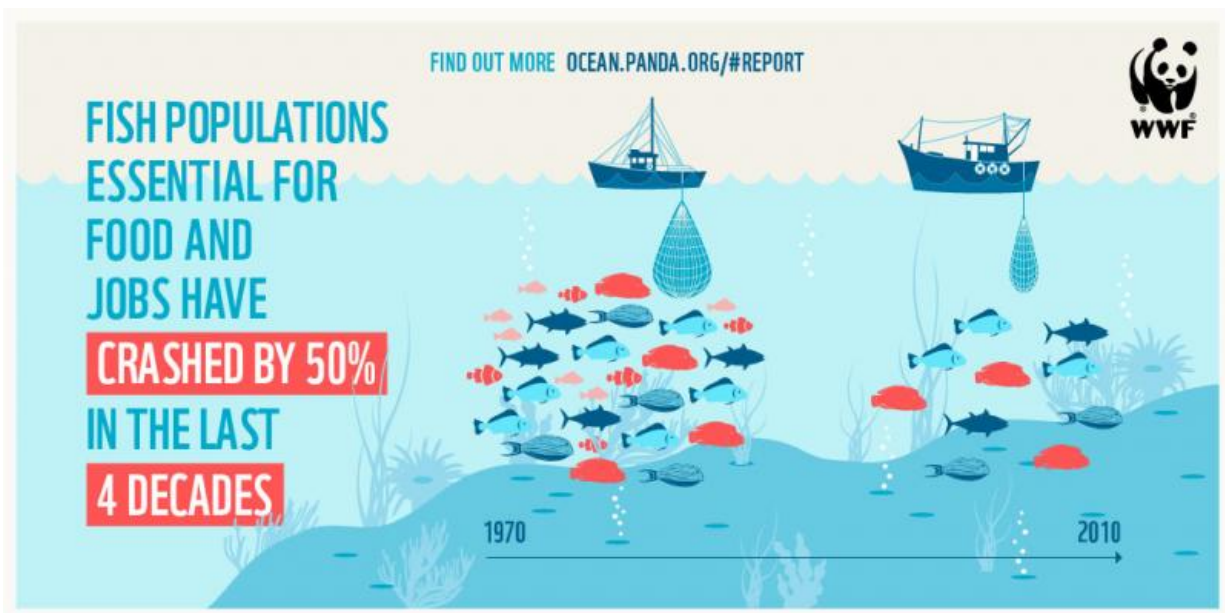
Research shows that coral reefs could be lost across the globe by 2050 as a result of climate change. With over 25 per cent of all marine species living in coral reefs and about 850 million people directly benefiting from their economic, social and cultural services, the loss of coral reefs would be a catastrophic extinction with dramatic consequences on communities.

"The ocean is an integral part of our lives. We are kept alive by the clean air, food and other services it provides. More than that, we are simply drawn to the ocean and its wildlife, whether a trip to the seaside or an encounter with the penguins at the ZSL London Zoo. This report suggests that billions of animals have been lost from the world's oceans in my lifetime alone. This is a terrible and dangerous legacy to leave to our grandchildren," said Ken Norris, Director of Science at ZSL.

While over-exploitation is identified as the major threat to ocean biodiversity, the study finds that [climate change](#) is causing the ocean to change more rapidly than at any other point in millions of years. Rising temperatures and increasing acidity levels caused by carbon dioxide

aggravate the negative impacts of overfishing and other major threats including habitat degradation and pollution.

Beyond the obvious harm to nature, threats to the ocean risk annual economic output of at least US\$2.5 trillion and an overall asset base of at least \$24 trillion, as found by a previous WWF study.



Decline in fish populations. Credit: WWF

"The fortunate news is that solutions do exist and we know what needs to be done. The ocean is a renewable resource that can provide for all future generations if the pressures are dealt with effectively," said Lambertini. "If we live within sustainable limits, the ocean will contribute to [food security](#), livelihoods, economies and our natural systems. The equation is that simple. We must take this opportunity to support the ocean and reverse the damage while we still can."

The Living Blue Planet Report details opportunities for governments, businesses and communities to secure a living ocean. Important measures to preserve ocean resources include preserving and rebuilding natural marine capital, wiser consumption and prioritizing sustainability.

Earlier this year, a separate WWF study found that every dollar invested to create marine protected areas could yield triple the benefits through factors like employment, coastal protection, and fisheries. That analysis showed that increased protection of critical habitats could result in net benefits of between US\$490 billion and US\$920 billion accruing over the period 2015-2050.

In September, governments will formally agree the 2030 Agenda for Sustainable Development with priorities including reducing poverty and increasing food security that have direct links to ocean health. It is essential that political and financial implementation of the sustainable development agenda addresses habitat destruction, overfishing, illegal fishing and marine pollution.

According to the report, decisions taken at the UN climate conference in Paris will directly impact the future of [ocean health](#). Current international commitments fall far short of the action needed to stop levels of warming and acidification that are proving catastrophic to the ocean systems all people depend on.

Provided by WWF

Citation: Failing fisheries and poor ocean health starving human food supply (2015, September 16) retrieved 24 April 2024 from <https://phys.org/news/2015-09-fisheries-poor-ocean-health-starving.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private

study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.