

WRI FACT SHEET

Reefs at Risk Revisited

The World Resources Institute (WRI) spearheaded a broad collaboration of leading conservation organizations and research institutes to conduct a global, map-based analysis of threats to the world's coral reefs called Reefs at Risk Revisited. This report provides detailed examination of human pressures on coral reefs, implications for reef condition, and projections of associated socioeconomic impacts in coastal communities.

In the 10 years since the first Reefs at Risk analysis, threats have increased on 30 percent of reefs.

THREATS

This effort found that approximately 75 percent of the world's coral reefs are currently threatened by a combination of local and global pressures. This includes recent impacts from climate change, which causes rising ocean temperatures and coral bleaching. The most immediate and direct threats arise from local sources, which currently threaten more than 60 percent of reefs (about 150,000 sq km of reefs). Local threats include overfishing, destructive fishing, coastal development, and pollution. In the 10 years since the first Reefs at Risk analysis, threats have increased on 30 percent of reefs (comparing data from 1997 and 2007). Unless steps are taken to reduce local pressure and reduce the emission of greenhouse gases, the percent of threatened reefs will increase to more than 90 percent by 2030 and to nearly all reefs by 2050.

Reefs at Risk: By the Numbers

Region	Reef Area (km ²)	Reef Area as % of global	% Reef Threatened (local threats)	% Reef Threatened (-2030)	% Reef Threatened (-2050)	% Reef in Marine Protected Areas (MPAs)	% Reef in effective or partially effective MPAs
Atlantic	25849	10	75	90	100	30	11
Australia	42315	17	14	90	99	75	74
Indian Ocean	31543	13	66	88	100	19	11
Middle East	14399	6	65	88	100	12	11
Pacific	65972	26	48	89	100	13	9
Southeast Asia	69637	28	94	99	100	17	3
Global	249713	100	61	92	100	27	20

VALUE

More than 275 million people live in the direct vicinity (on the coast within 30km) of coral reefs. Coral reefs protect 150,000 km [over 93,000 miles] of shoreline in more than 100 countries and territories – helping defend against storms and erosion. At least 96 countries and territories benefit from tourism related to reefs; in 23 of these, reef tourism accounts for more than 15 percent of gross domestic product (GDP).

SOCIAL VULNERABILITY

The report identifies 27 nations most vulnerable to coral reef degradation and loss in the world (this is out of 108 reef countries assessed). Of these, 19 are classified as Least Developed Countries (LDCs). The nine countries most vulnerable to the effects of coral reef degradation, due to high dependence on coral reefs and low adaptive capacity, are: Haiti, Grenada, Philippines, Comoros, Vanuatu, Tanzania, Kiribati, Fiji, and Indonesia.

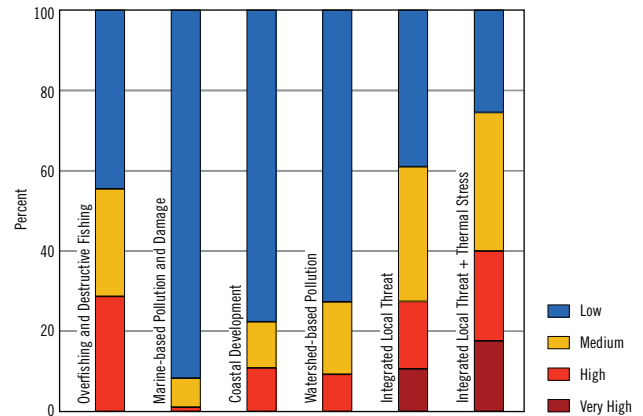
REEF CONSERVATION

Currently over one-quarter of the world's coral reefs fall within marine protected areas, a higher proportion than for any other marine habitat. However, only 6 percent of the world's coral reefs are located in effectively managed Marine Protected Areas, and 13 percent are in areas rated as only partially effective for achieving management goals.

SOLUTIONS

- **Mitigate threats from local human activities:** reduce unsustainable fishing; manage coastal development; reduce watershed-based pollution and marine-based threats.
- **Manage for climate change:** support both local and global efforts to improve the resilience of coral reefs, particularly through strategic planning and international collaborations.
- **Develop integrated management efforts** at ecosystem scales, including the expansion of protected area networks.
- **Build consensus and capacity:** through scientific research; education and communication; policy support; economic valuation; training and capacity building of reef stakeholders; involvement of local stakeholders in the decision-making and management of reef resources.
- **Reduce the emission of greenhouse gasses,** particularly carbon dioxide.
- **Individual action:** Regardless of whether you live near or far from a coral reef, make personal choices that protect coral reefs.

Figure 1. Reefs at Risk Worldwide by Category of Threat



Notes: Individual local threats are categorized as low, medium, and high. These threats are integrated to reflect cumulative stress on reefs. Reefs with multiple high individual threat scores can reach the very high threat category, which only exists for integrated threats. The fifth column, integrated local threats, reflects the four local threats combined. The right-most column also includes thermal stress during the past ten years. This figure summarizes current threats; future warming and acidification are not included.

ABOUT WRI

The World Resources Institute is a global environmental think tank that goes beyond research to put ideas into action. We work with governments, companies, and civil society to build solutions to urgent environmental challenges. For more information on our coral reefs work, visit www.wri.org/reefs.

ABOUT REEFS AT RISK REVISITED

The groundbreaking report, Reefs at Risk Revisited, is the most detailed assessment of threats to coral reefs ever undertaken. The report was led by the World Resources Institute, along with the Nature Conservancy, the WorldFish Center, ICRAN, UNEP-WCMC, and GCRMN.