

Small Island Developing States at the Forefront of Global Climate Change

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The world's small island developing states (SIDS) are often cited as the most vulnerable countries to climate impacts and the first nations on Earth to face critical climate change thresholds. Yet they have contributed least to the growing concentrations of greenhouse gases in the atmosphere and so have the least responsibility for the crisis the world now faces. They are least likely to be heard at the negotiating table, as they lack the political weight of the major emitters. As a result, their vulnerability goes unnoticed and their voices go unheard. They are also least likely to be the beneficiaries of climate funds, most of which get spent on mitigation (particularly energy projects) rather than adaptation. And when action is taken they are least likely to be involved in the consultations.

The Caribbean states provide a good example of the vulnerability of small island states. According to the New Economics Foundation, the increased strength of storms and hurricanes and the surge in their destructive forces have affected hundreds of thousands of victims and led to multimillion-dollar damages. In 2004 Grenada, an island considered to be outside the hurricane belt, was devastated when Hurricane Ivan struck, destroying over 90 percent of the country's infrastructure and housing stock and causing over \$800 million in damages, the equiv-

alent of 200 percent of Grenada's gross domestic product. The increase in frequency and intensity of these storms expected due to climate change could well place further strain on political, social, and economic systems and act as an additional constraint on development in the region.¹

These islands depend on fragile ecosystems such as coral reefs. Globally, coral reefs provide critical habitat for more than 25 percent of marine species and contribute more than \$30 billion in annual net economic benefit. Recent studies estimate that a third of the world's reef-building coral species are facing extinction. Climate change, coastal development, overfishing, and pollution are the major threats. A new analysis shows that before 1998, only 13 of the 704 coral species assessed would have been classified as threatened. Now the number in that category is 231.²

The Caribbean has the largest proportion of corals in high extinction risk categories, but reefs in the Indian Ocean and the Pacific are also likely to be decimated. Sea level rises, flooding, and storm surges are a particular concern for the atoll states in the Pacific and Indian Oceans. If the projections of the Intergovernmental Panel on Climate Change prove correct, these island nations will effectively disappear by the end of this century.³

SIDS also suffer from a lack of natural resources, often have limited freshwater supplies, and are constrained by poor trans-

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port and communication infrastructure. This means they are particularly susceptible to even small changes in the global climate. Furthermore, the chronic lack of adaptive capacity, including financial, technical, and institutional resources, means they are ill prepared to deal with these multiple threats.

Today small island states are striving to achieve long-term sustainable development and implement the Millennium Development Goals (MDGs). Climate change impacts are already undermining their efforts, however.

The first MDG—to eradicate extreme poverty and hunger—is being affected by changing patterns of food production and the gradual undermining of livelihoods. Many of these islands depend heavily on tourism and natural resources for their economic livelihood. They also depend on local staples and species for the bulk of their food. Threats to biodiversity and coral reef systems will reduce these livelihood assets, undermine economic performance, and threaten regional food security.

The second goal—to achieve universal primary education—is being compromised by extreme weather events that create a cycle of destruction and reconstruction and that reduce the amount of investment flowing into long-term development. Tropical cyclones destroy schools and hospitals, damage public utilities and infrastructure (including energy, water, and transport connections), and so reduce access to education, health care, and other public services. Loss of national revenue from associated impacts may also undermine public spending on education.

The third MDG—to promote gender equality and empower women—is jeopardized, as women living in poverty are often the most threatened by the dangers that stem from climate change. Cultural norms

can mean that women do not have the appropriate skill sets to deal with myriad impacts. The statistics indicating fatalities from extreme weather events are revealing in this regard. Moreover, as resources become scarcer, women and young girls spend more time collecting food and water and less time caring for their health and education.

Three of the MDGs deal with health and aim to reduce child mortality, improve maternal health, and combat HIV/AIDS, malaria, and other diseases. The World Health Organization and leading health providers are anticipating an increase in waterborne and vector-borne diseases, in diarrheal diseases, and in malnutrition as a result of associated climate impacts. This could lead to increases in child mortality, a reduction in maternal health, and the undermining of nutritional health needed to combat HIV/AIDS.⁴

In the Maldives, a small islands nation in the Southern Indian Ocean, the human drama of climate change is a daily reality for 300,000 residents. In 1987 the President of the Maldives, Maumoon Abdul Gayoom, became the first world leader to draw attention to the threat of climate change. In a landmark speech to the United Nations General Assembly, he warned that this would result in the death of his nation and others like it. Twenty years on and the effects of climate change are already evident: storm surges and coastal erosion destroy homes, pose dangers to infrastructure and utilities, and divert limited resources from strategic development.⁵

In the medium term, rising ocean temperatures, coupled with growing acidification, threaten the survival of coral reefs in the Maldives—the very lifeblood of the economy. The island's two principal industries, tourism and fisheries, are entirely dependent upon the reefs. They account for 40 percent

of the national economic output and more than 40 percent of the jobs. Together, these industries have fueled the sustained and enviable economic development that has enabled the Maldives to grow from being one of the poorest countries in South Asia in the 1970s to the richest country per capita in the region today.⁶

In the long term, it is not economic development but the country's very survival that is threatened. With most of the islands lying less than one meter above sea level, this generation—the most fortunate one to have ever lived on these islands—may be the last one to live in the Maldives.

Since some degree of climate change is already inevitable as the effects of current concentrations of greenhouse gases in the atmosphere continue to be felt for the next few decades, the government of the Maldives has developed a comprehensive program of domestic adaptation. Work has concentrated on reinforcing vital infrastructure, particularly related to transport and communications. Public services ranging from water supply and electricity generation to the provision of health care and education are being strengthened against climate threats. Flood defenses have been constructed, and measures are being taken to minimize coastal erosion.⁷

Perhaps the most innovative adaptation measure is the development of the “safe island” concept. This initiative is designed to minimize climate vulnerability by resettling communities from smaller islands that are more vulnerable onto larger, better-protected ones. This lets the government concentrate limited resources on protecting the more viable islands. It also allows for public



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Part of the Maldivian tourist infrastructure at risk of sea level rise

services to be strengthened and economic opportunities to be developed.⁸

Domestic adaptation in the Maldives and throughout other vulnerable societies will involve significant engineering projects and large financial investments. It will also require large-scale capacity building to strengthen institutional capacity, to enhance knowledge, human, and financial resources, and to encourage an awareness-raising program to prepare people for the inevitable changes.

Adaptation without mitigation will result in little more than a temporary respite, postponing catastrophic climate change to a later date. Urgent and ambitious action must be taken to reduce greenhouse gas emissions. Small island states have been active in attempts to find a global consensus on climate action from the very beginning. Indeed, the momentum to create the United Nations Framework Convention on Climate Change and the Kyoto Protocol was in part a result of moral and ethical arguments advanced by members of the Alliance of Small Island States (AOSIS), earning the

organization the title of “Conscience of the Convention.”

Today AOSIS members are participating actively in the Bali process, which seeks to find an appropriate global climate regime to succeed the Kyoto Protocol’s first commitment period, which expires in 2012. The AOSIS negotiating position for the Bali process is entitled *No Island Left Behind*. It outlines three long-term strategic objectives:

- An ambitious long-term goal for reducing greenhouse gas emissions should be the organizing point for all other processes within the Bali process. This implies deep and aggressive cuts in emissions to levels that keep long-term temperature increases as far below 2 degrees Celsius above preindustrial levels as possible.
- More funding for adaptation is needed, with priority access given to SIDS on an expedited basis based on their specific vulnerabilities and lack of capacity.
- SIDS need support and technical assistance to build capacity and gain access to technologies to respond and adapt to climate change across a wide range of socio-economic sectors.⁹

AOSIS favors an expanded and broadened Kyoto protocol, with clear opportunities for developing countries that may wish to enter into full Kyoto commitments. The overall outcome should use impacts on SIDS as a benchmark for effectiveness and success. Although AOSIS has had a legitimate and important voice in the climate change process, the organization has often suffered from its own capacity constraints and from division among its members.

Many countries have become frustrated at the lack of urgency and ambition in inter-

national negotiations and believe that the time has come to change the dynamic by introducing new approaches to solving the climate crisis. In March 2008, the government of the Maldives, working closely with a number of other island nations and drawing on the support of more than 70 countries, introduced a resolution on climate change and human rights at the United Nations Human Rights Council in Geneva. It called on the Office of the High Commissioner for Human Rights to conduct an analytical study exploring the interface between human rights and climate change. This groundbreaking and innovative initiative seeks to import the rhetorical, normative, and operational force of international human rights law into the climate change discourse.¹⁰

A rights-based approach to climate change holds a great deal of promise for small island states as they seek to inject urgency and ambition into mitigation policy while simultaneously lobbying for increased financial flows to support mitigation. First, a rights-based approach could help improve analysis of the human impacts of climate change by linking it to realizing more than 50 international human rights laws, such as the right to life, health, and an adequate standard of living. Second, a rights-based approach replaces policy preferences with legal obligations and turns the communities most vulnerable to climate change from passive observers of climate negotiations into rights holders. This will give voice to the vulnerable and compel the major emitters to act on climate change before the clock runs out on small island states.

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