



World Environment Day  
5 June

World Environment Day (WED) is the United Nations' principal vehicle for encouraging worldwide awareness and action for the environment. In support of the UN designation of 2014 as the International Year of Small Island Developing States (SIDS), WED this year will adopt SIDS in the broader context of climate change as its theme.

## Climate Change



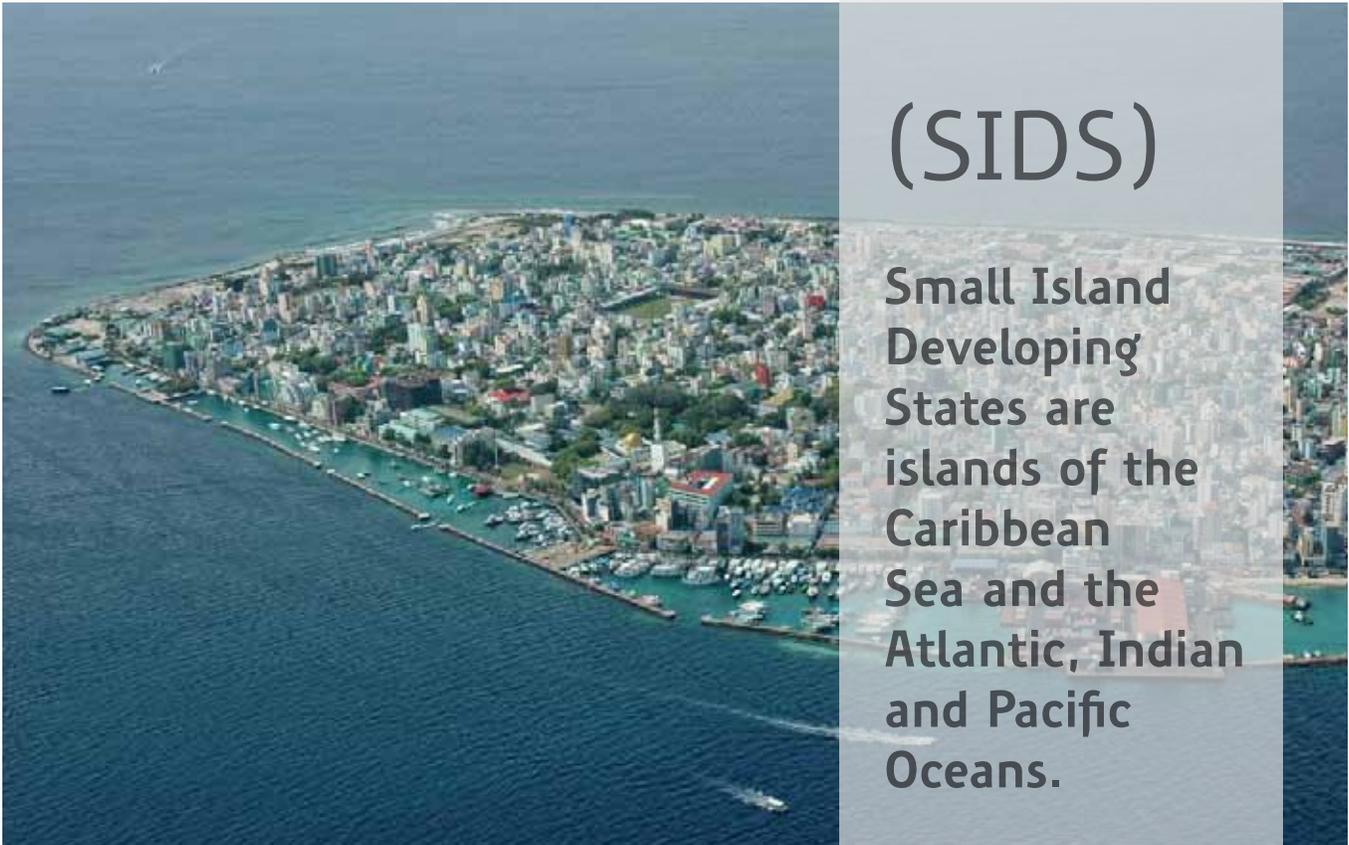
© Demonstrating the impact of rising sea levels in Brazil. Image via 350.org

The global sea level has risen by about 10 to 25 cm. (up to about 10 inches) over the last 100 years.

Sea level rise is attributable to global warming. Humanity's greenhouse gas (GHG) emissions are leading to changes in climatic patterns. The most harmful GHG emitted by human activity – carbon dioxide – accounts for 85% of the increase in the Earth's temperature in the past ten years.

When you save energy you reduce the use of fossil fuels --coal -- oil and gas-- the greatest source of human carbon dioxide output. Simple steps to reduce your carbon footprint—like turning off lights and appliances when not in use, switching to compact fluorescents, carpooling or biking -- can help.

# Did you **know?**



(SIDS)

Small Island Developing States are islands of the Caribbean Sea and the Atlantic, Indian and Pacific Oceans.

*Malé is the capital of Maldives. Photo from <http://whc.unesco.org/en/sids>*

They are some of the most beautiful places on Earth, with atolls of white sand beaches, mountain ranges covered in cloud forest, historic ports and towns, and agricultural landscapes. They are relatively remote, vulnerable to environmental challenges, such as climate change, and generally small in size—Niue has a population of only 1,269, and Tuvalu a total land area of only 26km.

- There are currently 39 small island developing States in three geographic regions: the Caribbean; the Pacific; and Africa, Indian Ocean and South China Sea.
- These small islands have a combined population of 63.2 million people and a combined gross domestic product (GDP) of \$575.3 billion.
- Small islands face a unique set of challenges due to their small size and remote location. They are also highly vulnerable to climate change and natural disasters.

# Did you **know?**



**Small island developing States benefit in different ways from an intimate relationship with the oceans.**

© Photo from <http://www.un.org>

- Singapore, for instance, makes use of its strategic geographic position within the global trading system. Other countries such as the Marshall Islands and Tuvalu, depend on their marine resources.
- Tourism is a vital sector of the economies of most small island developing States. Tourism receipts represent more than 30 percent of their total exports; in comparison, the average for the world is just over 5 percent.
- In Samoa and Fiji, coconut trees and their products account for 30 percent of GDP and the majority of small-scale farmers are dependent on coconuts for their livelihoods.
- The Caribbean region receives more than 21 million visitors each year. If the region were a single country, it would be the third most visited in all of the Americas, behind the US and Mexico, and the 14th most visited worldwide.
- Islands are home to numerous ecosystems, from mountain forests to wetlands that provide food, fresh water, wood, fibre, medicines, fuel, tools and other important raw materials that support island livelihoods, economies and cultures.

# Did you **know**?



Small islands are rich in biological diversity and are home to many endemic species – meaning that they are found nowhere else on Earth – such as the spider *Nephila* in the Seychelles.

The Seychelles, Comoros and Mascarene islands in the Indian Ocean also hold a number of critically endangered bird species.

© Photo from <http://www.un.org>

- Kiribati is home to the Phoenix Islands Protected Area (PIPA) in the Pacific Ocean, which safeguards important nesting grounds for threatened and endangered seabirds, coconut crabs, endemic plants, and sea turtle nesting beaches. It is also one of the world's last intact oceanic coral archipelago ecosystems, and tourist wishing to visit must first apply.
- There are no rivers in The Bahamas but the world's third longest barrier reef and about 14.5 percent of the world's coral can be found in these waters.
- Species have tragically been driven to extinction. Of the 724 recorded animal extinctions in the last 400 years, about half were of island species, and at least 90 percent of the bird species that have become extinct in that period were island-dwellers.
- Islands are repositories of genetic information whose present-day biodiversity stands as a record of millions of years of evolution. This biodiversity is of great value not just to island dwellers but to humankind as a whole.

# Did you **know**?

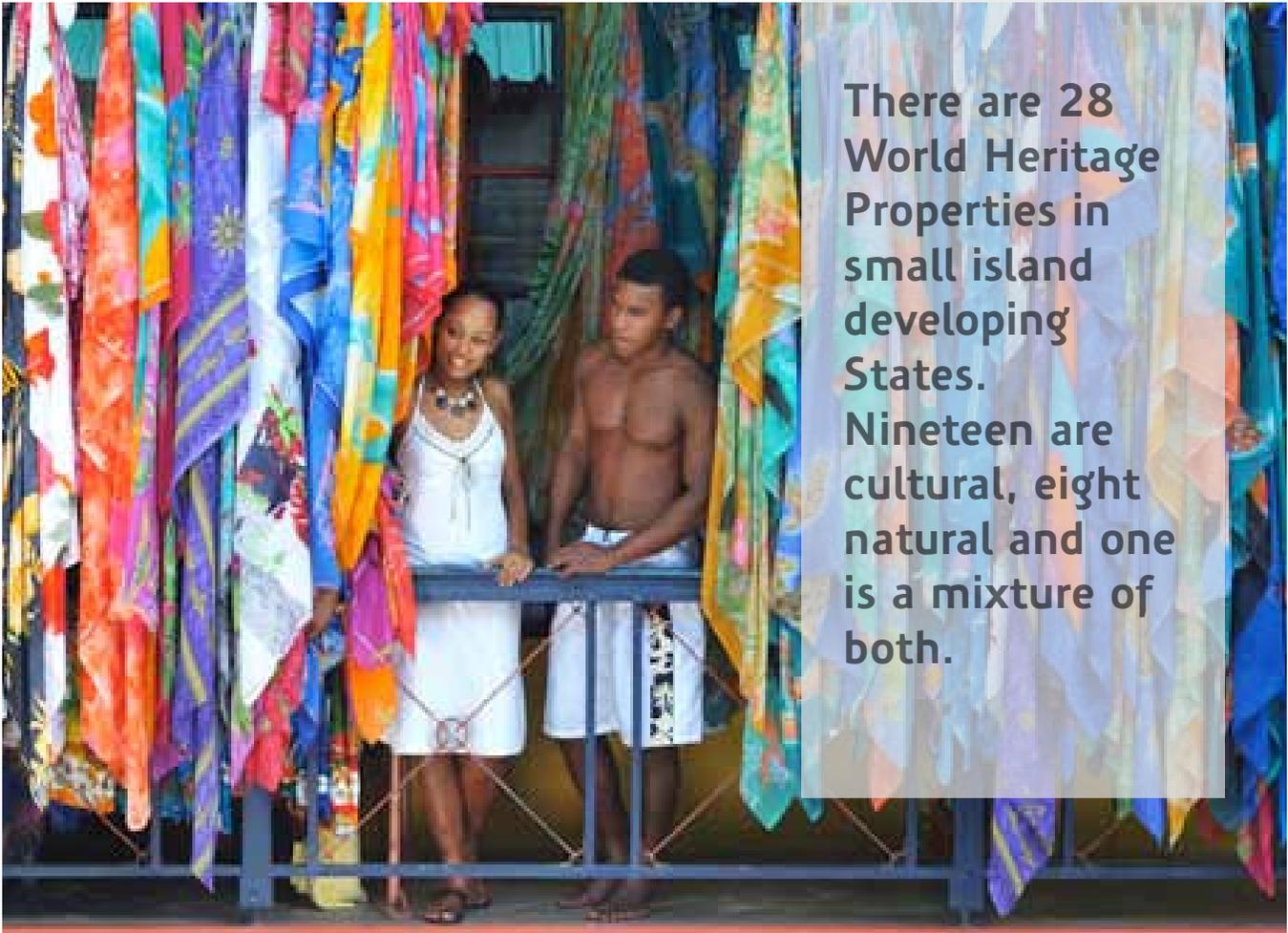


**Several small island developing countries, including the Maldives, Tuvalu and several Caribbean island States, are working to achieve "climate neutrality" through the use of renewable energy and other approaches.**

® The Musselroe Wind Farm has 56 wind turbines with a generating capacity of 168 MW – Tasmania's largest wind farm.

- While they contribute little to climate change, small islands are greatly affected by changes in climate patterns, and the rise in sea level can cause loss of land along coastlines of low-lying islands, disrupting economies and livelihoods. For example, a 50-centimeter rise in sea level will result in Grenada losing 60 percent of its beaches, while a 1-metre rise would inundate the Maldives.
- Climate change causes coral bleaching to become an annual occurrence, leading to environmental and economic losses. For example, Dominica has reported that half of its corals are bleached, and coral bleaching in Tobago affected an average of 66 percent of its hard corals in 2005 alone.

# Did you **know?**



**There are 28 World Heritage Properties in small island developing States. Nineteen are cultural, eight natural and one is a mixture of both.**

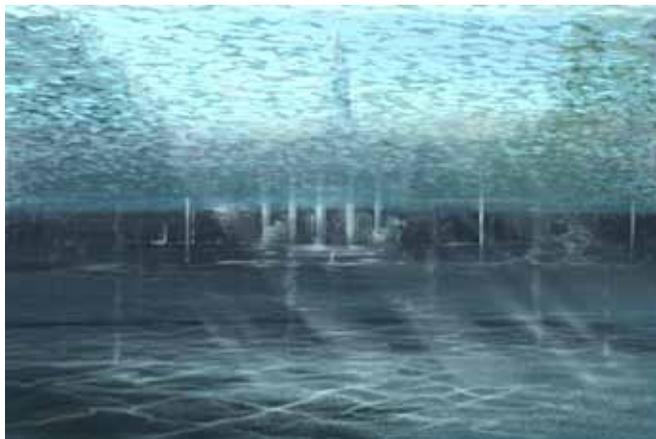
© Photo from <http://www.un.org>

- In spite of their small size, these countries have great diversity in cultures and languages with indigenous heritage (in the Pacific) as well as European, African, Arab and Asian influences.
- Small islands have also given the world various music genres including reggae, zouk, mambo, danzón, bouyon, calypso, soca, reggaeton and punta.
- Caribbean countries hold dozens of carnivals every year, where the folklore, music and traditions are showcased. Caribbean carnivals are also held in cities around the world. Some of the most famous ones include the Notting Hill Parade in London, and the West Indian Parade in New York.

# Did you **know?**

This is how a 25 ft. of sea level rise looks like

## Harvard Campus, Cambridge



® Source: Nickolay Lamm/StorageFront.com; Data provided by Climate Central read more: <http://www.businessinsider.com>

## Ocean Drive, Miami



® Source: Nickolay Lamm/StorageFront.com; Data provided by Climate Central read more: <http://www.businessinsider.com>

## Back Bay, Boston

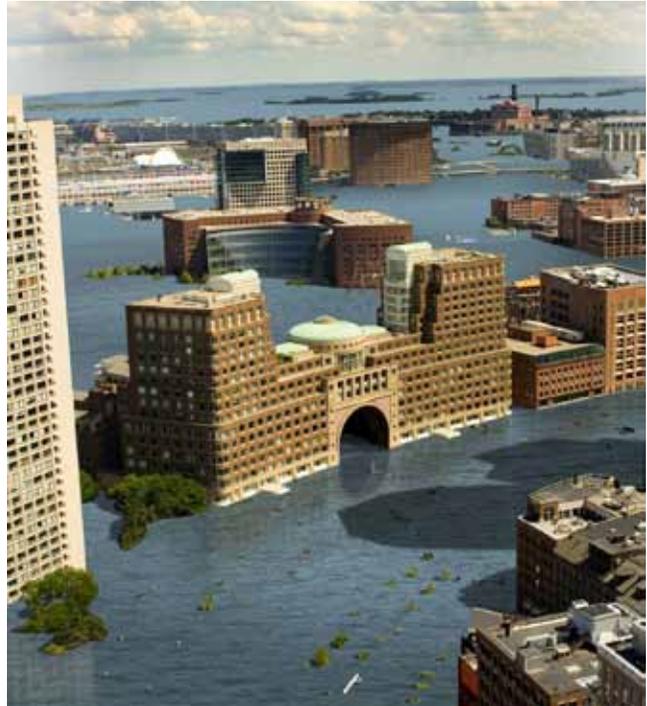


® Source: Nickolay Lamm/StorageFront.com; Data provided by Climate Central read more: <http://www.businessinsider.com>

# Did you **know?**

This is how a 25 ft. of sea level rise looks like

## Boston Harbor, Boston



® Source: *Nickolay Lamm/StorageFront.com*; Data provided by *Climate Central* read more: <http://www.businessinsider.com>

## Manhattan, New York



® Image above: Here, a visualization of what would happen if the Southern hemisphere experiences 6-foot sea level rise: Large parts of Manhattan would disappear.

# Take **Action!**



© Photo from <http://www.un.org>

**Simple steps  
you can take  
to reduce  
greenhouse gas  
emissions and  
climate impact**

- Keep it clean. Support measures to stop dumping of sludge and sewage into harbors, rivers, and streams.
- Keep it safe. Endorse creation of marine reserves to protect fish and other marine life.
- Don't touch. When snorkeling or scuba diving, take particular care to look at but not stand on or even touch coral reefs.
- Stash your trash. Pick up litter, stow plastic bags, reel in fishing line, and avoid six-pack rings.
- Prevent pollution. Don't dump motor oil, pesticides, or other toxic chemicals into streets, onto the ground, down storm drains, or anywhere else where they can eventually find their way to the ocean.
- Change five lights: Replace your five most frequently used light fixtures or the lightbulbs in them with ENERGY STAR® qualified products and you will help the environment.
- Heat and cool smartly: Changing air filters regularly, properly using a programmable thermostat, and having your heating and cooling equipment maintained annually by a licensed contractor can save energy and increase comfort, while helping to protect the environment.
- Use water efficiently: It takes lots of energy to pump, treat, and heat water, so saving water reduces greenhouse gas emissions. Saving water around the home is simple. Three percent of the nation's energy is used to pump and treat water so conserving water conserves energy that reduces greenhouse gas pollution.
- Be green in your yard: Composting your food and yard waste reduces the amount of garbage that you send to landfills and reduces greenhouse gas emissions. EPA's GreenScapes program provides tips on how to improve your lawn or garden while also helping the environment.