



**World
Wetlands Day**
2 February 2017

Wetlands for Disaster Risk Reduction



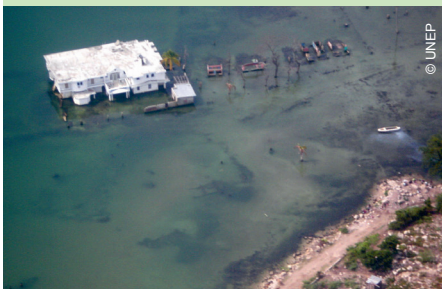
Wetlands: a natural safeguard against disasters

The frequency of disasters worldwide has more than doubled in just 35 years, driven by climate- and weather-related hazards like flooding, tropical cyclones and droughts. UN Water estimates that 90% of all natural hazards are water-related. And the Intergovernmental Panel on Climate Change (IPCC) predicts even more extreme events going forward.

The human toll is tragic: 1.35 million people died as a result of disasters between 1996 and 2015. Low- and middle-income countries account for 90% of fatalities. In material terms, weather-related disasters caused US\$3.3 trillion in damage between 1980 and 2014.

Disaster or hazard?

We think of floods, droughts, tsunamis, cyclones/hurricanes, earthquakes and other extreme events as disasters. But actually these are natural *hazards*. A *disaster* is the severe disruption that is caused to a community or nation in human, material, economic or environmental losses.



Using wetlands to minimize the damage from disasters

Defined as land areas that are flooded with water, either seasonally or permanently, wetlands are a natural buffer against disasters.

Along the coastline, wetlands act as a natural protective buffer. For example, they helped avoid more than \$625 million in damages from Hurricane Sandy in 2012. Inland, wetlands act as a natural sponge, absorbing and storing excess rainfall and reducing flooding. During the dry season, they release the stored water, delaying the onset of droughts and reducing water shortages.

When well managed, wetlands can make communities resilient enough to prepare for, cope with and bounce back from disasters even stronger than before:

1. Preparing/preventing

To minimize impact ahead of time, we can designate flood- and storm-prone areas as protected wetlands to strengthen nature's own buffer. The Biosphere Reserve of the Saloum Delta in Senegal is an area of estuaries, lakes and marshes. It controls flooding and makes sure that humans, animals and plants have access to fresh water over the entire year. IUCN is

working with local communities in Senegal to restore degraded wetlands and to encourage sustainable agriculture, tourism and fishing practices.

2. Coping

When an extreme event hits, healthy wetlands can absorb some of the shock, cushioning the damage in local communities. In Hikkaduwa, Sri Lanka where offshore coral reefs are protected through a marine park, the damage from the 2004 tsunami extended just 50m inland. In nearby Peraliya, where coral mining had degraded the reefs, the damage extended 1.5 km inland.

3. Bouncing back

Wetlands can also speed up the recovery and help to “build back better” after a disaster, acting as natural water filters and nutrient restorers. After a 1999 cyclone that hit Odisha in eastern India, rice paddies that were protected by mangroves recovered their food production much more quickly than croplands without the buffer.

Maintaining healthy wetlands and restoring degraded ones means that a community can deal with a disaster even better next time.

