

# Asia Pacific: Impact of Rising Sea Levels on Small Islands (Feb 2009)

According to the Intergovernmental Panel on Climate Change (IPCC), rising sea levels, more frequent storms and floods will impact tens of millions of people, particularly in coastal areas and on islands. The 'sinking' of Small Island States can have dramatic consequences, such as increasing food insecurity and displacement of populations. In the Asia-Pacific region, several countries have already proved to be among the most vulnerable to the adverse impacts of climate change.<sup>1</sup>

**Did you know?**  
Over the past 20 years the frequency of flood disasters has **tripled**.<sup>1</sup>

## Highlights:

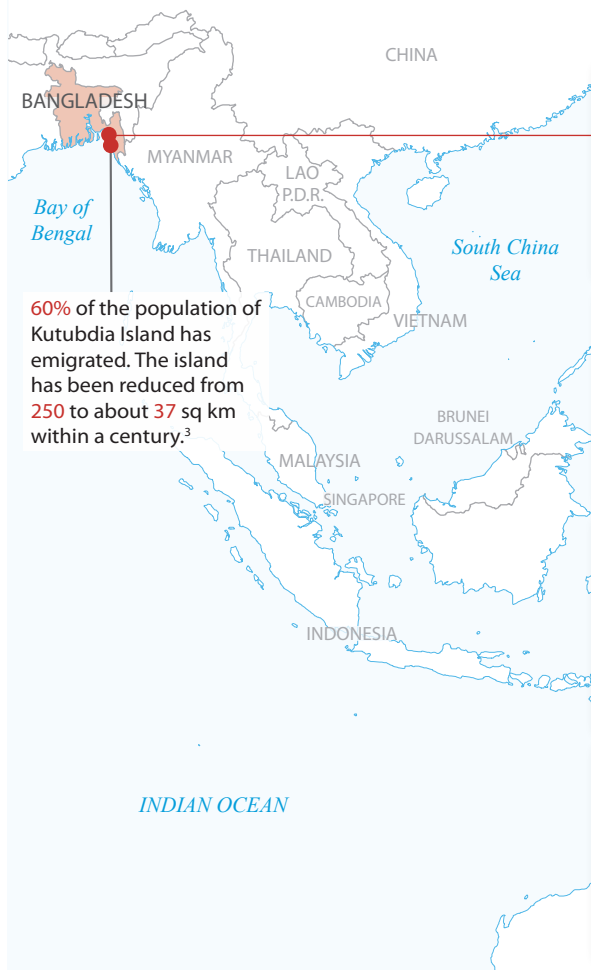
The average sea level is expected to rise between **18 to 58 cm** in a hundred years.<sup>2</sup>

In the absence of adaptation, cost of damages in food sector by 2050 could represent **2-3%** of Fiji's and **17-18%** of Kiribati's 2002 GDP.<sup>2</sup>

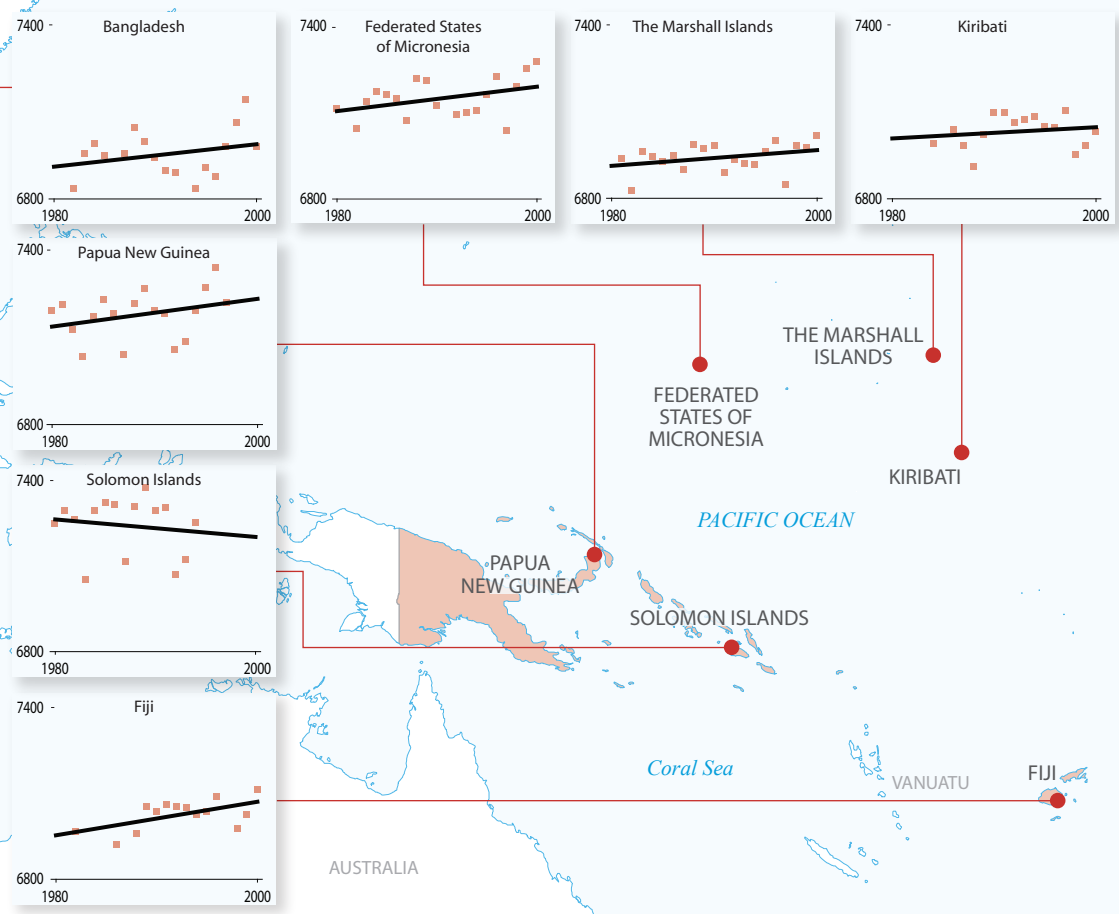
The Papua New Guinea Gov. estimates that **50,000-80,000** people have been affected by flooding caused by abnormally high tides in early Dec 2008.<sup>4</sup>

The Marshall Islands Gov. reported that swells **3.65 m** high impacted lower lying areas of Majuro on 10 Dec 2008.<sup>5</sup>

During the Jan 2009 floods in Fiji, seawalls were washed away by the impact of flood waters. It will cost over **USD 753,000** to repair the total damages incurred.<sup>6</sup>



Sea level from 1980 to 2000 in millimeters<sup>7</sup>



**Disclaimer:**  
The boundaries and names shown and the designations used on all maps do not imply official endorsement or acceptance by the United Nations.

**Creation date:** 17 Mar 2009.

**Base map sources:** UNCS, Referentiel Geographique Commun.

- References:**
- <sup>1</sup>Brookings-Bern Project on Internal Displacement. The climate change - displacement nexus. 16 Jul 2008.
  - <sup>2</sup>FAO. Climate Change and Food Security in Pacific Island Countries. 02 Dec 2008.
  - <sup>3</sup>IRIN. Bangladesh: When climate change gives you a sinking feeling. 23 Oct 2008.
  - <sup>4</sup>IRIN. Papua New Guinea: Tens of thousands displaced by coastal flooding. 12 Dec 2008.
  - <sup>5</sup>OCHA. Pacific Islands: Abnormally high sea levels OCHA Situation Report No.1. 13 Dec 2008.
  - <sup>6</sup>Gov. of Fiji. Damaged seawall repairs begin. 27 Jan 2009.
  - <sup>7</sup>BODC. GLOSS Station Handbook. www.bodc.ac.uk/data/information\_abd\_inventories/gloss\_handbook/stations. Download: 14 Jan 2009.