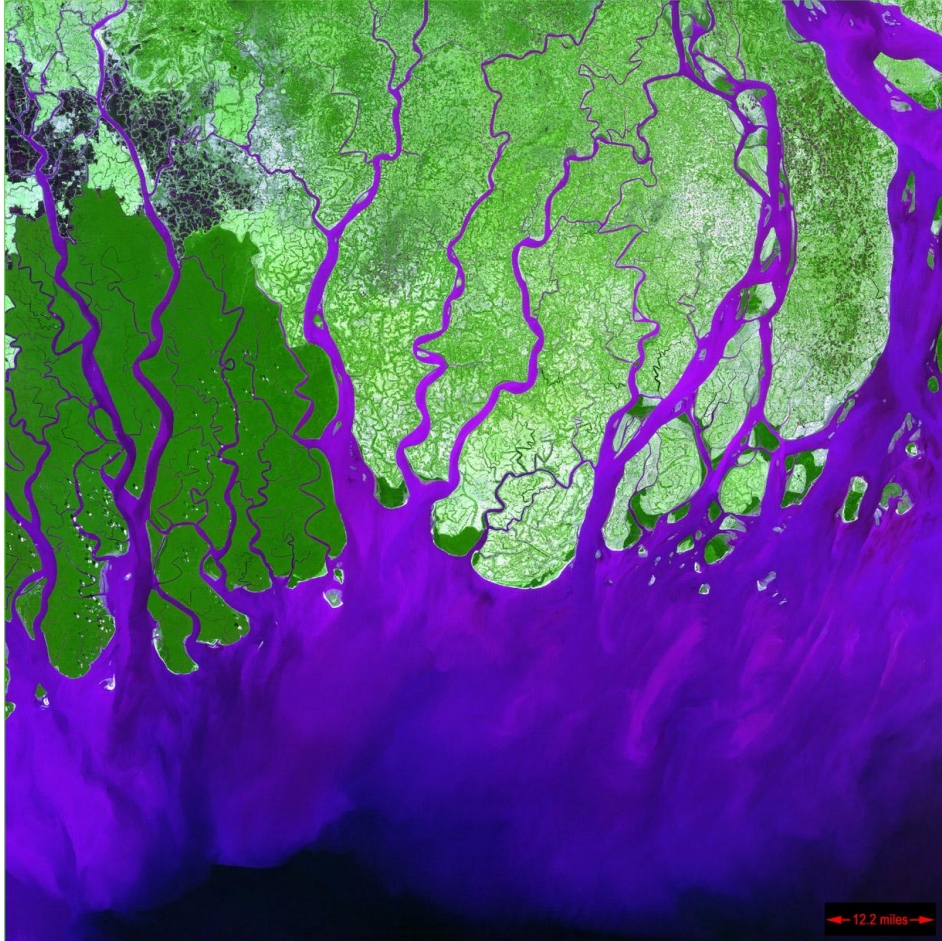


Watery grave for river deltas? *Sinking land & rising seas to blame*



Two-thirds of the world's major deltas, home to nearly half a billion people, are caught in the scissors of sinking land and rising seas, according to a study. The new findings are based on satellite images, show that 85% of the 33 largest delta regions experienced severe flooding over the past decade, affecting 260,000 square kilometres.

Delta land vulnerable to serious flooding could expand by 50% this century if ocean levels increase as expected under moderate climate change scenarios, the study projects. Worst hit will be Asia, but heavily populated and farmed deltas on every continent except Australia and Antarctica are in peril, it says.

On a five-tier scale, three of the eleven deltas in the highest-risk category are in China: the Yellow River delta in the north, the Yangtze River delta near Shanghai, and the

Pearl River Delta next to Guangzhou. The Nile in Egypt, the Chao Phraya in Thailand and the Rhone River delta in France are also in the top tier of danger.



Just below these in vulnerability are seven other highly-populated deltas, including the Ganges in Bangladesh, the Irrawaddy in Myanmar, the Mekong in Vietnam and the Mississippi in the US. These flood plains and others all face a double-barrelled threat, reports the study, published in the journal *Nature Geoscience*.

On the one side, a range of human activity — especially over the last half-century — has caused many delta regions to subside. Without human interference, deltas naturally accumulate sediment as rivers swell and spread over vast areas of land (AFP 23 September 2009).

In concert with global warming, the rivers that pour down from the Himalayas and empty into the Bay of Bengal have swelled and shifted in recent decades, placing these already fragile islands, known as the Sundarbans, in the mouth of daily danger.

A study by Sugata Hazra, an oceanographer at Jadavpur University in nearby Calcutta, found that during the past 30 years, about 80 square kilometers, or 30 square miles, of the Sundarbans have disappeared. More than 600 families have been displaced, according to the local government authorities. Fields and ponds have been submerged (New York Times, 10 April 2007).