

Lesson 5: Resource Sheet 1

Bangladesh and rising sea levels

Bangladesh is located in South Asia. It is a very crowded country with 163 million people living on just 147,570 square kilometres of land. This makes it one of the most densely populated countries in the world.

Bangladesh shares land borders with India to the west, north, and east, Myanmar to the southeast, and the Bay of Bengal to the south. Dhaka is the country's capital and largest city. It is also the country's economic, political and cultural centre.

The country's main geographic feature is the Ganges delta, which empties into the Bay of Bengal. The delta combines the waters of several river systems, including the Brahmaputra and the Ganges. The delta has many crisscrossing rivers and inland waterways. Highlands with evergreen forests cover the higher ground in the northeast and southeast of the country. The coast is lined by the world's largest mangrove forest. The country's plants and animals include the endangered Bengal tiger, the country's national symbol.

Bangladesh and climate change

Bangladesh is one of the Asian countries most at risk from rising sea levels resulting from increasing global temperatures. Eighty per cent of the country has elevations of less than 10 metres above sea level with the elevation decreasing to sea level in the coastal region of the south.

Scientists estimate that every 1°C increase in global temperature will trigger a sea-level rise of about 2.3 meters. It is now thought that sea levels could be 200 to 270 cm higher by 2100. Such a large increase will flood much of Bangladesh. Millions of people will be forced to move. They will become climate change refugees.

As the oceans warm, they expand in volume. This expansion of the oceans contributed 42 per cent to sea-level rise; the melting of glaciers contributes 21 per cent; and the ice melt from contributes Greenland, 15 per cent; and Antarctica, 8 per cent.

Bangladesh is also threatened by an increase in extreme weather conditions such as the cyclones.

Figure 1: Impacts of rising sea levels in Bangladesh

