

## Chapter 3 – Climate Consequences

### Consequences of Climate Catastrophe.

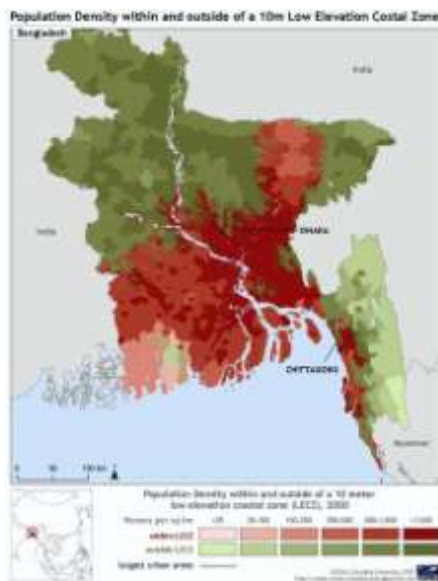
- *Sea level rise. Climate refugees. Bangladesh and London.*



Sea level rise will be mainly due to the expansion of seawater as oceanic world temperature rises. Another effect is the melting of Arctic and Antarctic ice.



There are 143 million Bangladeshis. The fence built between India and Bangladesh, which is under threat from sea level rise, is designed to prevent the migration of climate refugees.



- *Melting glaciers.* The large glacial lake Imja Thso in the Imja Valley south of Mt. Everest/Nepal formed in the 1960s has grown continuously. In the north-western Himalayas, researchers noted many of the glaciers are dynamically unstable and prone to rapid advances (so called “surges”) that largely occur independently of the climatic conditions. For the last decade on average, they detect even a slight volume increase. The researchers analyse that glacier shrinkage will not have a major impact on the water drainage of large rivers like the Indus, Ganges and Brahmaputra in the coming decades. However, glaciers in the tropical Andes have shrunk 30% to 50% in 30 years, where 3.5 million people heavily depend on melt water for survival.



- *Species extinction. Noah’s Arks.*



The Stern Review quotes “40% of species are potentially facing extinction after only 2°C of warming”.



Seed banks and zoos are needed to preserve the plant and animal diversity that would perish with such a rise of temperature.

- *Political action and inaction. Education.* Political action can gain media and public attention to climate catastrophe. From the community this is often challenged by interests within the fossil-fuel industry.



Michael Gove, Britain's Secretary of State for Education, has removed the subject of climate change from the curriculum for under 14s. Esha Marwaha, a student from the Heathland School in London, has created a petition to keep climate change on the education menu, and it has already received nearly 24,000 signatures, and counting.

- *Vested interests in fossil fuels.* Michael E. Mann writes:

The controversy that the hockey stick ultimately generated had little to do with the depicted temperature rise. Rather, it was the beginning of what became a pattern. Vested interests, including a handful of companies in the fossil fuel industry, perceived this graph as a threat because it was easy to understand and clearly showed through the rapid rise of temperatures in the last 100 years that our climate is changing due to human interference. The fossil fuel industry, which is among the largest and most deeply embedded industries in history, has sought to discredit science it perceived as a threat to its short-term interests. But the dishonest attacks on science and scientists are unacceptable. Oil and coal have been very good to us – they have enabled dramatic economic growth in our country and around the world. We know that continued reliance on fossil fuels will come at the price of a changing climate. Some energy and fossil fuel companies understand this and have backed away from attacks on climate science. But others have stepped in to take their place.

