

The Telegraph, Kolkatta, 22 Nov 2007

Disaster round the corner

TURNING ON THE HEAT

The human drama of climate change will largely be played out in Asia, where over 60 per cent of the world's population live. Over half of those are vulnerable to sea-level rise. Disruption to the region's water cycle also threatens the food systems.

The consensus from the Intergovernmental Panel on Climate Change indicates that all of Asia is likely to warm during this century, with more extreme patterns of rainfall, droughts and inundations. Tropical cyclones may increase in magnitude and frequency, while monsoons may become more temperamental. The Asia-Pacific region includes a huge diversity of climatic zones. Therefore, the impacts of climate change will be diverse. The arid and semi-arid regions are set to suffer further water shortages, while tropical, temperate and boreal Asia are likely to experience increased flooding.

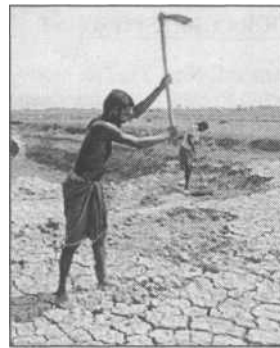
This report looks at measures that are being taken to reduce the causes of climate change and to overcome its effects—emissions reduction; alternative water and energy supplies; preservation of strategic ecosystems; increasing capacity, awareness and skills for risk and disaster management; and effective policy instruments.

India and China account for well over one-third of the world's population. Infant mortality rates as high as one in six are common here and malnutrition has been less effectively tackled in South Asia. A decrease in food security is likely to exacerbate this

Excerpts from the fifth report of the Working Group on Climate Change and Development

problem. Widespread droughts in Indian states, such as Maharashtra, have contributed to soaring suicide rates among farmers.

Increasingly intense rainfall, particularly during the summer monsoon, could increase the risk of



flooding. Already a large number of floods have occurred in China in the last few years. In arid regions of China, however, temperatures will continue to rise. Rainfall is already low in such areas, and is expected to decline further. Drought in north China has increased, resulting in severe agricultural losses. Already, some 82 per cent of the glaciers in western China are reportedly retreating.

India's climate is dominated by the southwest monsoon. Heavier rainfall during summer could increase flooding, but the monsoon may fail with the increasing frequency and

intensity of the El Niño phenomenon. With over 6,500 kilometres of low-lying, densely populated land, millions of Indians are at risk from sea-level rise.

A study by the International Rice Research Institute showed that increases of 1°C at night during the growing season would reduce global rice yields by 10 per cent. Another global study showed that the production of rice and wheat could fall by eight per cent and 32 per cent respectively by the year 2050. In India, less water could cause a loss of up to 30 per cent of agricultural production, including food grains.

To cope with a changing environment, Asian small-scale agriculture will need dramatically increased support, and locally adapted crop diversification that boosts biodiversity. Highly diverse systems are more resilient and often more productive. Farming based on expensive and energy-intensive fossil-fuel-based inputs will be both vulnerable to fuel-price rises and add to the release of greenhouse gases.

Small-scale farmers need support in the form of a favourable policy environment that addresses their problems. Greater investment in the agricultural sector is needed to increase productivity. Boosting production and improving distribution require the combination of new insights with the wisdom of traditional farming. Governments must guard against the dangers associated with clearing forests and putting bio-fuels ahead of food crops.