

Environment and Ecology in South Asia: Past and Present

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Guest editor

Ecology and environmentalism are back on the political and media agenda. During the 1980s, environmental concerns and themes dominated national and international politics. The German word *Waldsterben* became a globally familiar term for the possible destruction of the earth due to industrial pollution. Grassroot movements sprang up in Europe, the USA and on the Indian subcontinent. Deforestation was the main subject of the environmentalists who predicted the earth's desertification within less than a hundred years, by which time most of the globe's terrestrial area would be turned into non-inhabitable regions. Within a short time, all spheres of the globe, terrestrial, maritime and aerial, became the object of environmental activists as well as academics.

Some twenty years ago, global warming was regarded as the most dangerous environmental challenge. However, only in 1997 did the Kyoto Protocol acknowledge CO₂ emissions as the main cause of climatic change. To prevent further climatic deterioration, 178 nations signed the protocol, with the exception of the USA, the worst polluter of all, responsible for about 25 per cent of global CO₂ emissions. It took another 4 years until these nations reached a binding agreement in Bonn to implement the Kyoto Protocol. Since then all the signatories agreed in the United Nations Convention Framework on Climate Change (UNFCCC) to reduce greenhouse gases substantially by 2012. As is well known, the USA did not sign any of these conventions or agreements.

In 2007, the UN report on global warming once again alerted politicians of most nations which then agreed to speed up implementation of the Kyoto Protocol's stipulations and also to introduce more effective measures for surveillance and control. Looking back to the 1980s, themes have not fundamentally changed. CO₂ emissions as well as deforestation are still seen as the major reasons for the global climatic change. The only difference seems to be the present dramatic acceleration towards the environmental catastrophe. The slow but steady rise of the sea level is already proving the

effect of global warming. Two of the following four articles on environment and ecology in South Asia deal with this rise of the sea level.

Whilst Mahabub Sarwar presents rather horrifying data indicating a worst case scenario for Bangladesh if the water level were to rise by 1 metre, thereby flooding up to a third of the country's landmass and rendering about 28 per cent of the population homeless, Nils-Axel Mörner assumes that global warming will not necessarily cause a rise in the sea level since, according to historical as well as geological evidence, the sea level has been going up and down during the last 6000 years. One may read Mörner's article as a strategy of wait and see in the hope of being able to react in the event of an imminent environmental threat, whereas Sarwar's contribution reads as an ecological agenda for protective measures and emergency plans to be implemented by the Bangladesh government as soon as possible. Both articles deal with the same subject, coming, however, to quite opposite results. In the context of worldwide discussion on the causes and effects of global warming both articles represent the extreme span of arguments.

Seen from a historical perspective, it becomes clear that environmental changes have been occurring for centuries. This may sound rather banal; however, historical evidence presented by Iftexhar Iqbal demonstrates how the environment of a region like eastern Bengal was substantially altered by technological improvements during British colonial rule. If depletion and transformation of the Indian subcontinent's forests has been one result of colonial rule, the construction of railway embankments and bridges has certainly been another. As shown by Iqbal, man-made improvements had major ecological and environmental effects, most prominently the water logging of fertile agricultural land and the silting of rivers in the deltaic region of Bengal. Despite warnings from local people as well as some early environmentally aware British engineers, "traditional" knowledge was rejected in favour of "modern" technology. Ultimately, the politics of improvement and development (camouflaging the colonial state's protection of private capitalist interests) resulted in the decline of the country's agricultural output as well as in an increase of endemic diseases like malaria.

The last article deals with the environmental changes in the frontier region of Bengal-Nepal at the turn of the eighteenth century. Bernardo Michael demonstrates convincingly how the dynamics of ecology, land and labour produced movable agrarian spaces in the Champaran-tarriani ("Tarai") and the Gurkha-Butwal section of the Bengal-Nepal frontier. The author uses the term "environment" in a much wider sense than the other contributors to this volume, including administrative and political aspects of everyday practices of rule, be it British or Gurkha. Michael argues that patches of land along the Anglo-Gurkha frontier changed from being cultivated to becoming waste-

land – sometimes rather rapidly but mostly dependent on ecological conditions in the country – and even shifted between the competing centres of political power, viz. the British and the Gurkhas. Shifting control of land and variable revenue pressed colonial administrators to put an end to these rather dissatisfying conditions at the beginning of the nineteenth century. After the Anglo-Gurkha war of 1814–16, British officials immediately defined the boundary by erecting stone pillars, thus demarcating the different territories, at least as a visible line on the map.

All four authors offer insightful contributions to the complex histories of environmentalism and ecology. The articles are also an attempt to bring the two disciplines closer together. Despite their close affinity they are generally distinguished along the rather arbitrary lines of “sciences” and “humanities” or “natural sciences” and “social sciences”. Therefore, this special issue might also contribute to a more holistic approach to environmental changes: in short, environmentalism should become a discipline including economic, ecological, historical, political and sociological categories relevant to analysing the present-day environmental problems of the earth.

