

## Chapter 25

# A Critical Assessment of Environmental Degeneration and Climate Change: A Multidimensional (Political, Economic, Security) Challenge for China's Future Economic Development and its Global Reputation<sup>1</sup>

**Christian Ploberger**  
*University of Birmingham, UK*

### ABSTRACT

*China and its population are confronted with fundamental environmental challenges, as both environmental degeneration and the impact of climate change exhibit critical political, economic, and social implications for their future development. Among the various environmental challenges China faces, this chapter identifies pollution issues, soil erosion, acid rain, and sea-level rise. This variety of environmental issues increases the underlying complexity of how best to address these challenges, especially as China's growth strategy has the potential to exacerbate the negative impact on the environment further. Hence the question which development strategy China will follow—a 'growth first and clean up later' or 'cleaning up while growing'—carries serious implications not only for the environmental situation in China itself, but for the international community as well. It is crucial to recognize that China's multidimensional environmental challenges also carry critical implications for China's international reputation.*

DOI: 10.4018/978-1-60960-531-5.ch025

## INTRODUCTION

China's economic growth rate since the reform process began is extraordinary and generated a fundamental positive impact for the livelihood of millions of Chinese people by providing economic benefits and prosperity. However, several social and economic challenges remain, as these economic benefits are neither equally distributed among China's population nor within China's vast territory. Consequently, we can identify both a rural-urban divide as well as an increasing gap of economic development within and between provinces. In addition, various new challenges emerged, one such critical challenge, which has become increasingly prominent over time, is the environmental issue. The potential negative implications climate change has on China's future development and on the quality of life of China's population will almost certainly intensify in the years to come. Yet, the environmental question represents a complex issue with far-reaching implications and various aspects need to be addressed. Among them, we can identify: the nature of environmental degeneration; its close link with development and the inherent political implications and challenges faced when addressing issues of environmental degeneration; as well as the international dimensions of various environmental issues. In this context, identifying the historical and social origins of specific environmental challenges are of crucial importance for developing a comprehensive understanding into the challenges faced, highlighting that environmental challenges not only inherent a political-economic dimension but a social dimension as well. Consequently, addressing specific environmental challenges will not only require economic-technical solutions but may also require addressing underlining social-political dimensions as well.

This chapter will evaluate the underlining challenges environmental degeneration and climate change pose for China's future development, and will begin with an evaluation of the challenges

in identifying and communicating environmental issues before proceeding with an assessment of China's specific environmental challenges. It will thereafter address the related developments and potential political implications. Although one may argue, as the Copenhagen Summit did not produce binding international agreements, the immediate pressure in addressing environmental concerns decreased for the Chinese government. Instead, I argue, that such a view is misguided, as the environmental challenges China faces are as real as ever and will intensify in their political, economic and social implications as will the pressure on the Chinese government to address these issues. The essay will conclude with a comprehensive assessment of the national Eleventh Five-Year Plan (FYP) (2006-2010) and will consider the security and international implications of China's environmental challenges.

## **THE UNDERLINING COMPLEXITY OF THE ENVIRONMENTAL ISSUE: SCIENTIFIC PROBABILITIES; POLITICAL AGENDAS AND THE CONCRETENESS OF SPECIFIC ENVIRONMENTAL ISSUES**

When addressing and evaluating the complexity of the environmental issues, it is crucial to identify certain fundamental and critical issues from the onset. One such fundamental issue within the environmental impact debate relates to the ongoing and critical discourse, regarding two critical agendas: one is scientific the other is political. The scientific agenda relates to the authoritative assessment of a specific threat scenario, whereas the political agenda focuses on the formation of concern in the public sphere and the allocation or non-allocation of resources in dealing with specific environmental challenges.<sup>2</sup> It is crucial to be aware, that both agendas inherit a critical role considering the perception and the response towards particular environmental issues. Take

18 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

[www.igi-global.com/chapter/critical-assessment-environmental-degeneration-climate/53265](http://www.igi-global.com/chapter/critical-assessment-environmental-degeneration-climate/53265)

## Related Content

---

### The Bottled Water Market and Consumer Behavior

Mustafe Pillanaand Arbenita Qosa (2018). *International Journal of Sustainable Economies Management* (pp. 35-45).

[www.irma-international.org/article/the-bottled-water-market-and-consumer-behavior/202439](http://www.irma-international.org/article/the-bottled-water-market-and-consumer-behavior/202439)

### Brand Rejuvenation: The Effects of Hypothetical Brand Extensions on Existing Brands

Sudheer Muhammed K. M.and Sheenaa (2022). *International Journal of Social Ecology and Sustainable Development* (pp. 1-19).

[www.irma-international.org/article/brand-rejuvenation/301255](http://www.irma-international.org/article/brand-rejuvenation/301255)

### Country Digitalization, Trade Openness, and Innovation: Is There a Symbiosis?

Oualid Abidi, Vladimir Dzenopoljacand Aleksandra Dzenopoljac (2024). *Convergence of Digitalization, Innovation, and Sustainable Development in Business* (pp. 1-15).

[www.irma-international.org/chapter/country-digitalization-trade-openness-and-innovation/338671](http://www.irma-international.org/chapter/country-digitalization-trade-openness-and-innovation/338671)

### Introducing Eco Friendly Urban Traffic Control Room: A Green Approach

Somasree Bhadra, Anirban Kunduand Sunirmal Khatua (2017). *International Journal of Green Computing* (pp. 77-97).

[www.irma-international.org/article/introducing-eco-friendly-urban-traffic-control-room/206155](http://www.irma-international.org/article/introducing-eco-friendly-urban-traffic-control-room/206155)

### Indices of Land Degradation and Control Measures in Selected Urban Communities of Abeokuta, Ogun State, Nigeria

O. A. Lawal-Adebouleand A. K. Aromolaran (2015). *International Journal of Social Ecology and Sustainable Development* (pp. 54-66).

[www.irma-international.org/article/indices-of-land-degradation-and-control-measures-in-selected-urban-communities-of-abekuta-ogun-state-nigeria/142147](http://www.irma-international.org/article/indices-of-land-degradation-and-control-measures-in-selected-urban-communities-of-abekuta-ogun-state-nigeria/142147)