

# Chapter 14

## A Critical Assessment of Environmental Degeneration and Climate Change: A Multidimensional (Political, Economic, Social) Challenge for China's Future Economic Development

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### ABSTRACT

*China and its population are confronted with fundamental environmental challenges, as both, environmental degeneration and the impact of climate change, exhibit critical social, economic and political implications for their future development. Among the various environmental challenges China faces, pollution issues, soil erosion, acid rain, and sea-level rise are identified. This variety of environmental issues increases the underling 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. The strategic decision 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 global community as well.*

### 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

prosperity. However, various social and economic challenges remain, as these economic benefits are neither equally distributed among China's population nor within China's provinces. Consequently, we can identify both a rural-urban divide as well as an increasing gap of economic development within

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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. Critical, 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 is 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 also require addressing the underlining social-political dimensions as well.

This paper 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. Thereafter, the paper will address the related developments and potential political implications. The essay will conclude with a comprehensive assessment of the national Eleventh Five-Year Plan (FYP) (2006-2010). 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. Contrary to this perception, 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 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>1</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 for example the scientific agenda, as scientific work is not only characterized by complexity but also by probabilities, scenarios and uncertainties, scientific findings are harder to communicate. Equally critically, establishing a scientific link between climate change and the specific impact it has, for example on extreme weather patterns, still proves a challenging undertaking, albeit more indicators are pointing towards the existence of such a link. Yet, this challenge of establishing a scientific link between a specific environmental issue and its potential impact, does not apply to all environmental issues to the same extent. In cases of water or air pollution issues, establishing

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