Chapter 3 China's Environmental Challenges:

A Serious Risk Factor for Domestic Development With Potential International Repercussions

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ABSTRACT

China's environmental and climate-change-related risk provides serious challenges to its development as they carry actual and potential social and economic implications for the livelihood of its population. Among the various environmental risks China faces, pollution in its various forms, drought and flooding, water scarcity, and sealevel rise are some of the more challenging ones. This variety of environmental issues highlights the complexity of addressing and managing these challenges, not least since China's growth strategy has the potential to exacerbate the negative impact on the environment, even when protecting the environment is a specific topic of the 13th Five Year Plan (2016-2020). China's environmental and climate-change-related challenge also carries regional and global implications by facilitating the global climate change dynamic as well as increasing the negative impact on the regional environment in northeast Asia. Even so, it would be misleading to identify China as the major source of global climate change.

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INTRODUCTION

China's economic growth over the past thirty years is extraordinary, with largely positive outcomes for the livelihood of millions of its population despite reduced growth rates in the last couple of years, though still at a level many developed countries would be glad to reach. However, various social and economic challenges remain or emerged as a result of the reform/opening process, since the economic benefits are not equally distributed neither between urban and rural areas, nor within or between China's provinces. In addition, environmental degeneration and climate change are increasingly viewed as having a negative impact on China's overall development process. This negative impact on the environment has the potential to limit China's future economic development as well as decreasing the quality of life for China's population. As a result of those structural challenges and the negative impact on the environment, the pressure on the government to manage these challenges has increased.

Critically, responding to environmental/climate change related risks represent a complex challenge with far-reaching implications. Among the range of risks, we can identify the character of specific environmental degeneration; its close link with development and urbanization; as well as the inherent social and economic-technical implications. Various environmental topics are also linked to national security topics, as for example energy security. In this context, it is of crucial importance to highlight that environmental/climate change related risks not only comprise an economictechnical dimension but a political and social dimension as well. Consequently, specific environmental challenges will not only require economic-technical solutions but also a coherent response to the underlining social-political dimensions. Even as environmental degeneration and climate change comprise political, economic, and social development challenges they still do not command the serious response they require. Even so, changes in perception are already manifesting as both visibility and causality of environmental degeneration and climate change impact are increasing. Identifying environmental/climate change related risks as a distinctive risk category will further increase their visibility and thus will contribute to the mobilization of a positive political response.

This paper will start with an assessment of China's specific environmental challenges, before proceeding with an evaluation of the environment-development link. Thereafter, the paper will evaluate domestic and international statistical data of climate change. Followed by general observations of the link between development and environmental impact and how to increase the awareness of environmental/climate change related risks.

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