

Energy, Climate and the Environment Series



Global Warming and Climate Change

Prospects and Policies in Asia and Europe

Edited by Antonio Marquina



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Prospects and Policies in Asia and Europe

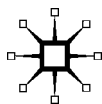
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Water Availability and Policies in Asia

Maizatun Mustafa

Introduction

Water availability is becoming an increasingly crucial issue for Asia. With the rise in the region's water usage, the demand for water is also increasing substantially. Many countries in Asia are beginning to experience moderate to severe water shortages, brought on by the simultaneous effects of various factors including agricultural growth, population expansion and environmental pollution. Global phenomena such as climate change also contribute towards water availability issues.

In recent years, evidence indicates that water is becoming increasingly affected by erratic weather patterns, as has already happened to countries such as Indonesia and China, which have experienced droughts and, inevitably, food shortages. Climate change and population growth also affected water availability in south Asian countries such as India and Bangladesh. Other Asian countries, such as Singapore, face water issues in a different way, Singapore having limited availability of water resources and being highly dependent on Malaysia for its water supplies.

The current concern is that continuously diminishing and degraded available freshwater not only leads to national issues within countries in Asia, but could cause possible interstate disputes and international instability. In this chapter, issues directly concerned with water availability in Asia will be discussed together with the discussion of factors that may influence such availability. The chapter will then highlight policy reforms undertaken by Asian countries to resolve conflicts, secure access and enhance water availability.

Water availability: Defining issues

Water is central to human existence and is an essential requirement for the survival of humans and ecosystems, and a vital element for human development. Thus, water availability is an issue of major concern globally. Although