

Anshuman Gupta · Narendra N. Dalei
Editors

Energy, Environment and Globalization


Recent Trends, Opportunities and
Challenges in India

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Chapter 1

Energy, Environment and Globalization: An Interface



Anshuman Gupta and Narendra N. Dalei

1.1 Introduction

Energy, environment and globalization are interrelated through many channels. However, their causal relationship seems to be unidirectional. The globalization leads to economic development through allocative efficiency, specialization and innovations on the premise of absolute/comparative advantage. It, in turn, results into more uses of energy, especially fossil fuels owing to their easy availability, leading to degradation of environment. Globalization also has favorable impact on environment via import of environmentally friendly technologies and better environmental standards (Frankel 2008).

It is observed the world over that at the starting of economic development, the people are more concerned about their livelihoods and so the governments emphasize economic development with little concern about environment. However, after attaining a certain level of economic development, people of the country start valuing about the environment. Good environment being income elastic is demanded more at increased level of income. Even it becomes the main agenda of the political parties in a democratic setup at this point of time. Thus, the kind of relationship observed empirically between income and environment represents inverted U-shaped Kuznets' relationship (Frankel 2008). Grossman and Krueger (1995) have observed per capita income at \$5000–\$6000 as the threshold point in achieving Kuznets' relationship with sulfur dioxide. The turning point for suspended particulate matter is estimated to be \$3300–\$9600 (Pugel 2008). This so-called Kuznets' impact is mainly because of increase in income. Many studies have concluded that international trade does

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