



ENVIRONMENT AND DEVELOPMENT

China and India

环境保护部环境规划院
印度能源与资源研究所

पर्यावरण एवं विकास:
चीन और भारत



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**A joint study by
Chinese Academy of Environmental
Planning (CAEP) and
The Energy and Resources Institute
(TERI)**



© China Council for International Cooperation on Environment and Development (CCICED) and India Council for Sustainable Development (ICSD), 2011

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FOREWORD BY ZHU GUANGYAO

The issue of environment and development is an enduring topic of human civilization. The history of human civilization to some extent is the history of the explorations on how to correctly handle the relationship between man and the environment during its development. In particular, as man entered the industrialization period, achieving sustainable use of the environment and its resources in the light of the increasing shortages of natural resources became a key issue of common concern.

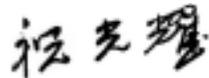
Developed countries have produced many good studies on this issue of sustainable development during more than hundred years of industrialization process. However, developing countries in general lack such studies on environment and development issues. This is particularly true for the comparative study on the environment and development of different developing countries. In fact, many developing countries intentionally or non-intentionally are following the industrialization path of developed countries, without a thought to whether the development path of current developed countries is fully suitable to current developing countries. Other questions related to sustainable development that must be studied by developing countries include: is there any common law that all developing countries can now follow when they handle the interface between the environment and development? What is the changing trend of environment and development in the developing countries? Are there same or similar environment governance experiences and models? The solutions to these questions are significant to the cause of sustainable development of human beings.

Both China and India are ancient countries with a long history. Today, they are also the biggest developing economies in the world, although there are differences between China and India in the areas of environment, natural resource endowments, socio-economic attributes, political system, and cultural traditions. Despite these differences, they face challenges and opportunities, which are many times similar if not same in nature, with regard to several environmental and developmental issues. At present, ensuring the sustainable use of natural resources during rapid socioeconomic development poses a big challenge for the two countries. With the development and rise of

the two countries, the implications of the issues confronted by them internally would be felt by the world at large.

Therefore, comparative study on environment and development issues in China and India, systematic exploration of the trend and pattern of development and environmental change, and analysis of the experiences and lessons during the process of exploring sustainable development in the two countries are not only important for future sustainable development strategy for these countries, but also provide important references to other countries in the world. At the same time, studying these issues will be beneficial for other developing countries that are working towards sustainable development.

To this end, CCICED and ICSD worked together to produce this report. Experts in relevant fields from the two countries were invited to carry out an overall and multi-perspective study on the issue of environment and development of China and India. These experts have put forward a set of common and different issues that are faced by China and India in the pursuit of sustainable development. I hope that this report will provide its readers with a good reference to the understanding of environment and development issues in China and India.



Zhu Guangyao

Secretary General of CCICED

April, 2010

FOREWORD BY R K PACHAURI

It was almost 25 years ago that TERI carried out a joint study with a group in the Tsinghua University, Beijing, to evaluate energy efficiency in the two countries comparing different sectors of the economy in both nations. The study was of great value in showing how some sectors in India registered higher energy efficiency than those in China, but likewise there were several sectors in the Chinese economy which used energy far more efficiently.

Much has changed in these 25 years, and we now have to focus not only on the security of energy supply and the efficiency of energy use, but also on the study of the environment in both countries with economic growth taking place at a healthy pace. Of course the Chinese economy has grown much faster and for much longer than has been the case in India, but so also have the environmental challenges facing that society particularly as the global compulsions to reduce the emissions of greenhouse gases gets stronger.

The study contained in these pages is the result of a joint research project carried out by the CCICED and the ICSD. Here again, there is a substantial difference between these two organizations. The CCICED is a government-sponsored initiative in China, which has been in existence for almost two decades, whereas the ICSD is the initiative of TERI, with of course membership of a distinguished set of leaders from different walks of life in India but a rather modest history of activity. The link that the ICSD has with the Government of India is through Mr Montek Singh Ahluwalia, Deputy Chairman of the Planning Commission, who is a patron of the ICSD. Given the fact that the ICSD functions within a democratic system, its ability to reach the government really depends on sensitizing the public at large. Hence, this volume is expected to perform a vital function in providing and disseminating information to the public in India, by which it is hoped that the subject of environment and development as it has evolved in China and India will be of some value in defining future public policies and private initiatives. Many readers in other countries would also find it of value to understand how the two most populous and most rapidly growing nations in the world are managing the challenge of growth with environmental protection.

The ICSD gratefully acknowledges support provided by CCICED in the conduct of the study.



R K Pachauri
Director-General, TERI and
Chairman, IPCC
April, 2010

PROJECT BACKGROUND

China and India, countries with the world's largest population, are also in the process of rapid economic transition witnessing high economic growth rates. However, particularly in the past decade, the challenges of improving the living standards of the people, need for alleviating poverty as well as the growing environmental concerns have drawn the rest of the world's attention to China and India. On their path of development, they face a common challenge of achieving environmentally benign sustainable pattern of development, demanding action from these countries domestically. In addition, the growing challenge posed by issues such as climate change and preservation of the world's biodiversity, has placed these countries in a strategic position for international action in the global environmental protection process. Actions taken in China and India towards domestic environmental problems, enhancement of natural resource base, efficient energy use, and development of capabilities to mitigate and adapt to climate change are bound to have immense global implications. A successful transformation of the developmental paths of China and India would be globally beneficial in various capacities.

In the light of the above argument and with the objective to bring to focus the commonalities and differences between the two countries in their transition to sustainable pathway of development, the CCICED and the ICSD undertook *Environment and Development: China and India*, a project initiated in the month of September 2008, as the first collaborative project between the two Councils. This project was launched with an aim to study the state of the environment in the two countries, with the focus on the last decade or so and with an overall purpose to draw lessons that both India and China can learn from each other in the context of the environment and development nexus. The programme was jointly implemented by CAEP, China, and TERI, India.

Project objectives

To understand the environment and development nexus for both India and China, identify key issues, challenges, draw synergies, and analyse options for future actions.

To draw commonalities, differences, and lessons that can be learnt from India–China experiences in the context of environment and development

Project outline and methodology

The study has three parts. Part I contains the *Synthesis: What is common, What is different*, which synthesizes the key findings of the project. Part II contains the *Detailed China Report*, and Part III contains the *Detailed India Report*.

The synthesis part summarizes the key findings of the study in a comparative format. It brings out the commonalities and the differences of issues that India and China face in the context of environment and development. It also highlights the lessons the two countries could learn from each other, and the areas they could mutually cooperate.

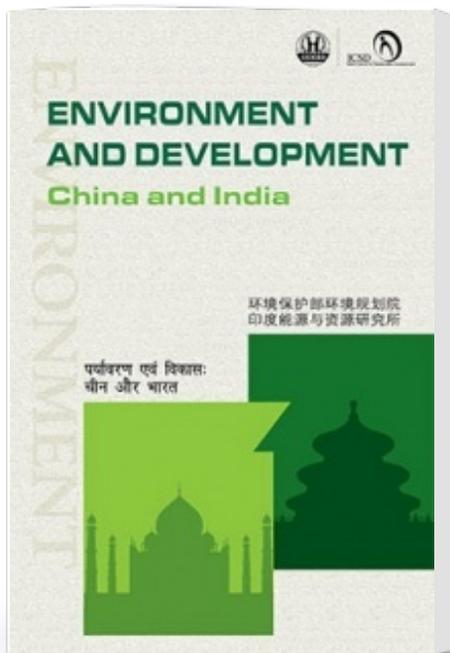
Each of the India and China parts are in turn divided into four components of study as shown in the following figure. Details of the same are as follows:



Framework of study

Environment and development: this component brings forth the study context in terms of the socio-economic progress of India and China, the overall environmental degradation caused in the two countries on their path of economic development, and the key challenges that they will face in the environmental context, in the future.

Environment and Development : China and India



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