



**PROCEEDINGS OF ASIAN SYMPOSIUM  
ON  
GLOBAL ENVIRONMENTAL CHANGE**

Tokyo, 1-2 December 1992

Japan National Committee  
for the International Geosphere - Biosphere  
Programme  
Science Council of Japan

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Satellite Image Mosaic Map in South - East Asia  
(Produced from Eleven NOAA AVHRR (LAC) Images of Dec. 1989 - Mar. 1990)  
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## Preface

The objective of IGBP (International Geosphere-Biosphere Programme) is defined as follows:

To describe and understand the interactive physical, chemical, and biological processes that regulate the total Earth system, the unique environment that it provides for life, the changes that are occurring in this system, and the manner in which they are influenced by human activities.

The analysis of the mechanisms which govern the processes of global changes, and their integration to understand the total Earth system as a whole, requires that the regional study, in its geographical sense, should be extended all over the globe. It is apparent that no single unit or organization can cover this work alone: international coordination is therefore one of the key elements in IGBP to develop work comprehensively as well as effectively. Active exchange of information among researchers is an essential process to enhance effective research collaborations.

In December 1992, under the initiative of the Japanese National Committee for IGBP and the Center for Global Environmental Research of the National Institute for Environmental Studies, more than 170 IGBP participants and related researchers from 16 countries in Asia-Pacific Region and International Organizations, including IGBP offices, held a two-day symposium in Tokyo to advance the above concepts.

The Asia-Pacific region, consisting of a whole or a part of the geographic boundaries of the Tropical Asian Monsoon region, Temperate East Asia, Oceania and Central Arid Asia (as defined by START), is very important in understanding the global environmental problems. This is where the atmospheric and oceanic phenomena that affect the world climate, such as Asia monsoon and El Niño phenomena, can be observed and where tropical forests, deserts, and mountains exist. At the same time, the rapid growth of population and economy in this region is affecting environmental change. Therefore, observation, monitoring, and research on global change in this region are indispensable in understanding the environmental change that is taking place on a global scale.

Already active researches under IGBP have been started in many countries of the Asia-Pacific region. However, there are a number of difficulties to conduct the international collaborative research programme on global change, such as unfavorable natural conditions for observation, and poor socio-economic conditions for international research. A strong cooperation and good coordination of scientific activities must be sought in this region.

This decade is set as the programme period of IGBP; however, considering the importance of the scientific role to investigate the global environment, implementation mechanisms for long-term succession of research should be established within this decade. START is one of such mechanisms to enhance the regional research efforts and foster research capacities, particularly in developing countries. As a research coordinate system in this region, the SARCS (Southeast Asian Regional Committee for START) has been established.

A governmental initiative to establish an Asia-Pacific Network on Global Change Research is also under way corresponding to the efforts of IGBP.

— This publication summarizes the output of the fruitful symposium, through which the necessity of strengthening the coordination within the region as well as with other regions was fully recognized.

The Chairman deeply appreciates the Science Council of Japan and the Center for Global Environmental Research of the National Institute for Environmental Studies, the Environment Agency of Japan for the efforts to organize this symposium, and the assistance of the Global Environment Department, the Environment Agency and the Research and Development Bureau, the Science Technology Agency of Japan. The chairman would like to express special thanks to the IGBP secretariat for advising us on the planning of this symposium and its structure, and, especially, to Dr. Phillip Williamson, Deputy Executive Director, IGBP, for reviewing all sections of this report.



Masatoshi Yoshino

Chairman

Programme Committee of the Symposium and  
Japan National Committee for IGBP

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