PROBLEM COASTS: SCIENTIFIC CHALLENGES TO ADDRESS COASTAL PROBLEMS IN THE ASIA-PACIFIC REGION

Nobuo Mimura

Professor, Ibaraki University, Hitachi, Ibaraki, Japan

The First Asian Forum was held as a special session of EMECS 2001 Conference held in Kobe, Japan. After intensive presentations and discussions on the current problems of the coastal environment, the Asian Forum proposed to conduct a comprehensive assessment for the state of the coastal environment in the Asia and Pacific Region. This is in line with global efforts such as the Millennium Ecosystem Assessment.

The coastal zone in the Asia and Pacific are important for both nature and human society. The coastal zone has precious ecosystems with rich bio-diversity, while it is a house for the world's largest growing population. It also provides space and rich resources for settlement and economic activities of the people. Therefore, it is crucially important to maintain the well-being of the coastal environment, which is now under tremendous pressures ranging from socioeconomic development and landbased pollution to global changes.

The purpose of the assessment is to present a comprehensive picture of the drivers of changes, current state of the environment, policy development for response and management, and future needs of scientific research as indicated in the provisional Table of Contents below. Special attention will be paid to real data, on which the analyses and description are based as much as possible. My presentation will introduce the structure, expected outcomes, and present status of the project, highlighting some of the central subjects for the future work.

Asian-Pacific Coasts and their Management: State of the Environment

- 1. Introduction
- 2. Drivers of changes of the coastal zone
 - 2.1 Physical environment in the coastal zone
 - 2.2 Natural environmental change including climate change and sea level rise
 - 2.3 Human activities
- 3. Environmental problems in the coastal zone
 - 3.1 Changes in coastal features and beach erosion
 - 3.2 Water and sediment pollution
 - 3.3 Ecological changes (mangroves, coral reefs etc)
 - 3.4 Fishery Industry
 - 3.5 Tourism
 - 3.6 Other issues on the use of resources
- 4. Policy for the utilization, conservation and sustainable development of coastal zone
 - 4.1 Policy movements for coastal zone management
 - 4.2 Coastal management

- 4.3 Best practices in each country5. Regional conditions
- - 5.1 East Asia
 - 5.2 Southeast Asia
 - 5.3 South Asia
 - 5.4 Islands in the Pacific Ocean
- 6. Conclusion