

Social-Ecological Systems (SES) Approach in Sustainable Coastal Tourism in Biosphere Reserves in East Asia

Miguel D. Fortes, Ph.D

Chair

UNESCO-National Committee on Marine Sciences

E-mail: fortesm@upmsi.ph

East Asia, characterized by complex patterns of endemism of species and diversity of habitats, has 57 Biosphere Reserves. Many of these have great potentials to help the countries in their development efforts. However, these patterns are coupled to an equally diverse and wide range of uses of these resources by a rapidly growing coastal tourism sector. For effective tourism development in these countries, efforts should lean heavily on conservation. This condition requires multi-, rather than single-pronged approaches to promote species and habitat resilience and sustainability, the fundamental basis of ecotourism. It is increasingly recognized that coral reefs, seagrass beds and mangrove forests in the region are linked by high-order interactions in terms of nutrients, plant dispersal, animal migration, physical processes, and human impacts. These linkages imply that if you disturb one ecosystem, you disturb the other; if you conserve one, you conserve the other.

Ecotourism development via coastal ecosystems conservation strategies in East Asia (such as marine protected areas, World Heritage Sites, or Biosphere Reserves) have met limited success due largely to inadequate attention to the social context of conserving these marine resource systems. While some ecological concerns are imperative, socioeconomic factors are critical to the success of such common-property institutions because they can influence decisions on how users adopt restraints on resource use. In contrast, where these factors are inadequately and poorly reflected by strategies and action plans, low compliance rates result and outcomes such as free riding and overexploitation are likely.

This social-ecological systems (SES) approach is an emerging trend in coastal conservation in East Asia. Much less is this approach applied in coastal tourism development in member countries. It arises, in part, from an increasing understanding of the profound human influence on the goods and services coastal ecosystems provide to the tourism sector and upon which the people themselves depend for survival. SES underlines the emergence of a complex systems approach for sustaining coastal ecosystems, linking habitat resilience to economics, local institutional structures, and society.

