

Abstract

SESSION 2:

Accelerating Actions for Sustainable Development and Climate Change

WORKSHOP 3:

Valuation of Coastal Ecosystem Services and Benefits and Coastal Use Zoning: Tools for Better Planning and Implementation

Understanding Economic Values of Seagrass Ecosystem and Implications for Decision Making: A Case Study of Trang Province, Southern Thailand

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Thailand's sea grass ecosystem which in 2013, expanded over an area of 18,986 hectares, is one of the main coastal ecosystems that provide both direct and indirect benefits. The objectives of this study was to analyze the benefits derived from sea grass ecosystems in Trang, the province recognized as being rich in diversity of sea grass species and an important habitat of the iconic marine endangered species, dugongs. Three types of economic values were estimated: (1) use values from fisheries and eco-tourism; (2) indirect use values from carbon sequestration and storage functions; and (3) non-use values of sea grass ecosystem which estimated by using Choice Experiment.

Use value from fishery and tourism was estimated to be 1.2 million USD and 5 Mil. USD respectively. The only indirect use value estimated, namely carbon sequestration was 65 million USD. Intangible and non-traded benefits of the sea grass ecosystems amounted to 275 million USD.

These numbers will not only be useful in understanding the economic benefits, but could also help in evaluating whether the cost of conserving sea grass ecosystem would generate a net benefit. Conservation prospects are positive. On the supply side, there is recognition of the direct link between the sustainability of the sea grass ecosystem and the flow of income from fisheries. On the demand side, apart from the tourism sector, the findings from the Choice Experiment Analysis also confirm demand for conservation measures from the general public who have neither present nor future benefits from sea grass ecosystems.



THE EAST ASIAN SEAS CONGRESS 2015
16-21 November 2015 • Danang, Vietnam

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About Orapan Nabangchang:

Dr. Orapan Nabangchang is an Associate Professor of economics at Sukhothai Thammathirat Open University. She completed her Bachelor Degree from the University of York, UK in the field of Politics and Sociology; her Masters in Rural Development from the University of East Anglia, UK and her Ph.D. in Land Economy from University of Cambridge, UK. Dr. Orapan has extensively researched the land and environmental issues of Thailand and Southeast Asia. She is also currently Deputy Director of the Economy and Environment Program for Southeast Asia (EEPSEA) and Director of the Economy and Environment Institute of the Lower Mekong Sub-Region (EEI-LMS). Both agencies' main mandate is to build capacities of environmental economists in this Region. Dr. Orapan has conducted research for agencies that are interested in the theory and application of environmental economics such as the Court of Justices, the Department of National Park Wildlife and Plants and the Department of Marine and Coastal Resources. Her main areas of interest and research are in the economics of marine and coastal resources.