ENHANCING SUSTAINABLE MANAGEMENT OF THE COASTAL AND MARINE AREAS THROUGH THE INTEGRATED INFORMATION MANAGEMENT SYSTEM FOR COASTAL AND MARINE ENVIRONMENT

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The GEF/UNDP/IMO Regional Programme on Building Partnerships in Environmental Management for the Seas of East Asia (PEMSEA) developed the Integrated Information Management System for Coastal and Marine Environment (IIMS) to address issues on data/information gaps, data quality and format, and access of information by stakeholders. IIMS aims to assist stakeholders, managers, and decision-makers to meet their information needs in attaining the necessary outputs towards the realization of sustainable development goals at the integrated coastal management (ICM) sites and sub-regional sea areas.

IIMS contains comprehensive data on ecological, biophysical, social and economic aspects of an area or site, which are essential in coastal and marine management. It can be linked with external software like GIS or predictive model to enhance spatial and temporal analyses of data or information.

This paper discusses the experiences of PEMSEA and its sites in the development and applications of IIMS as a tool in enhancing decision-making for coastal and marine management. Specifically, it discusses: a) the development/establishment of IIMS from a Windows-based to a web-based system that enhances sharing of data among stakeholders in the sites; b) how IIMS enhances assessment, planning and decision-making in coastal management, such as compilation of coastal environmental profile and environmental atlas, conduct of environmental risk assessment, development and implementation of coastal strategy, zoning and institutional arrangements for ICM implementation, development of oil spill contingency plan, conduct of public awareness campaign, development of environmental investments, implementation of environmental monitoring program and conduct of resource valuation; c) the development of IIMS network thereby promoting collaboration on data or information sharing among government agencies, research institutions, private sector and non-government organizations; d) how IIMS provides database platform for national and local governments; and e) how IIMS supports the data and/or information needs for state of the coast reporting.

Based on the experiences of and challenges encountered by PEMSEA, this paper also charts the future enhancements of IIMS to cater to the increasing challenges of data access and needs among stakeholders.