Toward Addressing Fisheries Concerns through Implementation of Integrated Coastal Management

The East Asian Seas region has a very diverse, multi-species fishery sector. It is also a multi-gear, labor intensive activity and largely composed of small-scale fishers (although the contributions to production from commercial operations are very significant). As such, the harvesting of fish resources supports both food security and livelihood, particularly of coastal communities.

The challenges in fisheries management have always been complex because of the multiplicity of issues that are inherently embedded in larger sociopolitical and economic contexts. As with most regions in the world, overfishing in East Asia has significantly depleted and altered fish stocks and ecosystems (and their capacity to provide food and services as well). Open access has contributed immensely to the problem in addition to increasing population, habitat destruction and land-based pollution. The recent widespread impacts of environmental changes caused by climate change compound this complexity.

To address the challenges, PEMSEA (the Partnerships in Environmental Management for the Seas of East Asia) has developed and implemented a multi-faceted, comprehensive, ecosystem-based approach—the Sustainable Development of Coastal Areas (SDCA) Framework—to provide as comprehensive a platform as possible by which to achieve sustainable development goals in coastal areas. The SDCA Framework ensures more focus and accountability in coastal governance. It is a strategic attempt to streamline and fast track local government actions.

Embedded in the Framework is a call for action to create food security and sustainable livelihood programs to directly address the fisheries concerns vis-à-vis other programs which also support fisheries management: habitat protection, restoration and management; water use and supply management; pollution reduction and waste management; and natural and manmade hazard prevention and management. Thus, the Framework emphasizes the link which exists between fisheries and other coastal activities. Ideally, a harmonious, peaceful co-existence between these mutually linked (but competing) concerns can be established. But pragmatically—and given the increasing trend in coastal urbanization and the pressure coming from tremendous maritime and navigation use—tradeoffs need to be decided upon; local governments have to choose which coastal activity in which area can best achieve the goals of sustainable development.

The SDCA Framework utilizes the Integrated Coastal Management (ICM) cycle—comprising of mechanisms and processes that have matured in over four decades—as the driver to get it moving. On the one hand, the Framework has completed the conceptual and operational “loop” of ICM. On the other hand, and more importantly, ICM provides the Framework a stepwise, iterative approach and the necessary innovative tools that allow a systematic and integrated policymaking, planning and management approach; and confers the dynamism through which the SDCA Framework operates in; as such the Framework adjusts as new challenges (and opportunities) arise.

The SDCA Framework is based on a platform of interdependence—among local political, economic and civil/social actors—which augurs well on a need for

communicating effective, nuanced local responses to fisheries problems. This is operationalized in ICM sites by way of the sustainable development council—an interagency, multisectoral coordinating mechanism.

From what is being practiced in all PEMSEA ICM sites, a Coastal Strategy (and its implementation plan) is developed and implemented. And because fishery-related issues are major areas of concern, specific interventions are thus instituted. A suite of management tools are available (gear restrictions, enforcement mechanisms, limited entry programs, MPA, etc.), which communities can adopt in consideration of the benefits and costs in setting them up.

Some of the specific interventions from PEMSEA's sites are instructive:

- Xiamen, in China implemented its marine zonation schemes, which stopped fishing in certain areas; transferred aquaculture operations to another area; compensated fishers displaced by this decision; and protected endangered species. User and permit fees govern this scheme while a strong enforcement team accompanies its implementation
- Bataan, in the Philippines instituted a coastal-use zoning scheme, after a wide stakeholder consultation. In it, a municipal fishing zone prohibits large-scale commercial operations. Bataan also instituted a text-a-crime campaign to strengthen enforcement of fisheries regulations, particularly in reporting illegal and destructive fishing practices. Policies for supplemental livelihood were implemented (e.g., seaweed farming and mud crab fattening) as well as habitat protection for mangrove restoration and turtle protection.
- Batangas, in the Philippines will refine its coastal-use zoning scheme. A network of 18 marine protected areas exists while a fisheries management plan has been integrated into the Batangas Province Strategic Environmental Management Plan (2005-2020). A strong voluntary enforcement squad (*Bantay Dagat*) is very active as reflected in the decline of fishery-related violations
- Sihanoukville, in Cambodia established a revolving fund to provide initial start-up capital to fishing families, particularly women members for funding supplementary livelihood. Here, 14 women's groups are able to access the revolving fund. Of the 142 individuals involved in the project, 102 are women.
- Chonburi, in Thailand recommended limiting the number of vessels to allow recovery of resources while the Thailand Department of Fisheries implements a buy-back scheme to reduce the number of trawlers and push-netters in the Gulf of Thailand.

Recently, PEMSEA developed an enhanced, continuous monitoring and evaluation mechanism built through the State of the Coasts (SOC) reporting to keep tab on how local governments interventions are progressing and more importantly, to identify gaps in the programs of action.