Abstract

SESSION 2:

Accelerating Actions for Sustainable Development and Climate Change

WORKSHOP 2.3:

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



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Accounting for Sea Space Use in ECOFISH MKBAs – A Preliminary Approach

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Marine areas are utilized for various purposes such as habitat conservation, as food and livelihood source, as area for recreation, transportation, and many others. Typically, these activities tend to co-occur in time and space. Conventional focus and methodologies in marine spatial planning (MSP) involve delineating and appropriating space for the different activities in order to reduce use-use conflicts and with respect to use-habitat compatibility. However, rarely are use- and non-use values explicitly incorporated in the equation when making decisions regarding area prioritization and zoning.

To facilitate this, we at ECOFISH are testing the application of a simple value attribution per unit area of sea space by computing for the respective net annual values of the various activities that take place therein. This entails calculating the net revenues generated from direct uses and estimating non-use values of a space. Our approach focuses initially on the major activities in municipal capture fisheries settings, including artisanal and small-scale fisheries, mari-culture operations, marine tourism, and marine biodiversity conservation through fish sanctuaries or marine protected area establishment.

GIS-based, the estimated values of sea space use are visually rendered as an additional map layer over the existing sea use maps. In this manner, the stakeholders can compare the "size" of the benefits derived from their sea space. Subsequently, this can serve as a helpful decision-making tool, particularly in prioritizing particular activities over others where use conflicts exist. In the future, we hope to make use of this approach to make fair comprehensive estimates of the value of a delineated marine space at various scales (from a specific habitat to a fishing ground shared by two or more districts). We likewise foresee its utility in determining use and entry fees, in IEC, and in cultivating among the stakeholders a mindset for the worth of place.

About Regina T. Bacalso:

Regina Therese Bacalso is currently a fisheries resource management specialist of the Ecosystems Improved for Sustainable Fisheries (ECOFISH) Project in the Philippines. She has been involved in engaging local partners and various stakeholders towards the development of fisheries zoning and marine spatial plans at the LGU and inter-LGU levels through a characteristically participatory process, from classifying and mapping of sea use patterns, identifying and evaluating of sea use conflicts, to the drafting of sea use zones and marine spatial plans. She likewise leads the development of trophic systems models in the project's 8 Marine Key Biodiversity Areas (MKBAs) and explores through modelling and stakeholder consultations various fishing effort configuration scenarios for fisheries right-sizing. At the same time, she also conducts, facilitates, and provides technical inputs in the projects' other fisheries management-related interventions and field activities relating to fisheries monitoring and stock assessment.