Closing Ceremony

Impressions

Synthesis of Symposium Proceedings

Ninfa R. Pelea,
Professor, Bicol University Tabaco Campus

Awarding of Certificates

Maria Asuncion V. Oronan,
Dean, Bicol University Tabaco Campus

Closing Remarks

Ronnel R. Dioneda
Director, BU Research and Development Center

November 26, 2016

Cross-Border Education: Fieldwork in Sagurong, San Miguel Island

Courtesy Call to Barangay Chairman

Dr. Plutomeo M. Nieves
Prof. Antonino Mendoza, Jr.
Mr. Renan Bobiles
Mr. Christian Cabiles

Interview of Stakeholders

Discussion in BUTC: ***Towards Co-existence with theEcosystem Conservation: Preservation and the Development of Rural Residents' Lives***

Dr. Plutomeo M. Nieves (BU)

Cross-Border Education Session：

Integrated Management of Coastal Resources by Marine Protected Areas

Review

Plutomeo M. Nieves
Bicol University Tabaco Campus
Tabaco City, Albay, Philippines

This review is covers the lecture series and field work in held on November 24 and 26, 2016 respectively, during the 10th International Kuroshio Science Symposium held at Patio De San Jose, Malilipot, Albay, Philippines and San Miguel Island, Tabaco City.

The lecture series highlights nine presentations where marine protected area (MPA) is the central discussion points. The first paper features an unorthodox management scheme referred to as *Hidden MPA*. The word “hidden” implies that it is not within the popular view for MPAs because it is privately managed with armed men on guard. Interestingly, its success is indicated by a good to excellent live coral cover with impressive reef fish diversity and biomass. Given this reality, is it worth adapting? Meanwhile, the MPA management and rural fisheries along Lagonoy Gulf were reported to show successes as well as failures. The sustainability of MPAs however, depends largely if it could promote the material welfare of the fishers.

The case of Western Danajon Bank, presents a new MPA management approach - by networking 21 community-level MPAs. Ecologically, the effort is beneficial in determining the hydrographic and larval distribution of fish eggs and larvae. In aspect of governance, management networking re-establishes the implementation structure and formalizes management plan in each community-level MPAs.

Dr. Matsuda presented comprehensive views about fisheries management: the input control regulates fishing opportunities while the output control regulates the amount and quality of fish landings, MPA falls under the input control category. The idea of MPA also varies with definition as well as governance: the bottoms-up to top down management or co-management in which the government shares power with resource users (common in Asian countries). In Japan, co-management is based on territorial use rights for fisheries (TURF) and special overlap between varieties of fisheries. Japanese local fishers from focal FCAs can regulate their own fishing gears, season and fishing ground in operation, a management action not found in the Philippines. But recently, conflict between other stakeholder groups (eco-tourism, whale-watching and snorkeling); offshore wind farms and restoration movement of sea grass beds as payment for ecosystem services (PES) is evident, thus, the hesitation of the fisheries Agency of Japanese Government to develop an integrated coastal management framework.

A comparative evaluation of MPAs: partially protected MPAs fully protected and open fishing in terms of species richness and abundance of commercially important fishes using visual belt transect survey reveals that fully protected area is still more a effective approach. From the ecological perspectives, suggests the critical significance of seaweed and sea grass ecology in MPA establishment in view of its connectivity to marine ecosystem.

Meanwhile, a comparison between locally-established MPA and nationally-established MPA relative to implementation effectiveness reveals that strong collaboration among the community, the government and the voluntary participation among local residents is critical for effective MPA implementation. But the need to balance resource management and economic development also necessary.

MPA is not only about enhancing species biomass or abundance; it can also offer solution to reduce fishing pressure and provide alternative income sources in coastal area. The Thai success story presents a good example of community-based initiatives that harmonize environmental management and economic development.

The last presentation covers the life and natural resource use in Sagurong Marine Fishery Sanctuary and Reserve (SMFS-R) in San Miguel Island (SMI) where catch restriction is enforced. Because fishing is a way of life in the island, the sea including its resources is of paramount importance to food security, livelihood and income. With restricted fishing, the option is off shore fishing catching tuna and tuna-like fishes, engaged in seasonal siganid fry fishery and to a certain extent macro-invertebrates gleaning along sea grass beds and reef flats.

The field work in SMI provided a clear picture of the island's resources and people. An interactive discussion about the Sagurong Marine Fishery Sanctuary and Reserve (SMFS-R) was exhaustive. The views and insight about MPA management and experiences was the discussion points. Deliberations made reveals that their management objectives are not actually met for various reasons which include limited capacity, availability and allocation of resources, natural disaster as well as the perceived influence of politics. Special mention was given on the Japanese Territorial Use Rights for Fisheries (TURF) which seems to gain more success than failures compared to open access nature of Philippines Fisheries.

An informal forum type discussion about the field visit in SMI was done in BUTC, the highlights of which centered on the MPA effectiveness.

An interactive discussion among the participant points out the element of strong collaboration between local government unit and the participation of the community in meeting the objectives of the MPA is of critical importance.

Reports of Participants

Emma L. Ballad

Kochi University, Japan

Being a common-property and open-access resource, the coastal and marine ecosystem is vulnerable to unsustainable use which resulted in its degradation. This worldwide phenomena opened the consciousness of many experts to develop strategies to cease the increasing tide of destruction of critical habitats and the decline of fisheries productivity. The establishment of marine protected areas (MPAs) has been a popular management initiative as response to these occurrences. It limits the uses of a specific marine area to protect the resources thereby giving it a chance to recover from earlier damages, thus providing long-term benefits for the environment and local communities.

The concept of MPA as a way to regulate and manage fisheries has been advocated globally for many years. Several countries established their respective legal and policy frameworks as basis in carrying out MPAs. Many researches have been conducted since then to study appropriate approaches for the establishment and operation of MPAs. In the recent years, researchers from the member countries along the Kuroshio Region (Philippines, Taiwan and Japan) had been engaging in several studies which looks into identifying best practices of MPA management. As these countries share related resources, the need to deal the growing challenges is of paramount importance.

The emerging trend of globalization has made the movement and integration of ideas and views to be more accessible. The execution of Cross Border Education (CBE) on MPAs as part of the 10th International Kuroshio Science Symposium held in Bicol Region, Philippines on 24-26 November 2016, has provided a platform for sharing of information that promote learning and for creating networks among people working towards ensuring the sustainability of coastal resources through MPAs. Comprising of lecture series and field study, the CBE on MPA has the goal of creating mutual understanding with emphasis of the processes and dynamics of MPA as a strategy to coastal resource management.

The lecture series served as an avenue for putting together recent studies on MPAs as a way to manage the coastal resources. It lay down various information ranging from ecological aspects (e.g. MPA networking; conservation effectiveness of partially protected areas considering the size and design; incorporation of seagrass and seaweed beds) to management strategies (e.g. private ownership; community-based co-management; territorial use rights for fishers; prospects for ecotourism). These discourses brings out the issues and challenges in the promotion of MPAs as well as recommendations to resolve these matters. It opened our thoughts on viewing coastal resource management on a multi-disciplinary structure and presented various concepts on MPAs. Given the multiplicity of regulations and governance of the environment in the different countries, this learning experience provided a venue to exchange ideas that would also be applicable to other places.

The field work in San Miguel Island in Tabaco City, Albay has shown us first-hand accounts on how MPA is managed by the local community. Located at the western end of the strands of islands in the Lagonoy Gulf under the political jurisdiction of Sagurong village, the island is the abode of the San Miguel Island (SMI) MPA. The Bicol University Tabaco Campus (BUTC) served as the external agent that facilitated the establishment of the SMI MPA. The SMI MPA is a product of a community-academe partnership which is one of the many processes and mechanisms of MPA establishment in the countries. Nevertheless, the local government supports the initiative by providing funding to ensure enforcement of the regulations within the protected area. The field exposure imparted insights on how a community-