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Bv Mario Añabieza & Paul Watts

here are unique challenges that face the world's 20 million smallscale fisherfolk in the Philippines, including higher poverty rates and declining fish catch. A recent program sponsored by Volunteer Services Overseas (VSO) International and the Philippine Aurora State College of Technology (ASCOT) has led to new partnerships involving local government and nongovernment organizations. Together | Pamana is helping to transform 120 |

transformation in less developed countries with limited government resources also requires the direct grassroots involvement of fisherfolk in a bottom-up or beneficiary led approaches.

Fisherfolk involvement

Mario Añabieza, a fisherman has worked for many years on the development of PAMANA Ka sa Pilipinas, the national fisherfolk alliance of marine protected area (MPA) managers.

within the next twelve months, based primarily upon volunteer fisherfolk involvement.

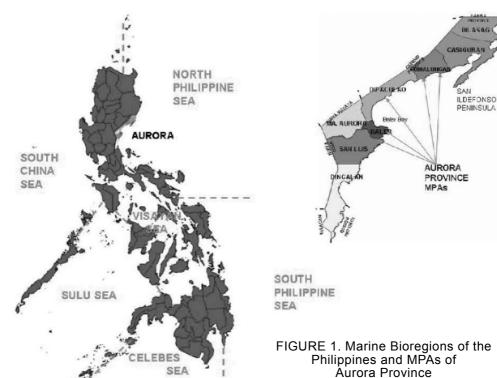
Increasingly, academic research supports the beneficiary led approach as critical for the changes required in marine sustainability, particularly in less developed countries. MPAs represent a potential to merge aspects of traditional and local ecological knowledge with other scientific approaches and create renewed hope for improved livelihoods and sustainable fisheries. Linking in-

Hands across the waters

Sustainability through Philippine fisherfolk empowerment

these agencies along with PAMĂNA Ka sa Pilipinas, the national fisherfolk alliance of marine protected area (MPA) managers have initiated an approach that has continued even after the closing of the VSO placement program in the country.

Although VSO volunteers are no longer sent to the Philippines, a new international organization, DALUHAY,



has emerged to continue the work with ASCOT, Pamana and local government. The focus of this partnership is on local and national changes that create empowerment and sustainability within marine livelihoods and support the nutritional health of Filipinos.

The Philippines depends more upon marine protein than any other large Asian country. Managing marine ecosystems are most often considered by jurisdictions and international agencies as a top-down activity. However, fisheries

individual Filipino communities into one voice for positive change and sustainability. Local marine tenure, shared administrative or enforcement resources and advocacy activities form the core of Pamana's organizational actions. Currently through a Canadian-Philippine collaboration led by Daluhay, Pamana is revitalizing its national communication network and considering further their role and potential partners in local health (and nutrition) programs. One goal is to create a new strategic plan for Pamana been divided into just 6 marine bioregions. The North Philippine Sea is one of these bioregions with 10 provinces along the open Pacific seaboard, where Pamana has previously had very few members. Aurora Province is strategically located half way along the coast of this sea (Figure 1).

Ecosystem-based management

Paul Watts is a Canadian ethnoecologist recruited by VSO International as to work at ASCOT on the sustainability



and ecohealth from the perspective of people as part of the ecosystem. Through this initiative there emerged a Philippine first Marine Bioregional approach to the North Philippine Sea. Previously, fisheries management in the Philippines has been generally limited to smaller areas often defined by specific coral reefs rather than fish stocks associated with bioregions.

The current goal is to strategically develop the capacity of both jurisdictions and beneficiaries to scale up local and MPA activities for larger (bioregional) ecosystem-based management. The North Philippine Sea is a strategic area to build inter-provincial cooperation due to a fisherfolk dependence on deep water or pelagic fish species. The fish stocks migrate over large areas and require a similar scale approach to management and resource partitioning.

However, the success of any resource/livelihood program can perhaps

best be measured by the level of integration with local government. It is not just the location of Aurora Province that makes it a good choice to form the secretariat for the evolving bioregional program. Through the leadership of Governor Bellaflor Angara-Castillo and USAID financial support, an Aurora Inter Local Government Unit (LGU) Coastal Resource Management unit was formed. Initially, four of seven Aurora coastal municipalities cooperated on an Inter-LGU Fisheries Management Plan. The initiative was led by several offices and coordinated by Reymar Tercero. Strategically, this province wide approach to CRM assists local municipal governments in coordinating activities over larger areas that better represent shared fish stocks. Further, working in cooperation with the University of Philippines Marine Science Institute, the local partnership was able to determine a need for inter-provincial

collaboration, particularly on the shared deep water tuna stocks. In parallel activities, Pamana has been developing baywide cooperative strategies amongst its members and partnerships with corporate agencies such as SMART. The merging of these approaches has led to the concept of the North Philippine Sea Marine Bioregion program, in part based upon strategic MPA activities.

Health linkages

The marine resources of the world are in decline and this is particularly evident in the Philippines and Aurora Province. Globally, MPAs are the functional ecological unit that links fisherfolk with the marine science approach. MPAs are often considered critical interventions for the sustainability of nutritional health within communities, yet little data is available. This linkage within the Philippines and Pamana's unique role was one topic of discussion at a December 2008 Forum in Merida Mexico, sponsored by the International Ecohealth organization. The Ecohealth organization focuses on the health linkages between the environment and people; considering their inseparable value. The application of local, institutional and social mechanisms to the ecological approach can be extended through representation to create a shared forum for larger ecosystem units such as the Marine Bioregions of the Philippines. This participatory approach for primary beneficiaries has the potential to apply the wealth of knowledge and efforts of fisherfolk to large marine ecosystems. Through engaged fisherfolk, MPAs can also provide additional opportunities for large scale monitoring and research. The current approach to the management of change is meant to focus strategically on sustainability and ecohealth, not exclusively on jurisdiction, institutions or specific beneficiary groups. Currently in Aurora we are analyzing the results of a province wide participatory process with fisherfolk and Pamana, in relation to a national assessment of established Pamana members

Social process

There is a tendency in fisheries science to focus on specific mathematical research results, such as a change in catch per unit effort or fisheries production. However, a focus on social-process and human transformation is equally if not more critical than the biophysical side of fisheries. There is competition for coastal resources between individual fishing communities; between communities and commercial operations, and even with other activities such as tourism. Emerging from the international program of VSO, ASCOT has adopted a mandate that includes placing priority on communication and coordination that can help to transform these competitive situations into a joint plan for sustainability. ASCOT, through the creation of a visiting Chair in Ethnoecology initiated an academe-jurisdictional partnership effectively scaling down from provincial governance and up though all seven coastal municipalities and their fisherfolk. We are now reaching out to the other nine provinces in this marine bioregion.

Advancing this approach to socialprocess requires the engagement of a wide range of organizations. The public participation approach to considering ecosystem capacity has been integrated through a successfully completed action research doctoral thesis at the South East Asia Interdisciplinary Institute. In partnership with the Maximo T. Kalaw Institute of Sustainable Development, Eduardo Macose, Director of ASCOT's Extensions program focused his thesis on the participation process, including representation from civil society, the church and the general public. These linkages provide a strong advocacy base for advancing social-process, local fisherfolk empowerment and directional change.

Consensus and capacity building

The next phase of the fisherfolk program will involve establishing the inter-provincial and bioregional consensus building process. This developing program has now been endorsed by the University of the Philippines Marine Science Institute, the Aurora Marine Research Institute and the Philippine Commission on Marine and Aquatic Research and Development. Perhaps many future ecological interventions involving less developed countries might occur on a similar fashion: identifying common ecosystem resources and building inter-agency and inter-jurisdictional consensus towards shared goals.

The Aurora program has now compiled a province-wide summary of fish harvest and fisherfolk for Aurora and has invited the other nine Governors and provinces on the North Philippine Sea (Sorsogon, Albay, Catanduanes, Camarines Sur, Camarines Norte, Quezon, Isabela, Cagayan and Batanes) to share leadership in a bioregional approach. Fisherfolk reaching across the waters to communicate and, with government help, to produce similar fisheries data sets could be an effective way of managing large ecosystems.

From a management standpoint, the Aurora combination of top-down and bottom-up approaches focuses strategically on capacity building towards ecological integrity priorities. This strategy emphasises the (poorly researched) relationship between human health and ecosystem health, now known internationally as ecohealth. Pamana has previously been an organization that would consider applications for organizational membership. However, the current North Philippine Sea initiative is intended to reach out and empower fisherfolk themselves through Pamana, to facilitate stronger local, MPA and bioregional management approaches. This program brings fisherfolk and their supporters together, extending hands across many oceans to lend support and build advocacy towards better livelihoods and a sustainable planet. There is a saying in the Philippines – *pa-unti*unti or 'little by little'....together we move forward.

