

The development of collaborative studies in Team 1 (Environment Group) during ten years

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Team 1 has conducted collaborative studies with a goal of the appropriate conservation and management of coastal environment in consideration of rational utilization of the fishery resources. Our principle is that these must be on the basis of sound scientific evidences. Since both in Japan and the Philippines, fishery products are the major sources of animal protein for the people, then the management should be reasonable and effective.

We set the base of our collaborative study on: conservation of the marine environment and biodiversity. As our association in study projects, we discussed and shared a common understanding, that we focused our collaboration on three areas.

1. Conservation of environment in mangrove areas and water quality

First, mangrove area was recognized as the most important ecosystem in the coastal area. And, we focused on conservation of water quality, because we learned that the problem of water pollution in the Philippine coast became severe more than more.

2. Marine botany and sea-grass areas

Sea-grass and sea-weed areas were also focused, because it is important habitat of organisms including fishery species. Basic biological information was required to conserve this habitat.

3. Biodiversity and bioactive substances

Fundamental study of another organisms, for example, invertebrate animals, was listed also topics. Some of them are regarded as new resource for bioactive materials.

To accomplish the goals of these study topics, we applied various types of methodology from field survey to laboratory analysis. Study areas are distributed throughout the Philippines and Japan. Most studies started from observation, survey and sampling in the field site. Samples were analyzed in the laboratory, and some experiments were conducted under aquaculture conditions and in the aquarium of Kagoshima University and UPV. Some techniques for mitigation or remediation of coastal environment were tested in the field site to determinate their effects.

We also conducted studies about chemical and biological pollution in the wild habitat and in aquaculture systems. Some of them have reached to propose some methods to mitigate the human effect and restore the coastal environmental condition. The results of these studies emphasized that the researches about the influence of toxic matter on the coastal environment will increase their importance as a result of economical development of Philippines. These results contributed in the conceptualization and formulation of project for oil spill from the accident of oil tanker in Guimaras Island on August 2006 as introduced in the oil spill session. It is also products of these studies that the facilities and techniques are established in UPV.

During these 10 years, 47 scientists visited Japan from Philippine side for the collaborative research. 89 % of them were from UPV: UPV Miagao, UPV Cebu and UPV Tacloban, and 11% were from other participating universities in the Philippines. Meanwhile, 37 Japanese scientists (86% were from Kagoshima University) visited Philippines. We sent 55 participants in the total to 5 seminars organized by CUP in 1998, 2001, 2004, 2006 and 2007. 51 papers presented in these seminars. A total of 39 papers have been published: 29 as product of collaborative researches and 10 by individual initiatives.

Our collaborative studies also produced some doctoral thesis during these ten years including the thesis of Japanese doctoral students. Two students finished their doctoral degree and one is ongoing in the United Graduate School of Agricultural Sciences, Kagoshima University. And one scientist from UPV has finished Ronpaku Program.

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