

PLENARY SESSION I

Plenary Paper:	Conservation and Management of the Philippine Marine Ecosystem
Chairman:	Carmen C. Velasquez
Plenary Speaker:	Edgardo D. Gomez
Rapporteur:	Leopoldo S. Castillo
Discussants:	Angel C. Alcala Cirilo B. Serna

I. SUMMARY/HIGHLIGHTS OF DISCUSSIONS

A. On Coral Reefs

Dr. E.D. Gomez identified the major problem of destruction of coral reefs through relentless exploitation by an ever-increasing number of people. Dr. A.C. Alcala, president of the Silliman University, reiterated the view that the destruction was man-made. However, he also averred that there were stresses caused by natural occurrences, such as typhoons and volcanic eruptions. He also mentioned that human-induced stresses were geometrically increasing in severity without let-up, giving no time for the reefs to recover. Time was when the reefs were teeming with fish. Before, it took a fisherman only several minutes to gather a kilogram of fish. But now a trip of 2 - 3 hours will enable the fisherman to harvest only 1.6 - 2.0 kg of fish, as shown in his studies of a protected island. And for the aquarium trade some species are in much diminished numbers if not totally absent.

Dr. Alcala agreed with Dr. Gomez that the strategy of limited access to the coral reefs would allow the recovery of its productivity. The former also suggested the combination of this strategy with the establishment of protected areas (parks and reserves). With this, the degraded coral reefs would return to their normal condition within a fairly short period of 5 - 10 years, as he had demonstrated in his experiments at Sumilon Island. Dr. Alcala also asserted that the presence of strong enforcement mechanism was important in sustaining the positive effects of protection.

With regard to reef systems away from human population centers, such as the Tubbataha National Marine Park in the Sulu Seas, the enforcement measures should involve a strong political will on the part of the government and non-government organizations.

Dr. Cirilo B. Serna, director of the Environmental Management Bureau of DENR, agreed with the views of Dr. Gomez and Dr. Alcala. He warned, however, that these were easily said than done. He further averred that the approach through local autonomy might be quixotic considering the deeply ingrained Filipino value of *pakiki-sama*.

B. On Seagrass Ecosystem

The paper of Dr. Miguel D. Fortes on "Seagrass Ecosystem and Resources in the Philippines" gave a clear picture of the nature and variety of seagrass ecosystem components. This was affirmed by Dr. Serna, who pointed out the apparent role of seagrass in preserving two of the important endangered species, namely, the green sea turtle (*pawikan*) and the dugong.

The views of Dr. Alcala corroborated the finding on the valuable role of seagrass for important marine species, as well as for producing organic matter. Seagrass, like the mangrove, will contribute substantial amounts of carbon important to the food chain. He also observed that migratory birds found the seagrass locale as feeding areas.

II. RECOMMENDATIONS

1. Components on education and information dissemination, especially on coral reef and mangrove protection, should be accorded top priority. This will create awareness of the importance of returning the productivity aspects.
2. An implementable and effective authority that will unequivocally look after the coral reefs, mangrove and seagrass ecosystem productivity should be created. To be more effective, this authority should include regional, provincial, municipal and barangay levels. It is also essential to encourage, promote and sustain the support of non-government organizations in the management of the authority for greater marine ecosystem productivity and usefulness.
3. There is a need to encourage an integrated study or research on seagrass-mangrove-coral reef ecosystem to maximize the benefits with socio-economic implications.
4. It appears there is again a need to reiterate the problem on population pressure as the most important factor in the destructive coral reef fishing and utilization. Hence, promoting an urgent, acceptable, viable and effective family planning program is strongly emphasized.

