

An Education and Awareness Program on Coral Reefs in the Andaman and Nicobar Islands

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INTRODUCTION

The coral reefs around the Andaman and Nicobar Islands have been the main source of livelihood for the islanders over many years. Traditional experience and wisdom passed down over generations, in combination with restricted entry into Tribal Reserves, ensured that fishing practices remained traditional and sustainable over long periods of time.

However, the earthquake and tsunami in 2004 were followed by abrupt displacement of local communities, succeeded by economic, material and social intervention in several parts of the Andaman and almost all of the Nicobar Islands. This disruption in the pattern of life of the population has led away from traditional practices. Changes in coastal topography, temporary changes in distribution of resources, shift of dwellings from the coast and scarcity of equipment to access open waters have made communities fish in inland creeks, even during fish breeding seasons. Protracted stay in transit camps, monetary aid and free food and aid rations, much needed in the aftermath of the tsunami, have also built up inertia among displaced communities to resume traditional ways of life.

To increase our understanding of these changes and to seek possible solutions, an awareness and

education program was carried out in association with coral reef surveys.

AWARENESS PROGRAM

Living with local communities during coral reef surveys enabled us to design and carry out awareness campaigns addressing local priorities and needs. The overall focus was sustainable fishing practices and the principal threats to coastal resources, and changes in distribution of resources. In the Andaman Islands, where reefs are still recovering from the damage sustained, particular emphasis was placed on minimizing threats such as sedimentation and pollution from effluents. As the submergence of reefs actually led to the depletion of resources in the Nicobar Islands, the focus was on optimizing the chances for resource revival and seeking alternatives.

Seventeen villages in the Nicobar Islands were visited, and over 2500 villagers participated in awareness events. Often village elders interpreted the event in the local language, and participation of Village Captains, Priests, Heads of Tribal Councils and entire families in these sessions facilitated an extended percolation of the message in the region. Video material was used extensively for the education and awareness program. This included footage

Obura, D.O., Tamelander, J., & Linden, O. (Eds) (2008). Ten years after bleaching - facing the consequences of climate change in the Indian Ocean. CORDIO Status Report 2008. Coastal Oceans Research and Development in the Indian Ocean/Sida-SAREC. Mombasa. <http://www.cordioea.org>

obtained during our surveys of the islands, as well as some clippings from films such as the BBC documentary Blue Planet. Film clips showcased the biodiversity of reefs, ecological processes, resource dynamics, as well as threats, impacts and their implications. In 8 villages electrical power was not available and the awareness program focused on interaction and discussion with communities, aided by pictures and illustrations on marine biodiversity. Finally, in 3 villages in the Andaman Islands, experiences were also shared with officials of the Department of Environment and Forests (from Forest Rangers to the Principal Chief Conservator of Forests), and Officers of the Andaman And Nicobar Administration in Port Blair

OBSERVATIONS AND INFERENCES

The experience of living among the island community was enriching, allowing us to learn first-hand about the culture, hospitality, sensitivity and innate curiosity of the villagers. It also made possible a two-way exchange of information and knowledge, which is essential to bring about a synthesis of traditional wisdom and scientific understanding that can support development in these communities, with minimum intervention in lives and culture while ensuring sustainability. However, this requires a long time of continuous contact and dialogue. It is clear, though, that the type of informal educational interactions organized under this program can facilitate this, and will help in bridging the gap between the youth and

the traditions of older generations, especially in the current context of changed ecological and socio-economic conditions.

In addition to educational and awareness activities the program made some interesting observations. Traditional fishing practices in the Nicobar Islands previously included a traditional tenure system, governing ownership and use rights of territorial waters of even a single house or a large hamlet adjacent to the sea. It appears this system has been eroded, and post-tsunami resource consumption patterns and emerging fishing practices need to be studied and documented in order to identify the true extent of the impacts of the tsunami and earthquake as well as mitigate negative implications.

In the Andamans, it was observed that many reconstruction activities were being carried out in a rather haphazard way, often without consideration to environmental impact. This includes e.g. utilization of sand from beaches, which could alter beach profiles and stabilization processes after the major perturbation. Further, construction of seawalls and barriers to prevent seawater inundation of specific areas is also preventing tidal movement, which may cause seawater inundation elsewhere, in areas that were not inundated by the tsunami. Cutting wood and vegetation on hills may also have an adverse impact on the reefs due to increased sedimentation during monsoons. It is unfortunate this should still continue as it has long been known to be among the major threats to reefs in the area.