

## **COLLABORATION FOR CORAL REEF MANAGEMENT IN THE SOUTH CHINA SEA**

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The South China Sea is the largest sea in Southeast Asia bordered by nine countries, i.e., Cambodia, the People's Republic of China, Brunei, Indonesia, Malaysia, Philippines, Singapore, Thailand, and Vietnam. Thus it forms a semi-enclosed large marine ecosystem. Southeast Asia is the global centre of coral reefs, both in terms of extent and species diversity. An estimated 34% of the earth's coral reefs are located in the Southeast Asian seas which occupies only 2.5% of the total sea surface. The ecological and economic importance of the coral reefs in the South China Sea has long been recognized. The location of the South China Sea at the junction between the Pacific and Indian Ocean basins has resulted in it becoming a centre of aggregation of marine species from both Oceans. More than half of Southeast Asia's scleractinian coral species is found in the South China Sea. A wide variation in coral species diversity at different sites in the South China Sea reflects the influence of physical parameters and anthropogenic disturbances. The South China Sea region has undergone rapid economic development and population growth, particularly in coastal areas and human pressures on coral reefs have increased considerably. Coastal infrastructure development to support economic growth and the accompanying pollution of the marine environment associated with growing human activities have caused degradation of reefs closed to urban areas. Resource exploitation has led to extensive coastal degradation and watershed deforestation and erosion have resulted in increased sedimentation on coral reefs. All these stresses affect the overall health of the reef systems. Major threats identified at sites bordering the South China Sea were destructive fishing, overfishing, sedimentation, pollution (eutrophication), coral bleaching, coastal development, unsustainable tourism development, unsustainable fisheries and aquaculture, and deforestation. Under the UNEP/GEF Project on Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand, collaboration for coral reef management in the region has been emphasized. The strategic action plan for each participating country was developed. Consequently the regional strategies for coral reef management are formulated. Proposed activities in the demonstration sites have been implemented. The purpose of the demonstration sites selected under this project is to demonstrate actions which either "reverse" environmental degradation or will demonstrate methods of reducing degradation trends if adopted and applied at a wider scale. Demonstration site activities include enhancing capacity for monitoring and research, community-based management, establishing marine protected areas or sanctuaries, sustainable tourism, sustainable financing, alternative livelihood, strengthening legal instrument and law enforcement, and pilot activities on restoration of coral reefs. The establishment of regional networking and collaboration for coral reef management is important and should be maintained and expanded beyond the South China Sea project.