CORAL REEF MANAGEMENT AND RESTORATION IN MU KOH CHANG NATIONAL PARK, THAILAND

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Mu Koh Chang is located in the eastern part of the Gulf of Thailand or the west coast of the South China Sea, near the border between Thailand and Cambodia. There are over 50 Islands in the area which harbor approximately 16 km^2 of coral reefs. The Thai Government has paid much attention to Mu Koh Chang and declared it as a special administrative zone for sustainable tourism development in 2002. An estimated 30% of the coral reefs are within the area of jurisdiction of Mu Koh Chang National Park which was established in 1982. Mu Koh Chang was selected as one of the demonstration sites for the coral reef subcomponent under the UNEP/GEF Project on Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand. The causal chain analysis of Mu Koh revealed that major threats of coral reefs were sedimentation from infrastructure development, impacts from expansion of tourism business and unskilled divers, impacts from illegal fishing, coral reef bleaching and storms. The project has focused on networking among stakeholders for better co-ordination between government agencies, private sector, NGOs and local communities during the planning, operation and evaluation phases to strengthen co-management of all activities in the area and to reduce any obstacles to project implementation. The significant activities implemented include raising public awareness and education programs, networking among stakeholders, sustainable tourism development, capacity building programs, support of sustainable livelihood, and improvement of site management to support coral reef restoration. Demonstration site activities for coral reef restoration have been conducted in certain localities. The project aims to raise community awareness on coral reef issues and their roles to improve coral reef management and sustainable uses. The project also included impact mitigation designed to accelerate natural coral reef recovery. Major activities are: i) monitoring coral reef conditions in both ecological and socio-economic aspects; ii)mapping additional coral reef areas; iii) developing a demonstration project of coral reef restoration by using coral fragments and natural recruitment; iv) monitoring and controlling land-based pollution; v) training and assigning particular staff from relevant agencies concerned with coastal development; vi) establishing coral reef and marine organism GIS database; vii) supporting research on mariculture of economically important marine organisms. Success of implementation of the management and restoration model could be transferred and applied to other coral reef sites.