CAUSAL CHAIN ANALYSIS AND MANAGEMENT INTERVENTION FOR SEAGRASS RESOURCES IN THE GULF OF THAILAND

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The casual chain analysis was used in the identification of the cause of change in environmental state, the level or scale of threats at a particular site, and the alternative points of intervention, along the chain of cause. The analysis was based on 5 National seagrass sites in the Gulf of Thailand including Kung Krabane Bay, Chantaburi Province, Makam Pom Bay, Rayong Province, Tungka – Sawee Bay, Chumporn Province, Samui and Pha-Ngan Island, Surat Thani Province and Pattani Bay, Pattani Province. The loss of seagrass beds and associated animals is the primary problem. Three immediate causes or direct threats were identified as an increasing of sedimentation from coastal and land development, waste water discharge both from domestic and shrimp farming, and deteriorated fishing. Public meeting with an involvement of stakeholders indicated the root cause and clarify management intervention for seagrass management. Under each direct threat, the root causes were describe as: lacking knowledge on seagrass ecology and its importance, ignoring attention-grabbing of stakeholders according to the first threat, lacking of public participation in development projects, weakness of law enforcement and fishery pressure (small scale and large scale).

Given the root causes for seagrass degradation, the proposed interventions for management seagrass beds in the Gulf of Thailand can be summarized into 5 categories as follows:

- support integrated studies and researches for seagrass management,
- campaign and promote public knowledge and create awareness to conserve the seagrass,
- support local people to set up local organization and develop capacity building especially for the government sectors for seagrass management,
- revise law enforcement to protect and rehabilitate seagrass beds as well as environmental factors
- reduce fishery pressure by improving the local fishermen's income.