

Sustainable Management of Mangrove Ecosystem for Maintaining Coastal and Marine Resources

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Mangroves forest, in general occur along the coastlines on sheltered shores of deltas, and in the riverine reaches of estuaries and coastal creeks where there is an abundance of muddy soil within inter-tidal zone. They are distributed in approximately 120 tropical and subtropical countries with the total 950 million rai or 15.2 million ha of mangrove area the world-wide. Mangroves are among the most significant and highly productive ecosystems. They support an impressive biodiversity of flora and fauna in coastal and marine ecosystems which is as good as that found in other coastal and marine ecosystems like sea grass beds and coral reefs. Mangrove forests also play a significant ecological role by sustaining the nurseries. Serving food nursery, and spawning grounds for many commercial aquatic fauna such as fish, prawn, and crab in these eco-economically important coastal and marine areas. Additional equally important ecological role of mangroves include protection against coastal soil erosion, stabilizing sediment and improving water quality, and minimizing global warming thus reduce the impact global warming may have on flora, fauna and the ecological function properties of the seagrass ecosystem of coastal zone and on the coral reef ecosystem of marine area. Clearly, mangrove forest play a very important role in supporting and maintaining all coastal and marine resources and their many associated long-term various benefits, many goods and ecosystem services to human life and the national economy as a whole.

Currently mangrove forests in various parts of the world have been under increased pressure form conflicts among different interest groups and from economic development leading to diminishing mangrove forests and their ecosystem functional. The integrated sustainable management (ISM) of mangrove ecosystem focusing on rehabilitation, mangrove protection and sustainable mangrove resource utilization with full stakeholders offers our best approach; ISM can bring a sufficiency-economy based on multi-sector education. Laws and regulations concerned with mangroves should be strictly enforced. Collectively, these activities will lead us to sustainable mangrove forest use providing long-term support, to maintain and protect coastal and marine resources as precious assets.

Key words: Mangrove resources, mangrove eco-economic functions, integrated sustainable development