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Governance in Coral Reef Ecosystems — A Case of Gili Indah, Lombok, Indonesia

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Abstract

Indonesia is considered as one of the tropical coral reef centers in the world. According to a reliable study, Indonesia owns $60,000 - 75,000 \,\mathrm{km^2}$ of coral reef ecosystems. These ecosystems yield valuable products and services, which are useful for humankind. They serve as a bank of biodiversity, a habitat for many kinds of fish, sources for potential chemical and bioactive products, attractive tourist destinations, a coastal barrier, etc.

Unfortunately, those valuable ecosystems are at risk. The 1997 COREMAP project reported that only about 6% of the ecosystems are in excellent status, 22% good, 32% fairly and 40% very poor. Experts assume that Indonesian coral reefs will disappear within ten year from now if no protective measures are taken immediately.

There are many reasons why the coral reefs are approaching the point of extinction. Destructive fishing, limestone mining, live coral trading, coastal development etc. are regarded as the main causes for this development. Certainly, all these casualties may be relevant. However, in an institutionalist perspective, those assumed destructive factors are only results from inadequate institutional environments and arrangements. The main determinant is the absence of an effective governance structure or management regime which has to be based on well-designed rules, rights and duties. As long as these institutional prerequisites are missing, there will be no solution to the Indonesian coral reef problems. Therefore, changes in effective property rights a and establishing new institutional rules and arrangements will be necessary.

This paper aims at analyzing the present governance structure of the coral reef ecosystems. It is mainly based on a case study in Gili Indah, Lombok, Indonesia. Furthermore, it will include a description of the legislative background, the national coral reef administrative framework, the governance at the local or district level and the village level. Three aspects of institutions at the village level will be analyzed, i.e., property right systems, rules for conflict resolution and rules for halting destructive fishing practices. The conclusions drawn may serve as an instrumental information for policy makers enabling them to find policies that can protect coral reefs from being threatened by extinction.

Keywords: Governance structure, institutional arrangement, management regime, property rights

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