

MANGROVE AND AQUACULTURE REHABILITATION IN MADURA STRAIT, JAVA: A COMMUNITY-BASED PROGRAMME FOR COASTAL RESOURCES MANAGEMENT By Agustinus M. Samosir: Department of Natural and Rural System Management, University of Queensland, Lawes, QLD 4343, AUSTRALIA.—The recent ‘collapse’ of the shrimp aquaculture industry in Indonesia has been a ‘blessing in disguise’, and has made way for the restoration and proper management of coastal resources. The Madura Strait along the east coast of Java contains complex mangrove and aquaculture areas, and provides an example of how traditional activities which have been carried out for more than five hundred years have suffered from modern environmental destruction. Although limited numbers of ‘tambak’ farmers have managed to survive, most have abandoned their ponds mainly due to the toxic cocktail of biological and chemical waste from intensive shrimp ponds and other coastal activities nearby. This paper examines the feasibility of rehabilitating more than 40,000 ha of mangrove and aquaculture areas, and especially focuses on the mitigation of water quality degradation. Integrated mangrove and aquaculture pond management in six ‘green’ and ‘brown’ villages are reviewed to establish the effectiveness of rehabilitation programmes in these areas. This will enable a proper assessment to be carried out on the effectiveness of community based strategies to restore the condition of the coastal plain.