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Prospective Strategy for the Development of Grouper Fish (*Ephinepelus spp*) Aquaculture in Sub-district of Brondong, Lamongan Regency

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Abstract : One of prominent farming activities in coastal areas in Lamongan, East Java, is grouper fish (*Epinephelus spp*) aquaculture. The grouper fish aquaculture activities mostly employ simple technology, but this has been experiencing some problems such as several diseases, limited-yielding of superior seeds, limited trash fish feeds, and limited to the decrease the carrying capacity of the land. There should be maximum efforts to support the potential of grouper fish aquaculture rationally and sustainably. The objective of this research was to determine the carrying capacity of the land for the grouper fish aquaculture in the fishponds and formulate strategies for the development of grouper fish aquaculture in Sub-district of Brondong in Lamongan based on some scenarios that may occur in the future. The weighting and prospective analysis method was employed in this study. According to the land carrying capacity analysis showed that the grouper fish aquaculture in the Labuhan Village, Sub-district of Brondong, was categorized into moderate to high of land carrying capacity with the limiting factors of fishpond including high value of water pH ranging from 9.8 ± 8.2, Ammonia >0.1 ppm, BOD 5.41 $\pm$ 3.71, and 33.2 ± 5.69% for land organic substances. Results of prospective analysis, optimistic scenario is determined for the development of grouper fish aquaculture in the regional fishponds completed with facilities and infrastructure which can support the farming activities, improve the technology for the aquaculture, improve the marketing results of the operations, increase the counseling activities, increase human resources (HR), increase business capital, improve business management and increase business competiveness.

Keywords : Grouper Fish, Land Carrying Capacity, Development Strategy.

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