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"The synergy of aquaculture stakeholders to strengthen the independency, sustainability,
and environmentally sound fisheries and marine sectors"

ABSTRACT BOOK

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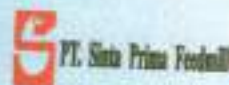
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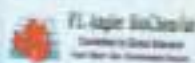
Land's Fish Farm



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A model of sustainable shrimp farming area management

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ABSTRACT

The development in coastal area is more rapid than other mainlands. There are various activities conducted in this area, so that there are many conflicts of interests in social, economy, security, and environmental disruption. In other parts of the coastal region that has great potential for aquaculture is used for the fish and shrimp production. The most common shrimp cultivated in ponds are tiger prawn *Penaeus monodon* and vaname shrimp *Litopenaeus vannamei*. Shrimp has a great potential and is one of the five leading export commodities from Indonesia. Nevertheless, the development of production in some areas is not sustainable. This condition is caused by poor management oriented to environmental, social, and economy. For that we need the modeled area management of sustainable shrimp farming. The aim of a model of sustainable shrimp farming area management is to evaluate the land suitability, carrying capacity, institutional of the area, and management design of shrimp farming. The purpose of land suitability research is to evaluate the land suitability for shrimp farming. The results showed that the total area very suitable (S1), suitable (S2), less suitable (S3), and not suitable (margin). The purpose of carrying capacity research is to assess the carrying capacity of the area. The institutional is an important element of farming management. The design of areal management model used the dynamic model with application powersim. Modeling diagram consists of the production model, carrying capacity, and suitability of land. To facilitate the assessment and planning of shrimp cultivation areas, an application was built (software). The name of this application is an assessment model of sustainable shrimp aquaculture (shrimp farming assessment management area). The conclusion in this application is the area of land with the criteria very worthy, worthy, less feasible, and not feasible with the description of the land according to the feasibility level.

Keywords: land suitability, carrying capacity, institutional, sustainability

Notes:

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