

## APPLICATION OF THE INDONESIAN SEAWATCH INFORMATION SYSTEM IN MARICULTURE DEVELOPMENT

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### *Abstract*

*Production of mariculture is affected by growth of individual fish and survival rate of fish population. The growth of cultured fishes is influenced not only by applied inputs, for example fish feed, but also by environment conditions. Meanwhile, survival rate of cultured fish population is influenced by environment conditions. Therefore, availability of information systems providing continuous real time data is important to support mariculture development. The availability of continuous real time data will support an early warning system of mariculture production. Meanwhile, time-series data is important in planning production strategies and development of mariculture. The Indonesian Seawatch System, developed for monitoring the environmental quality of marine ecosystem, therefore, benefits the effort to develop mariculture. Application of the Indonesian Seawatch System as a part of a decision support system in mariculture development, however, needs a production management model. The model is used to estimate the effects of environmental quality to the growth and survival rates, to estimate the effects of the level of applied inputs to the environmental quality and to evaluate alternative production strategies.*

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