

Thesis Title Trends in Quantity of Marine Fish at Pattani Fishery Port
(1999-2003)

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Abstract

The objectives in this study are to investigate the trends in quantity of marine fish and to develop statistical models for forecasting the quantity of the various types of marine fish landed at Pattani Fishery Port, allowing for trend and seasonality. Data was collected on fish types and quantity of marine fish by daily during 1999-2003. The data are classified by eight type components (mackerel, other food fish, squid, scads, trash fish, shrimp, lobster and crab). These data are graphed and analysed after square roots transforming for the five marine fish types (mackerel, other food fish, squid, scads and trash fish) and natural logarithms transforming for the three shellfish types (shrimp, lobster and crab) to satisfy statistical assumptions.

The statistical methods are one-way analysis of variance, linear regression analysis and time series analysis. It was found that mackerel, other food fish and squid have decreasing catches, whereas the catches of scads are increasing, and trash fish catches have no detectable trend up or down. Shrimp and lobster catches are decreasing exponentially, and the crab catch is constant.