Time Series Modelling and Forecasting
of
Sarawak Black Pepper Price

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Abstract

Pepper is an important agriculture commodity especially for the state of Sarawak.
It is important to forecast its price, as this could help the policy makers in coming up with
production and marketing plan to improve the Sarawak's economy as well as the farmers'
welfare. In this paper, we take up time series modelling and forecasting of the Sarawak
black pepper price. Our empirical results show that Autoregressive Moving Average
(ARMA) time series models fit the price series well and they have correctly predicted the
future trend of the price series within the sample period of study. Amongst a group of 25
fitted models, ARMA (1, 0) model is selected based on post-sample forecast criteria.

Keywords: Time series, pepper (*Piper nigrum L.*), Autoregressive Moving Average
model, forecasting, forecast accuracy.

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