

**UNIVERSITI TEKNOLOGI MARA**



**FORECASTING CRUDE PALM OIL PRICES IN MALAYSIA**

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## ABSTRACT

”How to correctly estimate the palm oil price?” is the first question that spring into mind. For a long time, authorities, policymakers, and economists have been debating this issue. The first reason is that Malaysia has recently demonstrated a competitive advantage in palm oil production, becoming the world’s leading producer and exporter. Palm oil (PO) has become a major edible and economic commodity with applications in various domestics and industrial processes. The main objective of this study is to determine the most effective model in forecasting crude palm oil prices in Malaysia using ARIMA model. This study is also to forecast crude palm oil prices in Malaysia effectively for two years ahead. Malaysia is the second largest producer and exporter of crude palm oil (CPO). The price of palm oil plays an important role in the government budget and is a substantial source of revenue for Malaysia, which could affect the scale of monetary policies and, as a result, inflation. The data on the price of crude palm oil were collected from the Malaysian Palm Oil Board (MPOB). However, this overview is limited to the price of crude palm oil within January 2017 until April 2021 and seeks to discuss the trend within the context of the timeframe. The method of Autoregressive Integrated Moving Average (ARIMA) has been used to forecast the average CPO price in order to find the best of ARIMA model. From the result that had obtained, the best ARIMA model is ARIMA (0,2,2). ARIMA (0,2,2) is chosen because it has the lowest value of Akaike’s Information Criteria (AIC) and Bayesian Information Criterion (BIC) which is 511.53 and 516.36 respectively. Henceforth, forecasting the CPO price two years ahead is done using the best ARIMA model that had been selected. The future price of CPO seems to be increased after forecasting had been done using the best ARIMA model. Forecasting the future price of CPO is very important in order to succeed in business and maintaining the Malaysia’s economy. By forecasting the future CPO price, it helps to plan the future and help to anticipate change in the market.

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