ABSTRACT

PREDIKSI HASIL PERTANIAN PADI BERBASIS *WEBSITE* MENGGUNAKAN METODE *AUTOREGRESSIVE INTEGRATED MOVING AVERAGE* – BOX JENKINS (ARIMA – BOX JENKINS)

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Agriculture as an important sector in the State of Indonesia which is an agricultural country that has many natural resources and relies on natural products is an important thing to pay more attention to in its process. With the rapid development of technology lately, other sectors have taken advantage of technological developments to facilitate work in their fields, for the agricultural sector the use of technology itself is still in the distribution or marketing of agricultural products, while for other sectors such as predictions of agricultural products there is still no . It can be seen that forecasting or prediction itself has the benefit of preventing excess and shortage of staple food supplies in Indonesia. The Autoregressive Integrated Moving Average (ARIMA Box-Jenkins) method is a forecasting method that many people know, the forecasting method using ARIMA Box-Jenkins is considered to be more precise because the prediction target of ARIMA Box-Jenkins is the production of rice agriculture as a staple food in Indonesia. In making predictions using the ARIMA method, it is necessary to model according to the data used. In this study, data on national rice production was used using ARIMA modeling (3,3,1) which resulted in a Mean Square Error value of 2.15 and a Mean Absolute Percentage Error value of 0.384529, with MSE and MAPE values which were quite small. then the modeling is applied in the application to be used as a calculated model in the application so that it can produce predictions of rice production in Indonesia.

Keywords: rice production, forecasting, Autoregressive Integrated Moving Average