

PREDICTING THE YIELD PROMISING RICE VARIETIES THROUGH STRUCTURAL TIME-SERIES MODELS IN CHHATTISGARH

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ABSTRACT

The enterprise of modeling is most productive, when the reasons underlying a model adequacy, and possibility its superiority to others model to understand. The emphasis is on the time domain representation, for which the season is at the core of the modelling effort, rather than on the frequency domain, although the relationships between the two approaches will also be discussed. Structural time series model is formulated in such a way that their components are stochastic, i.e. they are regarded as being driven by random disturbances. The study mainly confined to secondary collected for a period 2009-10 to 2014-15 data of promising varieties of rice yield. As these techniques, it may be mentioned that models are fitted to the data and coefficient parameter values obtained on the basis of the model are compared with the actual observation for assessing the accuracy of the fitted model. Structural time series models are a flexible approach to time series analysis. Trend information was provided on the basis of least standard error for Swarna (0.001), MTU-1010 (0.001) and Mahamaya (0.002) varieties. The rice varieties BPT-5204 (3.984), Karmamasuri (2.186) and Bamleshwari (1.170) showed a decreased trend.

KEYWORDS: AIC, BIC, Goodness of fit, Forecasting and Structural time series model