RESEARCH PAPER

Forecasting wheat production using ARIMA model in Punjab

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Abstract : In the present study, area, production and productivity data of wheat for Punjab was analyzed by time-series method. Yearly wheat yield data for the period of 1950-51 to 2009-10 was used as input to forecast the yield upto the year 2020-21.The Box-Jenkins ARIMA method was put into use to forecast the yield. The validity of the model were tested by standard statistical techniques. The past 60 years data revealed that wheat yield was increased from 0.8 t ha^{-1} in 1950-51 to 4.3 t ha^{-1} in 2009-10. The model projected 15.3 per cent increase in wheat production in the years to come by 2020-21 in Punjab. Based on ARIMA output, wheat production of Punjab is likely to increase from 15844.7 thousand tons in 2010-11 to 18271.7 thousand tons in 2020-21.

Key Words : Wheat production, Forecasting, ARIMA model

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