A STUDY ON PRE-HARVEST FORECAST OF RICE YIELD USING CLIMATIC VARIABLES

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Abstract: A suitable statistical model has been developed for forecasting the yield of the rice in Raipur district (1981-2013) using the data and weekly weather variable viz., average maximum and minimum temperature, relative humidity morning evening sunshine hours and total weekly rainfall. The forecast model was developed using generate weather variables as regression in model. The generated weather variables were developed using weighted accumulated of weekly data on weather variable, weights being the correlation coefficient of the weather variables, in respective weekly with yield. The data for a period of (1981-13) was used to develop the forecast model. The validation of the model was done using the data from (2011-13).

The results revealed that the forecast model developed was able to explain 57% of variation in the rice yield. And it is possible to forecast rice yield successfully two month before harvest.

Keywords: Generate weather variables, Regression weekly data, Correlation Coefficient, Forecast model

REFERENCES