MODELING SUGAR-CANE PRODUCTION IN PAKISTAN

Muhammad Bilal, Rana Muhammad Ayyub, Mudassar Ayyub Awan

University of Veterinary & Animal Sciences, Lahore, Pakistan

Abstract: A study of Production Sugar-cane in four provinces of Pakistan has been carried out in this research in order to obtain a suitable forecast model for production of rice. Data for this study has been obtained from “fifty years of Pakistan in statistics and economic survey of Pakistan, 2009. Sugarcane contained a sweet tasting liquid and could be used in the preparation of food. Sugar cane found in the tropical and semi-tropical regions of the world where it can grow up to five meters in height. Sugarcane is an important cash crop of Pakistan. Sugarcane is an important cash crop of Pakistan. Its share in value added of agriculture and GDP are 3.4 percent and 0.7 percent, respectively. For 2008-09, sugarcane has been sown in the area of 1029 thousand hectares, 17.1 percent lower than last year. Sugarcane production for the year 2008-09 is estimated at 50.0 million tonne, against 63.9 million tonnes last year. This indicates significant decline of 21.7 percent over the production of last year. In this paper forecast model for production of Sugar-cane in different Provinces in Pakistan has been fitted. Methodologies for fitting of the model has been used these include ARIMA. ARIMA model has been fitted for each province. Diagnostic test has been carried out to see the adequacy of fitted models. It has been found that the model accounts for more than 90% of variation of the Sugar-cane production across country. Forecasted production has been obtained for coming five years.

Keywords: Production of rice, area, temperature and rainfall, provinces, ARIMA models, forecast