AN ANALYSIS OF GROWTH RATE AND TREND OF CHILLI IN TELANGANA

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ABSTRACT

Chilli is one amongst the necessary spices crop cultivated in India. India is the largest producer of dry chilli and pepper contributing 51 per cent to the world production (FAO, 2014). It is additionally, the largest shopper and business person of chilli. The reference period of this study was from 1971-2010, and it absolutely was carriedout within Telangana. A trial has been created to look at the trends in area, production and productivity of chilli crop. Linear and compound growth rates were calculated for this purpose. 10 growth models were fitted to the area, production and productivity of chilli crop to watch the trend, and the best model for trend was chosen based mostly upon least Residual Mean Square Error (RMSE) and vital R^2. Besides, the necessary assumption of randomness of residuals was checked using one sample run test. The results unconcealed that linear and compound growth rates of area, production and productivity of chilli in Telangana were ascertained to be in considerably increasing trend throughout the study. Among all the trend models, polynomial trend was found to be the best fitted one for all the aspects of Telangana state. The analyses forecast chilli production for the year 2018 to be 308.66 t t. These projections can facilitate formulation of appropriate policies and steps to be taken to improve the crop production further.

KEYWORDS: Chilli, forecasting, growth rate, trends, modelling and production.