



**RESEARCH PAPER**

# **Trend analysis and future projections in maize crop in three districts of Northern Telangana Zone**

A. Sreenivas\* and D. Srinivasa Chary

Department of Statistics and Mathematics, College of Agriculture, Professor Jayashankar Telangana State Agricultural University, Hyderabad (Telangana) India  
(Email: [akulasreenivas948@gmail.com](mailto:akulasreenivas948@gmail.com))

**Abstract :** A study on “growth rates, growth models and future projections of maize crop in three districts of Northern Telangana Zone” has been undertaken to estimate the growth rates of maize crop in three districts of Northern Telangana Zone and fitted the adequate trend equation for the future projections by 2020 AD. Attempts have been made to examine the trends and forecasting in area, production and productivity of maize crop in three districts of Northern Telangana Zone. Linear and compound growth rates were calculated for this purpose. Ten growth models were fitted to the area, production and productivity of maize crop and best-fitted model for future projection was chosen based upon least residual mean square (RMS) and significant Adj  $R^2$ . Besides, the important assumption of randomness of residuals was tested using one sample run test. The reference period of study was from 1979-80 to 2012-13 and it was carried out in three districts of Northern Telangana Zone.

**Key Words :** Rice, Energy Input, Energy output, Specific energy

**View Point Article :** Sreenivas, A. and Chary, Srinivasa (2019). Trend analysis and future projections in maize crop in three districts of Northern Telangana Zone. *Internat.J.agric.Sci.*, **15** (2) : 288-296, DOI:10.15740/HAS/IJAS/15.2/288-296. Copyright@2019: Hind Agricultural Society.

**Article History :** Received : 27.04.2019; Revised : 13.05.2019; Accepted : 22.05.2019