



**Research Paper**

# Analysis of trend in area, production and productivity of cotton crop in three districts of Northern Telangana zone

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**ABSTRACT :** Attempts have been made to examine the trends and forecasting in area, production and productivity of cotton 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 cotton 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 :** Production, Productivity, Cotton crop, Best- fitted model

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