

Selection of Appropriate Growth Model for Projections of Cotton Area, Production and Productivity of Tamil Nadu, India ABSTRACT The statistical study was carried out on different non-linear viz.

<http://ijapsa.com/published-papers/volume-1/iss...>

Cotton also known as 'White Gold' dominates India's cash crops, and makes up 65 per cent of the raw material requirements of the Indian textile.

<http://www.efymag.com/admin/issuepdf/cotton-oct...>

India has tripled cotton production from 13 million bales to 40 million bales and has doubled its market share of global cotton production from 12% in 2002 to 25% in 2014, representing a quarter of total global cotton production.

<https://www.scribd.com/document/46969496/Bt-Cot...>

Growth models can provide a fitting data summary can be useful for forecasting future trends.

<https://hbr.org/1971/07/how-to-choose-the-right...>

Dhakre and Amod Sharma had undertaken the study to compute the growth rates of area, production and productivity of Ginger in northeastern region by using exponential growth model.

<http://www.ijraset.com/files/serve.php?FID=3702>

Aparna et al analysed the trend in growth rates of major vegetables in Visakhapatnam district of Andhra Pradesh with the help of compound growth by using exponential function.

https://www.researchgate.net/profile/Deep_Naray...

Borthakur and Bhattacharya studied on trend of area, production and productivity of potato crop in Assam.

<http://shodhganga.inflibnet.ac.in/bitstream/106...>

, linear, quadratic, cubic, exponential, compound, logarithmic, inverse, power, S-curve, and growth model for estimating the growth of cotton on area, production, and productivity to find the best fit using the statistical methods such as highest R^2 and adjusted R^2 .

<https://scribd.com/doc/74468549/Be-Paper-1>

RESULTS AND DISCUSSION The results from Table (1, 2, & 3) revealed that all the values of accuracy measures are highest adjusted R^2 .

<http://www.bmj.com/content/346/bmj.f2492>

In case of productivity, the parametric values are 192.01(a), 5.37(b), -0.18(c) and 0.01(d).

<http://www.biochemia-medica.com/2013/23/143>

Fig.1 Area of Cotton in Tamil Nadu Fig.2 Production of Cotton in Tamil Nadu Fig.3 Productivity of Cotton in Tamil Nadu Obviously, realistic growth models should be computed by identifying the model which describes satisfactorily the path followed by response variable over time.

<https://fr.scribd.com/doc/307654001/PRODUCT-DES...>

The choice of good starting values can spell the difference between success and failure in locating the fitted value or between rapid and slow convergence to the solution.

<http://researchmathsci.org/apamart/apam-v5n1-8.pdf>

However, when we compared the models based on various Goodness of fit criteria it was found that cubic model performed better than the other models.

<http://www.theanalysisfactor.com/assessing-the-...>

, (2010) worked in similar models for area, production and productivity trends of Tobacco crop in Gujrat.

http://nhb.gov.in/report_files/banana/BANANA.htm

The results were predicted for values of cotton productivity and are found to be in slightly increasing trends during 2019 to 2020 (Table 4).

<http://agbioforum.org/v5n4/v5n4a04-huang.htm>