



TRENDS ANALYSIS OF COWPEA AREA AND PRODUCTIVITY IN NIGERIA FROM 2006 - 2018

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ABSTRACT

The study examined the trends over the years of cowpea cropped area, output and yield per hectare. Time series data of cowpea area and production in Nigeria (2006 - 2018) obtained from the Central Bank of Nigeria annual bulletins were used for the study. Data were analyzed using three (3) trend models; linear, quadratic and exponential growth models which were fitted and the exponential growth models were selected on econometric basis in the analysis. The result of the exponential model showed positive compound growth trends in area (0.031) and output (0.039), but with negative growth trend of -0.008 for the yield/ha analysis. The doubling times for the growth rates were estimated at 17 and 14 years to double the growth rates in cowpea cropped area and output. Result of the growth pattern disclosed that there was deceleration in the growth of cowpea cropped area, output and yield/ha for the period under consideration. It was concluded that that the marginal compound growth rates in cowpea area, output and yield/ha resulted in actual retardation in cowpea production. The study recommended that the trend results can be reversed by land improvement mechanisms that will increase the yield/ha, and the incorporation best practices like Purdue Improved Cowpea Storage (PICS) to achieve the dual objectives of increased production and market successes.

Keywords: Area, Cowpea, Productivity, Time trend models, Trend analysis.