A STUDY ON TREND AND DETERMINANTS OF AGRICULTURAL PRODUCTIVITY: AN INTER – DIVISIONAL ANALYSIS IN CHITTOOR DISTRICT (ANDHRA PRADESH)

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ABSTRACT

There are number of studies on the agricultural sector in Chittoor district. But the research on trends and determinants of agricultural productivity is scanty. Hence the empirical, scientific, inductive, factor-finding investigational study on agricultural productivity in the rural economy of Chittoor district is an important phenomena. This paper aims to determine the trend in agricultural productivity in Chittoor District. Also, identify and analyse the important factors determining the agricultural productivity in three revenue divisions of Chittoor District, Andhra Pradesh. It is proposed to study the trend in agricultural productivity for entire district as a whole. The function has been developed to determine the trend. At present, the productivity trend is calculated for the period 1978-79 to 1997-98. To avoid the risk in productivity, observations are considered as the average of three years productivity (Triennium period). The trend is calculated for triennium period. To determine the effect of some identified variables on agricultural productivity, multiple regression analysis is utilized. Seven variables were identified as the determinants of productivity in Chittoor district. The district is divided into 3 revenue divisions namely, Chittoor, Tirupati and Madanapalle and the functional relation is established to these divisions and the entire district as a whole as one unit. The data is collected for the dependent variable agricultural productivity, crop wise, (i.e., six major crops namely, paddy, jowar, bajra, ragi, groundnut and sugarcane) in each mandal from un published records, hand book of statistics, issued by the district Chief Planning Officer, Chittoor district. The average yield of these six major crops, in terms of rupees, is considered as the agricultural productivity. The data related to independent variables is collected from the same records. In case of Chittoor district as a whole, the observed and expected relationships of the explanatory variables – percentage of irrigated area, average size of operational holding and percentage of hired workers are coinciding with the explained variable agricultural productivity. The remaining four variables establishing the negative and significant relationship with agricultural productivity. The observed negative relationship is contradictory to the expected positive relationship. Further, the same was calculated separately for the three selected revenue divisions of Chittoor District.

KEYWORDS: Agricultural Productivity, Actual Annual Rainfall, Percentage of Irrigated Area, Average Size of Operational Holding, Land Concentration Ratio, Workers-Area Ratio, Percentage of Hired Workers, Fertilizers and Pesticides Consumption per Acre