



Factors Affecting Food Grains Production in West Bengal: A Panel Data Analysis in 18 Districts during 2000-01 to 2011-12

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Abstract

Agriculture is the backbone of West Bengal economy. After 70 years of independence West Bengal economy is still an agrarian economy. Agriculture is described as the heart of West Bengal economy, because agriculture provides livelihood to two third of the total population. Food grains are the main component of total agricultural product. Using panel data of 18 districts of West Bengal from 2000-01 to 2011-12 this paper identifies the factors those are responsible for the production of total food grains in West Bengal. The results show that area under principle crop and yield rate of principle crop have significant positive role on total food grain production. In addition, the yield rate of principal crop is divided into yield rate of rice, yield rate of wheat and yield rate of total cereal, and the results show that yield rate of rice and yield rate of total cereal have significant positive role in explaining total food grain production in West Bengal. Likewise, we divide chemical fertilizer into nitrogen, phosphate and potash, and the results also show that phosphate and potash have significant positive role in explaining total food grain production in West Bengal.

Key Words: Food grains, Principal crop, Random effect model, Fixed effect model, Ordinary least square method