

Test of Endogenous Structural Break for Different Crops: Case Study of West Bengal

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The existing literature on West Bengal's agricultural growth based on traditional growth analysis is limited in explaining the nature of any series. The object of the present study is to test any structural break in the growth path of area, production and yield of different crops, using the endogenous structural break approach over the period 1980-1981 to 2002-2003. All the series, except pulses yield, have different stationary process implying that only changes associated with pulse yield are sustained in nature and no certain conclusion can be made for other cases. The inter-crop disparities with respect to the break point are conspicuous.

I Introduction

For a couple of decades, sound agricultural growth in West Bengal has been thought to be mainly driven by a steady and sustained growth of foodgrains production. A good volume of literary works supports the acceleration in agricultural, particularly foodgrains, production. Boyce's work (1987) was perhaps the first one to extensively analyze the growth performance of West Bengal agriculture. The growth estimate of agricultural output for the period 1949-1980 stood at an average figure of 1.74 per cent per annum. While analyzing the sub-period growth rates, he found the average rate of growth to be 2.74 per cent per annum for the period 1965-1980. Subsequent studies endorsed acceleration in the growth of agricultural output, particularly from the eighties onwards. Saha and Swaminathan (1994) emphasized the sharp change in agriculture in 1980s characterized by acceleration in agricultural growth. Rawal and Swaminathan (1998) corroborated the same. Both the papers made references to CMIE estimates of State-wise Compound Annual Growth Rates (CAGR) of foodgrains production from 1981-1982 to 1991-1992. According to this estimate West Bengal registered 6.5 per cent per annum growth in foodgrains production as against All-India average of 2.7 per cent per annum. Bhalla and Singh (1997) in a state-wise analysis from 1962-1965 to 1992-1995 recorded acceleration, more noticeably from 1980 onwards, in the growth rate of

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