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## Diversification of Crop in West Bengal: A Spatio-Temporal Analysis

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Agricultural diversification particularly the changing cropping patern has been contributing significantly to the rural development in West Bengal, which is an important agricultural state of India over a long period of time. This paper examines the spatio-temporal nature of crop diversification in the state in terms of some crop diversification indices.

## Introduction

The rural economy of West Bengal is basically a crop economy. Though contribution of other sub-sectors of primary sector like forestry, fishery etc. has increased over time the cropping sector remains the major contributor to the total state domestic product<sup>1</sup>. The state of West Bengal is also one of the major contributors to the national agricultural and mainly crop production. With the development of agriculture cropping pattern has been changed to cope with the changing conditions and to meet the ever-changing demands of growing population. The changing cropping pattern has been contributing a lot to the total earning of the farmers' in the state over the past nearly three decades<sup>2</sup>. Moreover its contribution to increasing farm-income has increased over time (De U.K., 2000). Limited supply of land along with increasing population and declining yield growth has compelled the farmers to search for alternative ways of raising farm income and for the sustainability of growth. Advancement of technology in different fields and increasing exploitation of irrigation sources, development of varieties of seeds, changing market and other infrastructure has led to continuous reallocation of land resources towards different crops. Sometimes a new cropping pattern is practised in view of earning more and to do so changes in technology is invited. The omnipresent problem facing the farmers therefore lies in the decision-making about the profitable levels of diversification of crop farming or choice of crops to be grown on their limited plots that can probably give the optimal level of profit and also meet their daily requirements. The process of crop diversification is also another way of avoiding risk and uncertainty involved due to vagaries of nature and market. In the early years of development farmers used to grow subsistence crops mainly for own requirement. With the passage of time farmers became increasingly commercialised and started farming for maximising their farm output. Nowa-days farmers have realised the need for emphasising more on the long-term net return.

Due to its economic importance the analysis of crop diversification has been a considerable interest to the agronomists. Introduction of new seed-fertiliser-irrigation technology has not only led to intensification of farming but also resulted in large-scale diversification of crop farming and the benefits gradually accrued to the whole farming community. Though Green Revolution technology has been introduced in India in mid-

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Statistical Abstracts of India, various issues.

<sup>&</sup>lt;sup>2</sup> De, Utpal Kumar (2000), Crop Diversification in West Bengal during 1970-71 to 1994-95, Ph. D. thesis (unpublished) submitted at the University of Burdwan, Table-7.3 & 7.4, pp. 140-141.