

## **A Study of Growth and Fluctuation in Crop Output in India during Post Green Revolution Period**

**Soma Roy (Adhikari)**

*The present paper examines statewise (i) growth rates and fluctuations in terms of total agricultural production in India during 1970-1971 to 2000-2001; (ii) relationship between growth and fluctuation; (iii) decomposition of output growth into area growth and productivity growth; and (iv) factors influencing output growth and fluctuation during the post green revolution period. The broad findings of this study include: (i) a tendency towards deceleration in the growth of total agricultural production in India in recent years; (ii) tolerable impact of green revolution on crop-output fluctuation; (iii) absence of definite pattern with regard to the association between growth and fluctuation, and; (iv) the major driving force behind the output growth and fluctuation being productivity hence technological improvement.*

### **I Introduction**

In India, till now, along with industry, agriculture also occupies a place of pride. Agricultural sector through its 'product contribution', 'factor contribution' and 'market contribution' might act as the 'leading sector' for economic development (Kuznets 1961). Hence any change in the agricultural sector—positive or negative—has a multiplier effect on the entire economy. Recognising the crucial role played by this sector in enabling the widest dispersal of economic benefits, the performance of agriculture need to be evaluated carefully properly with the help of the measurements of its growth and fluctuation.

Keeping this in view, the purpose of the present paper is three-fold. First, it focuses on the trends and sources of the agricultural growth, as well as, growth contributing factors in different regions. Secondly, it examines the nature and sources of instability in agricultural production, as well as, the instability contributing factors in Indian agriculture. Thirdly, it also analyses the association between growth and instability in crop-output at the state level. To attend the desired objectives, we have taken three crop-groups, *viz.* total foodgrains, total non-foodgrains, and all crops combined for each of the 15 major states during the study period 1970-1971 to 2000-2001 and also for two sub-periods 1970-1971 to 1984-1985 and 1985-1986 to 2000-2001.

---

Soma Roy (Adhikari), Senior Lecturer, Michael Madhusudan Memorial College, Durgapur - 713 216, West Bengal.

The author is grateful to Prof. Arup Chattopadhyay, Department of Economics, The University of Burdwan, for his encouragement and valuable suggestions in the preparation of this paper.