### **BOOK REVIEWS**

Dynamics of Agricultural Development: A District Level Study by Amandeep Kaur, 2018 Concept Publishing Company (P) Ltd., New Delhi, 110059, Price ₹ 1200.

## **Background**

Agriculture is the most important sector and demographically the broadest economic sector in many countries. It is the source of livelihood to majority of population living in rural areas. In India, Uttar Pradesh State is also highly dependent on agriculture and is the main source of livelihood to majority of the population, where two-thirds of them rely on it by producing onefifth of the Indian foodgrain production. But, the agriculture is grossly underdeveloped in the State as compared to the neighbouring States. To understand the detailed dynamics, there is no comprehensive analysis for Uttar Pradesh agriculture, dealing different dimensions at the district level over a longer period. To fill the gap, the author took up the study on dynamics of agriculture development in Uttar Pradesh.

### Methodology

Author has focused on the temporal and spatial performance of agriculture in Uttar Pradesh over the last five decades (1960-61 to 2010-11). To study the temporal dynamics of growth at the State and zonal level, the time period was divided into five periods, namely i) pre-green revolution (1960-61 to 1965-66), ii) initial green revolution (1967-68 to 1980-81), iii) matured green revolution phase (1981-82 to 1990-91), iv) initial post-reform period (1991-92 to 2000-01) and v) new millennium period (2001-02 to 2010-11).

The spatial performance was studied for 46 districts (including newly formed districts). In

addition, the districts are clubbed into nine agroeconomic regions (Western Plain Zone, Mid-Western Plain Zone, South-Western Semiarid Zone, Central Plain Zone, Bundelkhnad Zone, North-Eastern Plain Zone, Eastern Plain Zone, Vindhyan Zone, and Hills) to get better understanding on agricultural performance and dynamics of labour productivity. However, it is not showing a better view, where these regions fall in the maps. Further, it is also important to note that most of the planning is done based on administrative boundaries rather than the agroeconomic regions. Nonetheless, the author has also developed a framework for assessing the agricultural performance covering 35 crops and 85 districts in Uttar Pradesh (including Uttarakhand, which is bifurcated from Uttar Pradesh in 2000).

The author used various methods/tools for analysing data. The standard inequality measure of Gini coefficient, coefficient of variation, ratio of top to bottom quintile productivity, top to bottom quintile shares, sigma convergence, beta condition and unconditional convergence and club convergence approaches were used for the analysis. To find the correlates of agricultural performance, the author has used district-wise growth and development comparison with use of modern inputs, infrastructure facilities, resource endowments and rainfall. However, a structural framework would be useful for understanding the use of such tools in the model.

#### **Results**

The author has highlighted that the agricultural performance in Uttar Pradesh

accelerated during green revolution and decelerated by the new millennium. Decomposition of growth shows that increase in yield was the main reason for total agricultural production, but it lost its importance during last decade. The contribution to total production declined from more than 50 per cent to 17.6 per cent during 2001-11. The cropping pattern was changed from low value to high value crops accounted for considerable contribution to growth during 2001-11. The changes in cropping pattern from low value to high value crops accounted for considerable contribution to growth.

The regional and district level analysis of agricultural performance has brought out the characteristics of temporal and spatial pattern of agricultural growth during 1960-2011 in Uttar Pradesh. The author's results point out that the agricultural performance varies considerably across agro-economic regions in the State. The agricultural growth in five of the nine regions followed an inverted 'U' curve behaviour over time, indicating acceleration during the prereform period and deceleration in growth during the post-reform period. The temporal pattern of growth in area under different crops is not uniform like in the output growth. In six of the nine regions there was acceleration in area growth up to 1980s, but it continued to decelerate significantly during the post-reform period. Similarly, mixed observations were noted on the acceleration/deceleration of crop yield.

The author has presented similar results for the districts, where number of high growth districts increased from 15 during pre-green revolution period to 37 during 1980s and declined to 12 during 2000s. The growth in the districts has varied from 1 per cent to 4 per cent. Almost half of the districts recorded significant

deceleration in the post-reform period, where 14 districts have shown growth accelerated in the State. The results on the agricultural development are not much varied with the growth. The author has found the differentials in agricultural performance raised due to differentials in resource endowments in regions as well as due to differentials in use of modern inputs in agriculture.

# **Policy Implications**

In view of this, the author has gone for the policy implications where there is a need for the development of irrigation infrastructure/ facilities. The author gives a call for the second green revolution where the State could not benefit from the earlier green revolution. However, the technologies and crop preferences related to the development process was not listed. The author should have focused on future developments with different technologies and crop options to suggest for the policy implications rather than explaining the past performance, trends and its impacts.

It was also specified that the cost of production should be reduced and improve the income levels of the farmers to improve the socio-economic well-being. The author has suggested for the development of farmers' machinery cooperatives with modern implements, improved livestock, incentive schemes for small and marginal farmers. The options presented are not based on the analysis or findings of the study.

The Central and State governments are already taking policy implications based on the market opportunities. The author still calls for the high value commercial crops as there is a need

to fill the gap as per the analysis. The author's survey found a big information gap on the modern agricultural practices and policies, programmes and extension services in the State. Nonetheless, one should remember that the researchers, extension specialists, and policy makers are already working for the same from time to time for the agricultural growth.

Overall, the book is unique by studying the dynamics of agriculture with the reforms in the State. The study is highly useful for the researchers and policy makers to make similar analysis to understand the constraints and available opportunities. The future researcher can focus on the incorporation of the benefits on new technologies and how this would improve the agricultural performance in the State and country.

Dr. Krishna Reddy Kakumanu

Socio-Economic Profile oF Rural India: Series-III, Volume - 2, Edited by Sucha Singh Gill and Varunendra Vikram Singh, Price: ₹ 1000

The book which is reviewed is a part of a larger series on Socio-Economic Profile of Rural India, which runs into three series, each series comprising volumes focusing on rural development issues of different regions in India. This volume in the series edited by Sucha Singh Gill and Varunendra Vikram Singh focuses on rural development issues of six States; Maharashtra, Karnataka, Kerala, Andhra Pradesh and Telangana (together) and Bihar. It puts into perspective, the status and achievements of the State in the arena of rural development and identifies potential areas of improvement. An interesting feature of

the book is that, the facts and analysis presented in the book are a combined effort of the authors of individual chapters pertaining to each State and IAS trainee officers who prepared socioeconomic assignments. The analytical framework of the contributions to this volume is firmly anchored on the macro and micro level empirical analysis for a decade from 2003 to 2013. The macro level perspective originates from the analysis of official statistics on key indicators of rural development, which is empirically verified at the micro level though data and information collected by field work of IAS trainees.

The book consists of six Chapters, with an introductory Chapter by Sucha Singh Gill that puts into perspective the trajectory of rural development in India over the last seven decades, and reflects the status of that of five States. The introductory Chapter gives a macro view of the various facets of rural development and sketches the regional variations in development achievements of the States under focus. India started its journey as a young nation grappling with the problem of more than fifty per cent of its population in poverty, majority of them living in the rural areas. The efforts towards rural reconstruction of the country were laid on the four pillars of i) land reforms ii) community development programmes iii) co-operative credit societies and iv) public investment in irrigation, flood control and power generation. India's rural development pursuit which began with community development programmes in the 1950s, progressed with intensive agricultural development programmes which resulted in achieving food self-sufficiency through Green Revolution during 1970s. A conscious multipronged strategy to reduce poverty, addressing concerns on health and nutrition, improving rural infrastructure and housing