Book Review

Enhancing Agricultural Productivity and Farmer Incomes in Bihar, Edited by Sankar Kumar Bhaumik, Sage Publications, New Delhi, 2022. Pp.xii+404.

The volume comprises a collection of 18 selected papers presented at the National seminar on "Raising Agricultural Productivity and Farmers' Incomes in Bihar" held in Patna during 17–18 December 2021. The papers are arranged into six sections: agricultural growth trajectories; structural transformation in the agricultural sector; insurance and markets for agriculture; climate change and agriculture; credit and technology for agriculture, and income diversification of rural households.

Bihar State is listed as one of the BIMARU states. It is third largest state with respect to population, about 69 per cent of geographical area is under cultivation, agriculture sector provides employment to 70 per cent of the work force, 90 percent farm households own less than one hectare of land and own about 44 per cent of cultivated land. As regards the status of agriculture sector till 2008 agricultural growth was stagnant or even negative in some years. During 2004 to 2011 state agriculture GDP grew at the annual growth rate of 2.7 per cent. The state is also known for low yields of crops and frequent floods and droughts. High incidence of poverty, lack of basic amenities and basic infrastructure and out migration of rural population in search of employment.

Despite the above features the Bihar agriculture registered a big change after 2008 as the growth rate exceeded the average agricultural growth rate of India. Production of wheat and rice increased, rabi maize revolution in the flood prone areas, livestock sector became important as the milk production increased, etc. Bihar is one of the states of India where agriculture is affected most by climate change. The national seminar was very timely intervention to reflect on the changing agriculture dynamics in the Bihar State. This book provides some answers to the different aspects of the high growth of agriculture sector in the state. Sankar Kumar Bhaumik facilitated readers by providing summary of findings of each theme. Some of the important findings are listed below;

- This big change in Bihar's agriculture was ascribed to input intensification and adoption of improved technology.
- Despite high growth rate in agriculture sector the yield rates of the two major crops, i.e., wheat and rice, are lower than national average of these crops.
- As more than 90 per cent of farms belongs to the marginal category there is absence of any substantial surplus from agriculture for reinvestment, which prevents this sector to follow the capital path of accumulated expansion.
- It is the inequality in land distribution, landlessness and incidence of tenancy that resulted in low-income traditional agriculture in the state.
- Protection of farmers by introduction of programmes, namely, crop insurance and market reforms are less effective in the state because of lack

BOOK REVIEW 261

of awareness and the design and process of implementing is beyond the understanding and control of the farmers.

- The State procurement of wheat and paddy do not provide desired relief to the farmers.
- Farmers vulnerability has increased because of climate change, more floods and droughts.
- Low credit offtake in the farm sector because of low level of education and farmer practicing traditional agriculture. Also supply side factors constraining the flow of institutional credit; high non-performing assets of the banks, weak financial health of the regional banks and cooperatives, and low capital formation in agriculture through government support because of weak budgetary allocation for agriculture.
- Outmigration in search of remunerative occupation outside state because of lack of alternative diversification of occupation within village/district/state.
- Emergence of livestock sector enhancing income of farmers.

Few important suggestions that emerged out of deliberations by these contributors on different themes are;

- Adoption of agri-centric growth model to sustain the high agriculture growth rate
- Diversification of agriculture and creation of non-farm rural employment opportunities to sustain the increased high growth rate in agriculture sector and improve the livelihoods of rural population.
- The livelihoods of large numbers of poor farmers can improve by developing backward and forward linkages with small scale rural enterprises and by diversification of agriculture.
- Land reforms in the state is very much needed to change the fate of the people.
- Formation of Producers' Organisation along with handholding support can improve the income and livelihood of poor farmers.
- Need to evolve climate resilient farming system for each agroclimatic region of the State.
- Need to raise education base and level of awareness about the agricultural development schemes/programs launched by the state and central government.
- Generate more non-farm income opportunities, especially during the lean season and for lower social groups to lift them above poverty line.
- Organise the milk cooperatives and develop the required infrastructure and services to support milk production and livestock related enterprises. This will bring more equity in the society.

What is surprising element in the agricultural development in the state is that Bihar Government do not have a most important document called 'Agricultural Policy of Bihar' or a vision document. CII has come out with a Bihar Vision document 'Bihar@2022' reflecting on all the sectors and suggesting measures for

faster growth and development of Bihar. Second, baring small pockets the entire state is categorised as 'white zone' in case of availability of groundwater, groundwater-based irrigation is very much practiced in the State yet crops are affected by droughts? It is clearly evident that the future growth of agriculture will depend on land reforms, why state government is not making efforts in this direction, at least start with tenancy reforms?

Finally, this book will be very useful for researchers, policy makers and line department officials in the state to plan for faster economic development of the state.

Centre for Environment and Development Studies Jaipur 302 021, Rajasthan M.S.Rathore