Bihar Krishi Roadmap\textsuperscript{1}

Agriculture is the prime source of wealth in Bihar and is the key to the overall development of the state economy. Bihar has a total geographical area of about 93.60 lakh hectares, out of which the net cultivated area is 56.03 lakh hectares. Fertile Gangetic alluvial soils, and abundant water resources, particularly groundwater resources, form the basis of agriculture in Bihar. The state government has accorded top priority to agriculture and has prepared a roadmap for the agriculture sector. This roadmap aims to achieve food and nutritional security of the state population, increase in farmers’ income, gainful employment for agriculturists and consequently a check on their migration, equitable agricultural growth with a focus on gender and human aspects, and the optimal use of natural resources for ensuring sustainability of the production system.

The first Agriculture Roadmap was initiated in 2008 to usher in a rainbow revolution, an integral development programme of agriculture, horticulture, forestry, sugarcane, fishery, poultry and animal husbandry. It concluded with a \textit{Krishi Karman Award} to the state of Bihar for achieving the highest rice production at 81 lakh metric tonnes (MT) in 2011–12. This also led to commendable progress in seed sector and agriculture extension. It was followed by the launch of the second Agriculture Roadmap by the then President Pranab Mukherjee in October 2012 in Patna. The main objective of this roadmap was to ensure safety of foodgrains and nutrition, and to augment the incomes of farmers. It paid special attention to road connectivity to help the rural population reach wholesale markets to be able to directly sell their produce. The third Agriculture Roadmap was unveiled by the current President, Ram Nath Kovind, for the period 2017–2022 in November 2017. This roadmap lays special emphasis on organic farming, and funds to the tune of Rs. 1.54 lakh crore have been allocated for this phase.

\textit{First Agriculture Roadmap:}

The first agriculture roadmap, which was implemented in Bihar between 2008 and 2012, signalled the launch of several programmes like the \textit{seed extension scheme}, seed gram scheme, and the thrust on bio-farming and use of agricultural equipment. This roadmap also laid stress on the availability of certified seeds for 23 crops. These certified seeds were distributed on a subsidy. The Seed Replacement Ratio (SRR) for some crops was as high as 83 percent in 2011–12. There was also an emphasis on bio-farming, farm mechanisation and the implementation of new techniques for SRI cultivation.

According to sources, the total foodgrain production in Bihar was 178.29 lakh tonnes in 2012–13, the year when the first Agriculture Roadmap (2007–12) ended. Thereafter, foodgrain production in the state touched a record high, in terms of both the total produce and the per hectare yield, in the financial year 2016–17.

\textsuperscript{1} Prepared by Garima Nain, Gokhale Institute of Economics and Politics. She was working as Summer Intern at NCAER during this work.
The yield stands at 185.61 lakh tonnes, which exceeded the expectations of the state agriculture department by 5 lakh tonnes.

The six goals of the two-phase *Agriculture Roadmap (2012–17 and 2017–22)* are:

- Food security;
- Nutrition security;
- Increase in the income of farmers;
- Employment generation and control on migration of workers;
- Inclusive human base of agricultural development and extensive participation of women; and
- Conservation of natural resources and their sustainable use.

**Second Agriculture Roadmap:**

The main objective of the second Agriculture Roadmap was to ensure the safety of foodgrains and nutrition, and to augment the income of farmers. These objectives are sought to be achieved by ensuring the adequate supply of electricity to farmers, enhancing storage facilities, and promoting food processing initiatives to help achieve the rainbow revolution that would make Bihar self-reliant in agricultural production and make the sector export-oriented.

Under this roadmap, the state government planned to connect habitats with populations of 250 people each through the construction of concrete roads to allow farmers to bring their produce into the markets. Further, it aimed to enhance the storage capacity of farm produce by constructing new godowns. Steps were taken to boost the food processing industry to ensure that farmers get better price of their crop. In order to address the problems of climate change and global warming, and contribute to the ongoing efforts of maintaining the ecological balance, the state government also launched a green mission to increase the forest cover from 9 to 15 per cent by 2017.

Further, the state government set up its second agriculture university as well as three new agriculture colleges, including one each at Saharsa, Purnia and Kishanganj, to promote research and the use of advanced farm techniques for the development of the farm sector. Lauding the tremendous development in the agriculture segment in China, the Bihar Chief Minister also announced that the state government would soon send a team of farmers to China at its own expense to enable them to learn the agricultural techniques adopted by the farmers there. These initiatives were aimed to provide farmers in Bihar the opportunity to learn new techniques of growing crops and plants by adopting the modern methods of agriculture.

**Third Agriculture Roadmap:**

On November 9, 2017, the President of India, Shri Ram Nath Kovind, launched the Bihar Krishi Roadmap 2017–2022, which entails the allocation of a sum of Rs 1.54 lakh crore for the agriculture and allied sectors, including for food processing, irrigation, flood protection and dairy development projects. This roadmap has been launched to strengthen the farming community and improve the performance of the agricultural sector.
The Third Agriculture Roadmap also envisages realisation of the vision to ensure "at least one Bihari dish on the plate of every Indian" over the next five years. The roadmap covers implementation of programmes by as many as 12 departments, including Agriculture, Animal Husbandry and Pisciculture, Revenue and Land Reforms, Water Resources, Power, and Food Processing. In addition, nine other schemes have been launched under this roadmap, including an organic farming corridor, a Bihar Fisheries College at Kishanganj, stone laying of an 11kV agriculture feeder at the Naubatpur block in Patna district, and a three-layer Bihar Vegetable Processing and Distribution Cooperative system. A new aspect of the Third Agriculture Roadmap is the creation of an organic corridor in the districts along the Ganga river, the tangible results of which are likely to be visible from the third year of the implementation of the roadmap, that is, in 2019–20.

This roadmap thus lays an emphasis on organic farming, including the development of organic corridors in the riverine areas and off the national and state highways, as also the development of a 1500 MW power network for exclusively catering to the agriculture sector. As part of the scheme for advance payment for the purchase of agricultural inputs, an amount of Rs. 6,000 each has been transferred into the bank accounts of more than 20,000 farmers to enable them to undertake organic farming under this roadmap. Another key initiative under the roadmap includes approval for an expenditure of Rs. 151.14 crore for providing nutritious food, especially eggs and seasonal fruits, at least once a week, to students under the Mid-Day Meal Scheme.

References: