

Impact of Agricultural Infrastructure on Diffusion of Technology of the Sample Farmers in North 24 Parganas District, West Bengal

Authors : Saikat Majumdar, D. C. Kalita

Abstract : The Agriculture sector plays an important role in the rural economy of India. It is the backbone of our Indian economy and is the dominant sector in terms of employment and livelihood. Agriculture still contributes significantly to export earnings and is an important source of raw materials as well as of demand for many industrial products particularly fertilizers, pesticides, agricultural implements and a variety of consumer goods, etc. The performance of the agricultural sector influences the growth of Indian economy. According to the 2011 Agricultural Census of India, an estimated 61.5 percentage of rural populations are dependent on agriculture. Proper Agricultural infrastructure has the potential to transform the existing traditional agriculture into a most modern, commercial and dynamic farming system in India through its diffusion of technology. The rate of adoption of modern technology reflects the progress of development in agricultural sector. The adoption of any improved agricultural technology is also dependent on the development of road infrastructure or road network. The present study was consisting of 300 sample farmers out which 150 samples was taken from the developed area and rest 150 samples was taken from underdeveloped area. The samples farmers under develop and underdeveloped areas were collected by using Multistage Random Sampling procedure. In the first stage, North 24 Parganas District have been selected purposively. Then from the district, one developed and one underdeveloped block was selected randomly. In the third phase, 10 villages have been selected randomly from each block. Finally, from each village 15 sample farmers was selected randomly. The extents of adoption of technology in different areas were calculated through various parameters. These are percentage area under High Yielding Variety Cereals, percentage area under High Yielding Variety pulses, area under hybrids vegetables, irrigated area, mechanically operated area, amount spent on fertilizer and pesticides, etc. in both developed and underdeveloped areas of North 24 Parganas District, West Bengal. The percentage area under High Yielding Variety Cereals in the developed and underdeveloped areas was 34.86 and 22.59. 42.07 percentages and 31.46 percentages for High Yielding Variety pulses respectively. In the case the area under irrigation it was 57.66 and 35.71 percent while for the mechanically operated area it was 10.60 and 3.13 percent respectively in developed and underdeveloped areas of North 24 Parganas district, West Bengal. It clearly showed that the extent of adoption of technology was significantly higher in the developed area over underdeveloped area. Better road network system helps the farmers in increasing his farm income, farm assets, cropping intensity, marketed surplus and the rate of adoption of new technology. With this background, an attempt is made in this paper to study the impact of Agricultural Infrastructure on the adoption of modern technology in agriculture in North 24 Parganas District, West Bengal.

Keywords : agricultural infrastructure, adoption of technology, farm income, road network

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