## **Abstract**

The prolonged crises in the Indian agriculture sector, particularly in respect of its slow growth, low productivity, price slump, wastage of unsold produce and farmers' distress are well-recognized. The problems are generally seen as outcomes of technology fatigue, infrastructural constraints, poor market linkages, and policy and institutional failures. Accordingly, efforts have been made towards bringing in new technologies, developing infrastructure, providing subsidies on inputs and access to credit, setting the minimum support prices and waiving farm loans. While these measures are considered to be crucial for promoting growth of the sector as a whole, reaping the benefits by the land-constrained farmers remains a critical issue primarily due to their lower scale of operation, limited bargaining power, lack of human capitals, and inefficiency of the development-delivery institutions. The problems are more acute in West Bengal that has highly fragmented landholdings leading to the existence of a large number of smallholder farmers. These farmers often suffer from the problem of lower returns, particularly in the presence of intermediaries, along with high production and market related risks. Hence, there is a need for detailed analysis of these aspects to design appropriate pathways toward inclusive intensification in agriculture, and this study attempts to do the same. The specific objectives of the study include examining structure and functioning of agricultural markets and farmers' strategic behaviour therein, analysing the implications of value chains in developing market linkages and the specific role of information and communication technology (ICT) in this regard, and designing framework for strengthening market-policy-institution linkages. The study uses both primary and secondary data and information and applies primarily qualitative methods. It is found that land-constrained farmers are better linked with markets when they are engaged in collective actions, diversified value chains, adoption of modern farming technologies and application of ICT. Further, collective actions promote women empowerment through intensification in agriculture. In addition, formation of collectives by the smallholders with external handholding (by the NGOs and government agencies) give the farmers wider and stronger strategic space as compared to individual farming. The findings, therefore, suggest policies and institutional support toward development of infrastructure relating to ICT applications, collectivization of smallholder farmers, and incentivizing them toward low-cost protected farming through continuous community engagement to facilitate inclusive and sustainable intensification in agriculture.

Keywords: Land-constrained farmers, agricultural markets, ICT, value-chain, collectives, India