

SDC 2018 Annual Meeting Abstracts

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**Title: Enhancing Agricultural Productivity through Delivery of Customised
Agricultural Information: Evidence from India**



Making agricultural systems financially viable for farmers and reducing adverse impact of agriculture on environment are two key concerns in agriculturally dominant and developing economies like India. We show that sharing best practices with farmers, which has been customized as per farmers' unique resource endowments, can help in achieving twin goals of financial and ecological sustainability of agriculture at a low cost and in a short span of time. Impact of dissemination of best practices on agricultural outcomes is difficult to determine, due to which agricultural research dissemination machinery or agricultural extension machinery is among the least funded state initiatives in India. Due to poor availability of quality information among farmers, current growth rate of agriculture in India is much lower than desired and in certain locations agricultural practices have led to significant deterioration of land and water resources.

Using data from a randomized control trial experiment we show that, when provided with customized agricultural information, farmers in India were able to rationalize use of inorganic fertilizers and pesticides and achieve highly significant increase in yields to the extent of eighteen and eighty five percent for rice and cotton crops respectively, within a short span of two years. Information was provided to farmers through a unique combination of information technology and human intervention, which allowed dissemination of accurate but customizable information at low cost to large number of farmers.

The study makes a significant academic contribution because it is one of the few studies on evaluation of agricultural information delivery which is free from methodological issues. A double randomization at village and farmer level helped us in neutralizing impact of farmer characteristics and agricultural endowments of the area on results and a special emphasis on minimizing potential sharing of information between treatment and control farmers helped us in accurately measuring size of impact of information delivery on agricultural outcomes.

Lastly, our study has strong policy implications as we show that reviving the defunct agricultural information delivery systems can help states quickly achieve multiple goals linked to agriculture, especially those linked to financial and ecological sustainability.