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Successful scaling approaches leading to autonomous adoption of Conservation Agriculture in West Bengal

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In West Bengal, India, the agricultural sector needs options that can address labour scarcity, reduce production costs and improve productivity. Conservation agriculture based technologies offer potential solutions for these issues. Since 2012, a network of actors comprised of research (local university, international research organisations), extension (Department of Agriculture) and farmers groups have been working together through particaptory field trials, capactiy development, supply chain and policy interactions to undertake research and development activites with the unified aim to take CA to Scale across the state of West Bengal.

As a result of this, more than 70,000 farmers in the state are now using CA practices, with several important factors identified that have contributed to the scaling CA. First, the opportunity to strengthen links and build networks in the agricultural system that were limited before. For example agricultural universities worked very closely with the state extension department, which was integral to fostering trust in academic results. An important part of this network was the farmers' groups (i.e. state sanctioned Farmers Groups, Farmer Producer Organisations and Self-Help Groups). These groups have played a crucial role in machinery provision and as an information channel for farmers. As emerging entrepreneurs, they have been linked to partner networks, and had access to technical expertise that has reduced risk and allowed them to capitalise on an opportunity to use more profitable and inclusive enterprises. Enagement of women and rural youth through farmers groups and alternative income generating activities makes the new system attractive to communities and government alike. These strong networks helped develop trust with communities, and coupled with over 200 participatory trials and ongoing technical backing from international research organisations, resulted in greater buy-in from multiple actors in the system and gave confidence to partners to channel demand to higher levels. A combination of proof of concept and increasing demand from farmers meant policy makers had something to see in the field that was also supported by locally produced, international standard science. Having dedicated, focal staff at every level from

local (block and subdivision) and higher allowed for coordinated lobbying from different levels within the government system.

Convergence with government schemes was the ultimate aim for scaling and sustainability of CA use in West Bengal, and these outcomes are demonstrated in several ways. Now, it is compulsory that all new Custom Hiring Centres (CHC) include at least two CA machineries in their portfolio of five machines (minimum), in an attempt to promote CA technologies and avoid environmental hazards associated with straw and stubble management. At the local (block) level, extension staff are able to commit resources from state extension schemes to activities of their choosing, allowing these schemes to promote CA. This promotion of CA is supported by government research and extension staff assigned at district levels who have a commitment of both time and funds for technical backstopping, troubleshooting and adaptation as adoption spreads in both time and space. The approaches used here will continue to contribute to scaling and long term sustainability of CA use in West Bengal, and provide key learnings more broadly for sucessful scaling.

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