

## **Smallholder farmer innovation: Facilitating farmer agency through experimentation and learning about cropping systems.**

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### **Abstract**

Learning, and in particular generating new knowledge, appears to have played a role in transforming the lives of poor women farmers on the east India Plateau. Learning and knowledge generation seem to have increased their self-esteem and generated a desire to learn more as well as improving their physical well-being and position in society. This paper describes our experience working with resource poor smallholder farmers on the East India Plateau to develop more diverse and intensive farming systems. Our focus is on developing the capacity of individuals for independent innovation rather than their skill in the application of specific agricultural technologies. Facilitating learning experiences through on-farm research on topics chosen by the community is central to our approach. Individual farmers learn from each other in self help groups that provide a forum for farmer-scientist interaction.

Locally developed vegetable cash crops and aerobic direct seeded rice are popular with farmers and adoption is expanding rapidly. Much of the local adaptation and dissemination is being driven by farmer-to-farmer communication and learning. Our experience confirms that despite often extreme poverty, malnutrition and discrimination these communities demonstrate high human capacity for innovation. Rather than a specific technology or cropping system, the real legacy of our approach is cognitive development in farmers, changing their perception of the environment in which they are working and enhancing their capacity for independent innovation in the face of increasing complexity and uncertainty.

**Keywords:** transformative learning, cognition, communication