



## Awareness and Economic Implications of Natural Farming: The Role of Krishi Sakhis in Rural India

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Natural farming is now gaining wider acceptance as an effective alternative to conventional farming methods because it focuses on maintaining ecological balance, minimizing the use of external inputs and improving soil health over the long term. By avoiding chemical fertilizers and pesticides, natural farming helps reduce cultivation expenses while also protecting the environment. In India's rural agricultural extension framework, Krishi Sakhis community-based women extension workers serve as an important link between formal agricultural institutions and farmers at the village level. Their level of knowledge, perception and economic awareness plays a major role in encouraging farmers to adopt natural farming practices. The present article examined the level of awareness among Krishi Sakhis about natural farming, evaluated their contribution in disseminating knowledge to farmers and analyzed the economic feasibility of natural farming through benefit cost analysis.

### Awareness and Understanding of Natural Farming Practices

Krishi Sakhis demonstrated a moderate to high level of understanding of natural farming principles. They were well acquainted with the preparation and use of traditional cow-based formulations, the application of plant-based pest management solutions and various practices that help improve soil microbial activity. Participation in training programs, exposure to field demonstrations and regular interaction with agricultural extension staff significantly contributed to improving their knowledge and clarity on natural farming concepts. However, certain knowledge gaps were noticed in more technical aspects, especially in areas such as nutrient management approaches and scientific understanding of crop yield performance under natural farming conditions. These gaps indicate the importance of providing advanced and refresher training programs to further strengthen their technical skills and confidence.

### Role of Krishi Sakhis in Technology Dissemination

Krishi Sakhis displayed a high level of interest and commitment towards adopting and promoting natural farming practices. Their motivation was largely driven by the lower costs associated with avoiding chemical inputs, visible improvements in soil health and increasing awareness about environmental safety and human health. To spread awareness, they used various extension methods such as farmer group discussions, field demonstrations and peer-to-peer learning, which helped farmers better understand natural farming techniques. In addition, Krishi Sakhis played an important role as change agents within their villages. By practicing natural farming on demonstration plots or on their own farms, they built confidence among other farmers. This practical exposure encouraged farmers to try natural farming on a small scale, helping to reduce their doubts, risks and uncertainty.

### **Constraints Affecting Adoption**

Even though perceptions towards natural farming were generally positive, several challenges restricted its large-scale adoption. These challenges included irregular availability of quality bio-inputs, limited opportunities for follow-up or advanced training, concerns about maintaining stable yields during the transition period and resistance from farmers who were already comfortable with conventional farming practices. Moreover, the absence of well-organized marketing systems and lack of assured price incentives for naturally produced commodities reduced the overall economic appeal of natural farming.

### **Impact of Awareness and Capacity Building Module**

The structured Awareness Module designed for Krishi Sakhis played an important role in improving their performance as extension facilitators. Evaluations conducted after the training indicated clear improvements in their technical understanding, communication skills and overall confidence. The module helped them address farmers' queries more effectively and enabled them to promote natural farming in a more planned, structured and systematic way.

### **Economic Performance of Natural Farming Systems**

The benefit cost analysis indicated that natural farming systems can compete economically with conventional farming methods. The cost of cultivation was significantly lower because there was no need for synthetic fertilizers and pesticides. Although crop yields were sometimes slightly lower during the initial years of adoption, overall net returns were often similar or even higher due to reduced input costs and better cost management. In the long run, natural farming helped improve income stability and reduced financial risks for farmers.

### **Conclusion**

Krishi Sakhis play a crucial role in increasing awareness, acceptance and economic viability of natural farming at the grassroots level. Strengthening institutional backing, providing continuous skill development opportunities, ensuring easy access to quality bio-inputs and creating strong market support with better price incentives can greatly speed up the adoption of sustainable natural farming practices.