



## Awareness and Economic Feasibility of Natural Farming among Krishi Sakhis: A Study on Knowledge Dissemination and Benefit-Cost Analysis

\*Riya Upadhayay and Dr. Subuhi Nishad

Indira Gandhi Krishi Vishwavidyalaya, Raipur (C.G.), Chhattisgarh, India

\*Corresponding Author's email: [rivaupadhyay01@gmail.com](mailto:rivaupadhyay01@gmail.com)

Natural farming has gained increasing attention as a sustainable agricultural approach that minimizes external chemical inputs, reduces production costs, and enhances soil health. In India's rural development framework, Krishi Sakhis—trained women resource persons working at the village level—serve as a crucial link between agricultural institutions and farming communities. Their awareness, capacity, and economic understanding play a decisive role in the successful promotion of natural farming practices. This article examines the level of awareness among Krishi Sakhis, their role in knowledge dissemination, and the economic feasibility of natural farming through benefit-cost analysis.

The study revealed that a considerable proportion of Krishi Sakhis possessed moderate to high awareness of natural farming principles, including the use of indigenous cow-based inputs, botanical pesticides, and soil biological management. Training programs, exposure visits, and interaction with agricultural extension agencies significantly enhanced their understanding. However, gaps remained in technical depth and scientific validation, especially related to nutrient management and long-term yield performance.

Krishi Sakhis demonstrated a high willingness to implement and promote natural farming techniques. Their motivation was driven by reduced dependence on costly chemical inputs, improved soil health, and the perceived health and environmental benefits. Their ability to disseminate knowledge effectively was strengthened through demonstrations, farmer meetings, and peer learning. Krishi Sakhis acted not only as information providers but also as role models, encouraging farmers to experiment with natural inputs on small plots.

Despite this positive outlook, several challenges hindered adoption and dissemination. These included limited availability of quality bio-input materials, lack of regular refresher training, initial yield uncertainty, and resistance from farmers accustomed to conventional practices. Inadequate market linkage and price premiums for naturally grown produce further constrained large-scale adoption.

The Awareness Module designed for Krishi Sakhis proved to be an effective tool for knowledge dissemination. Post-training assessments indicated a significant improvement in technical knowledge, communication skills, and confidence levels. The module enabled Krishi Sakhis to address farmers' doubts more effectively and promote natural farming practices in a structured manner.

Economic analysis showed that natural farming had a favorable Benefit-Cost (B:C) ratio compared to conventional farming. Input costs were substantially lower due to the elimination of synthetic fertilizers and pesticides. Although yields were sometimes slightly lower during the initial transition period, overall net returns were comparable or higher because of reduced costs and improved profit margins. In the long run, natural farming enhanced farmers' income stability and reduced financial risk.

In conclusion, Krishi Sakhis play a pivotal role in enhancing awareness and adoption of natural farming. Strengthening capacity-building programs, addressing field-level challenges, and ensuring institutional and market support can significantly improve the economic and environmental sustainability of natural farming systems.