

## ROLE OF CONSERVATIONAL AGRICULTURE IN SUSTAINABLE FARMING

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**Abstract:** Conservation tillage has been considered an established technology for growing farm income, but its implementation is still uncertain in the semi-arid part of western India. The most pronounced impact of conservation tillage is on the cost-saving compartment, but since conservation tillage / zero tillage / no-tillage (CT / ZT / NT) wheat farmers were able to sow the crop much earlier than their conventional counterparts, yield increases by 8%. Crop-rotations and household considerations were influencing ZT adoption. Although there are a range of constraints for continuous adoption of ZT, such as excess moisture, undulated plots, limited landholding and residue management difficulties for *khari* crops (pearl millet, cotton). The ZT technology was also found to be efficient in reducing the farmer dependency on external inputs and ensures sustainable production of wheat.

**Keywords:** Crop-rotations, Physico-chemical properties, Microbiological properties, Zero-tillage

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