

Technology Fact Sheet for Adaptation

CONSERVATION TILLAGEⁱ

3. CONSERVATION TILLAGE	
Introduction	This is a system of land preparation using a ripper where only planting holes/farrows (ripping) are made whilst the land remains unploughed. Hand hoes or folk jembes can also be used where only planting holes are made (pitting) whilst the rest of the land remains unploughed. A farmer can also intercrop maize/green manure cover crops and after harvest crop residues left on the farm. This system is based on minimal soil disturbance (reduced or no tillage). It is a method of growing crops without disturbing the soil through ploughing
Technology Characteristics	This technology embraces soil erosion control. Moisture conservation and soil fertility improvement through combining conservation tillage (ripping) for planting holes/farrows with possibility of intercropping maize/green manure cover crops. The technology is being promoted in Kisii and KARI Station in Marsabit.
Country Specific Applicability	The technology has been adopted in Kisii, Nyando, Transmara, Nandi and Marsabit Districts.
Status of the Technology in the Country	It was developed in 2005. Farmers are practicing it in the areas mentioned above.
Benefits to Economic/Social and Environmental Development	Conservation tillage reduces fuel consumption and soil compaction reduced since no tractor travels over the field. Farmers make savings in fuel and labour to create more time for additional farm work or off-farm activities for livelihood diversion. Application of Herbicides and fertilizers can be reduced
Climate Change Adaptation Benefits	Conservation tillage reduces erosion, improves soil structure and soil-water dynamics. The cover crops used in conservation tillage are usually leguminous which are typically high in nitrogen. Improved soil nutrient recycling may also help control crop pests and diseases
Financial Requirements and Costs	US \$ 12.5. The costs here cover the tools and implements used in Conservation Tillage.

ⁱ This fact sheet has been extracted from TNA Report – Technology Needs Assessment Reports For Climate Change Adaptation – Kenya. You can access the complete report from the TNA project website <http://tech-action.org/>