



CONSER- VATION AGRICULTURE FOR SMALL HOLDER FARMERS IN NORTH WESTERN AM- HARA, ETHIOPIA



20 cm
75cm 55cm untilled

Minimum tillage ,Jabi.Arbayitu Ensisa kebele ,2014

INTRODUCTION

Conservation Agriculture (CA) can be a possible technique to mitigate the reduction in soil quality, to reduce runoff and soil erosion, and can increase in situ moisture conservation, and contribute to sustainable production. Thus, flyer highlights conservation agriculture for small holder farmers.

Components of CA

1. Minimum soil disturbances (tillage)
2. Residue retention, and
3. Crop association (rotation or inter-cropping of legume and maize)

CA practices

Weed Control: Use non-selective herbicides such as Round up (glyphosate) at the rate of 3.0 lit ha⁻¹ 5–7 days before planting

Land Preparation: one pass oxen plough as minimum tillage for the maize and cowpea between maize rows.

Planting: Maize is planted in rows with distance of 75 cm and cowpea planted between two rows of maize. Spacing between maize. Legume plants was 30 cm and 7 cm respectively. DAP is applied at the rate of 200 kg ha⁻¹ during planting and 200 kg urea was applied 45 days after maize planting. Cowpea was planted after 15 days of maize planting.

Weeding: weeding should be done by hand at least 2–3 times

Harvesting: Harvesting should be done first the cowpea after 1-2 weeks of maturity and the maize after completely dried.

After Harvesting: 30% of the maize residue should be left on the farm. And the land protected from livestock entrance that feed on the residue.

FOR MORE INFORMATION

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Sustainable Intensification of Maize
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