Conservation Agricultural Practices in West Africa

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Goal and Objectives

Goal of this project is to provide food security by increasing productivity and economic returns to smallholding farmers dependent on rain-fed agriculture.

Objectives of this research are:

(a) test various conservation agricultural practices under on-station and on-farm conditions; and

(b) identify practices that are sustainable and contribute to crop productivity and soil health.

Conservation Agricultural Practices

Crop Residues

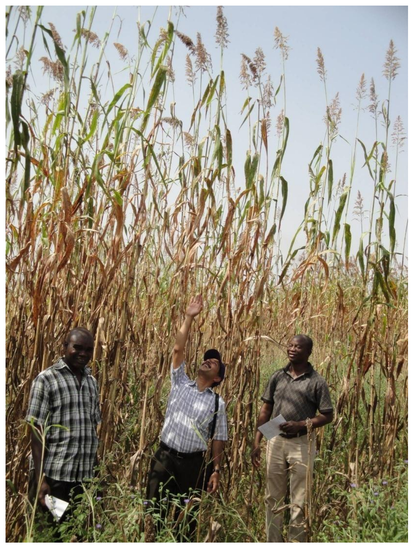
Cover Crops

Minimum Tillage

Crop Rotations

Water Harvesting

Nutrient Management



Large quantities of crop residue is produced by local genotypes that are tall. However, after harvest residue is collected and taken out of the field and stored due to alternative uses and biotic and abiotic challenges.

Challenges

Market Value

Building Material

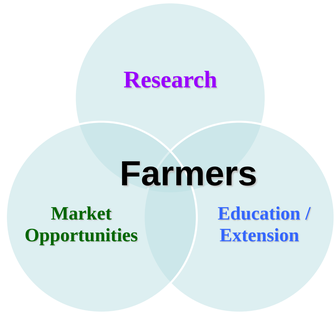
Fences

Animal Grazing

Termites

Fire Hazards

Research Approach and Road Map



1. Needs Assessment: Problem diagnosis with farmers

2. Collecting base line information on socio-economic and biophysical conditions

3. Gender sensitization

4. Community engagement / network building with all stake holders

5. Farmers identified conservation agricultural practices (CAPs) for evaluation

6. On-farm (5 – 10 villages) and On-station (2 – 3) demonstrations (Mother-trials)

7. Farmers led and managed : single / multiple CAPs in their own fields (Baby-trials): 10 – 25 in each village

8. Technical and impact assessment of CAPs

9. Methodology assessment and gender impact analyses

10. Extend and scale-up in other villages with in and outside the region (Baby-trials)

Farmers participation in decision making along with researchers, extension agents, NGO and value chain participants