Adoption of Climate Smart Agriculture and Sustainable Land Management Technologies for Integrated Landscape Management in Ethiopia

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1. Introduction

In recent years, the role of the agriculture sector and small holder farmers in developing countries has received greater attention in terms of contribution to global warming and with regard to its mitigation.

Exploring the synergy between mitigation and adaptation is at the core of agricultural policies which address climate change. The International Assessment of Agriculture, Science and Technology for Development (2009) concluded that:

‘Continuing the “business-as-usual” attitude to using green-revolution technologies and practices is not an option for the future.’

1. Introduction

2. Integrated Land Management

Major Land Use Types in the Watershed are:
- Degraded hill sides,
- Communal grazing sides,
- Farmlands and
- Homesteads

Livestock plays a specific role across different land use types.

3. Climate Smart Agriculture (CSA)

Is achieved through ‘HOW’ rather than ‘WHAT’ - Doing different things & doing things differently.

Is a continuum rather than a ‘YES’ and ‘NO’

4. The Difference between SWC and CSA

5. Building Climate Smart Agriculture Combinations

Combinations:
- Are necessary to overcome trade-offs within & between single measures.
- Can combine measures from various land use types and livestock.
- More than 5 single measures may face strong constraints of adoption.
- Should be balanced with hardware (inputs) & software (practices).
- Have at least 2 key interventions & optional measures added (farm based with soil fertility).

Table 1: Overview of Land Use Based Interventions and Ratings

Table 2: Example of Ratings and Justifications for Compost Application on Farm Land

6. Outcome: Adoption

- Adoption is when farmers carry out proposed interventions independently and without significant external support.
- Adapting techniques & technologies can come before adoption.
- Adoption can be a measure of sustainability.