



Government of Rwanda
Ministry of Agriculture Animal Resources (MINAGRI) &
Rwanda Agricultural Development Authority (RADA)



Field Experiences, Successes & Opportunities for Upscaling Greenwater Management in Rwanda

By Prime Ngabonziza

17/8/2009



CONTENTS

- Introduction
- Field Experiences - MINAGRI Interventions
- Strategy & Approach
- Production & market structure
- Retention, recharge & reuse through RWH
- Production from runoff ponds
- Livestock water use
- Capacity building & farmer field school



INTRODUCTION

Rwanda is a landlocked country with:

- An area of 26,388 km²,
- Population density of 310 inhabitants /km².
- Agricultural sector contributing 46% of GDP, 87% of employment & 80% of export earnings.
- Over 80% of farmers dependent on rain fed agriculture.

Water related problems:

- Loss of runoff and inadequate storage
- Inappropriate farming methods (subsistence farming)
- Inadequate skills and knowledge on Soil & Water Management
- Environmental degradation
- Low soil fertility
- Annual soil loss of 1.4 million tons



INTRODUCTION CONT'

Food insufficiency resulting in:

- Falling productivity and inappropriate farming methods
- Sub-optimal performance related to management aspects, rather than physical potential, meteorological /agricultural drought.
- Limited new lands to put under agricultural production
- Loss of great proportion of rainfall through runoff.

17/8/2009



Field Experiences – MINAGRI Interventions

Based on hydro-physical conditions of Rwanda, MINAGRI has:

- Prioritized ARWHI in Rwanda
- Scaled up ARWHI to cover 10 districts in Eastern/Southern Provinces
- Collaborated with other like-minded stakeholders to feed the nation
- Set-up a standardized design of the RWH system mainly focusing on small scale farming community
- Mobilized the community to include groups and individual beneficiary farmers



17/8/2009

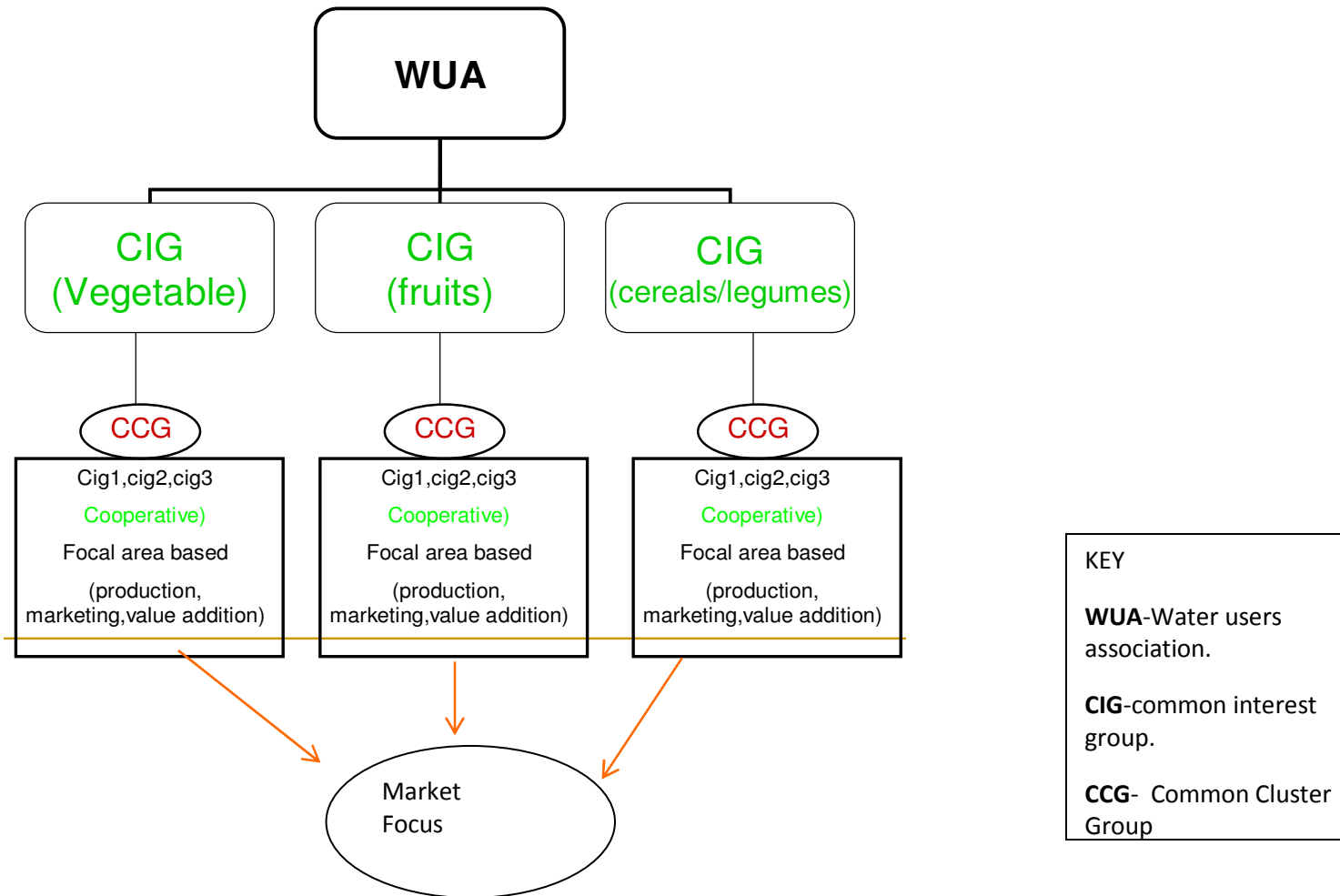


Strategy & Approach

- Starting small, growing with capacity
- Stakeholder participation
- Transfer of technology
- Community-based management of activities
- Consultative meetings with key stakeholders.
- Awareness creation and community mobilization.



Production & Market structure



17/8/2009

A good marketing structure encourages contract farming

Retention, Recharge & Reuse through ARWH

ARWH is emphasized in Eastern & Southern provinces, while terraces and AF is emphasized in Western & Northern provinces

17/8/2009



Bench terraces for erosion control, restoration & improvement of soil fertility



Enhancing soil moisture in root zone to maximize maize yield in Northern & Western Rwanda

For soil conservation (Radical and Progressive terracing), 30% of land area was covered in 2006, by August 2009, the coverage has reached 48% with a target of 100%.

Production from Runoff ponds



- A 120m³ pond is enough for ¼ ha plot
- Land productivity is enhanced through good crop husbandry practices
- Women and children are major beneficiaries - Gardening & domestic use

**In 2007, MINAGRI/RADA started with 65 runoff pond system
By August 2009, the ponds have reached 332 in number.**



Livestock Water use:

During the dry season the water stored in the ponds/valley dams especially in Eastern provinces is not only used in agriculture but in livestock rearing. Hence, increasing household income and contributing to enhanced soil fertility.



Capacity Building & Farmer Field Days



17/8/2009

Collaborative meetings with other extension providers to ensure standardization of adopted systems

A total of 2765 farmers were mobilized in 2007 and 1462 in 2008, 122 Agronomists and 20 technicians have been sensitized in ten (10) districts between sept.2007 and jan.2009.

It is the hope of the ministry that every household will be food secure and market focused by 2020



Opportunities for up-scaling RWHI

The GoR is committed to improve peoples livelihood through the following policies:

- Vision 2020
- Agricultural policy
- MINAGRI Log-frame
- Strategic Plan for the Revitalization of Agriculture
- Rwandan landscapes are suitable for agricultural production





17/8/2009

THANK YOU

