

Food Security and Conservation in the African Context

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## ABCG FS Working Group Background

Joint collaboration between AWF, CI and WCS

**Objective of this working group**: develop foundation year activities to promote understanding of conditions necessary for conservation agriculture to improve FS and uptake of biodiversity-sensitive intensification practices

Builds on previous ABCG FS-related work - October 2004 Workshop entitled, "FS and Conservation in Africa: Addressing Hunger Issues and Farming Issues to Conserve Wildlife"

# Today's Discussion

**CI**: Review of Spatial Planning and Community Engagement Approaches

**AWF**: Linking FS and Biodiversity Conservation in the Zambezi Heartland

**WCS**: Participatory Land Use Planning and Food Security in the Ituri Forest Conservation Landscape, DRC

**Plenary Discussion** 









### Review of Spatial Planning and Community Engagement Approaches

Emphasis on the capacity of approaches to facilitate better mgt of tradeoffs and synergies between FS and conservation across the landscape

Land-use activities and where they are positioned on the landscape influence dynamics and pressures between smallholder farmers and natural ecosystems

Focus on smallholder producers as the target agricultural sector and beneficiary group

#### **Food Security**

Improves Food Security
Lose – Win
e.g Agricultural programs that incentivize land clearing to improve production levels or which don't properly manage off-site impacts of chemical inputs.
Win – Win
e.g Activities which safeguard local ecosystem services and wildlife critical to stable, long term food supply.

Conservation

Improves Conservation



## **Overarching Assumptions**

A) Longer term food security is underpinned by good environmental management and biodiversity conservation

B) In meeting shorter term food security needs, ecosystem health is often traded off

C) Supporting sustainable agricultural systems for smallholders can minimize the tradeoffs and optimize the synergies



# **Conservation Agriculture**

The number of agricultural approaches that have attempted to align agricultural and conservation objectives has increased

All such approaches distinguish themselves against conventional agricultural practice

There is significant overlap between the various approaches

For the purposes of this report, we will use the term Conservation Agriculture (CA)

**Environmentally Integrated Agricultural Approaches** 

- **Conservation Agriculture**
- **Conservation Farming**
- **Organic Agriculture**
- Ecoagriculture
- **Greening Agriculture**
- Sustainable Agriculture Intensification
- Sustainable Agricultural Development
- Sustainable Land Development



Spatial planning and community engagement approaches

Categories considered to better support decisions to increase uptake of CA:

- Broad-scale Spatial Planning Approaches
- Localized Mapping Approaches
- Non-spatial Participatory NRM Tools



What tools can be used to increase the uptake of these approaches?

#### **1. Broad-scale Spatial Approaches:**

 e.g. Vulnerability index, matching crops to agroecological zones, remote sensing as a compliance tool...

#### 2. Localized Spatial Approaches

 e.g. Mapping of farmer practices, ground mapping, participatory 3D modeling...

## 3. Non-spatial participative Approaches e.g. Construction of food calendars, community agreements, participatory NRM...



# Take away thoughts on the tools analysis

Each approach has their strengths and weaknesses

Given the data constraints in Africa, need to utilize a combination of broad-scale, localized and non-spatial tools

This analysis can be connected to the Participatory Land-Use Planning (PLUP) approach that AWF and WCS used in their case studies

Serves as a foundation piece to guide next steps and tools for the ABCG FS Working Group



# Next Steps for CI

#### Cl's Food Security Initiative

Support creation of landscapes in which management of wild and domesticated biodiversity and improved production and harvest practices ensure resilient, sustainable food production

This requires an integrated approach that is spatially explicit and leverages expertise with partners

CI will ensure that this Initiative works in close collaboration with ABCG FS Working Group Members

# Thank you.

## Collaborat

#### veaction

## Greater

#### conservation

Biodiversity and ecosystems protected at the expense of human livelihood options

Productive activities improve quality of life and contribute to conservation of biodiversity and ecosystems

Investme nts in rural productio

Land degraded and people get poorer

Increased production and incomes occur at the expense of biodiversity and ecosystems Greater food security



# Issues to be considered to implement spatially explicit FS strategies

- Participatory resource mapping by stakeholders
- Analysis of resource distribution and respective utilization over time
- Detailed socioeconomic analysis of settlement trends, patterns and distribution
- Assessment of existing food security strategies and ranking of the role of crop cultivation, livestock, fisheries and others (e.g. NTFP)
- Document land tenure systems and analyze resource use rights to inform implications of zoning
- Overall assessment of staple foods, crop varieties and livestock types that suit the area

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