Climate-Smart Agriculture Project

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CSA Inception Workshop
Ibis Gardens Hotel
Lusaka, Zambia
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Overview

- Objectives of the CSA Project
- Examples of CSA practices & barriers to adoption
- Project framework
- CSA priority areas for Zambia
- Planned project outputs
- Expected Outcomes from Workshop

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Background and rationale

- Food security and climate change are urgent and inter-related issues in the agriculture sector
- CSA is about increasing food security with needed adaptation, capturing financial benefits from potential mitigation co-benefits
- Zambia has good potential for capturing synergies between agricultural & CC policy priorities (CCP)
- Opportunity to link with the CAADP Investment plan

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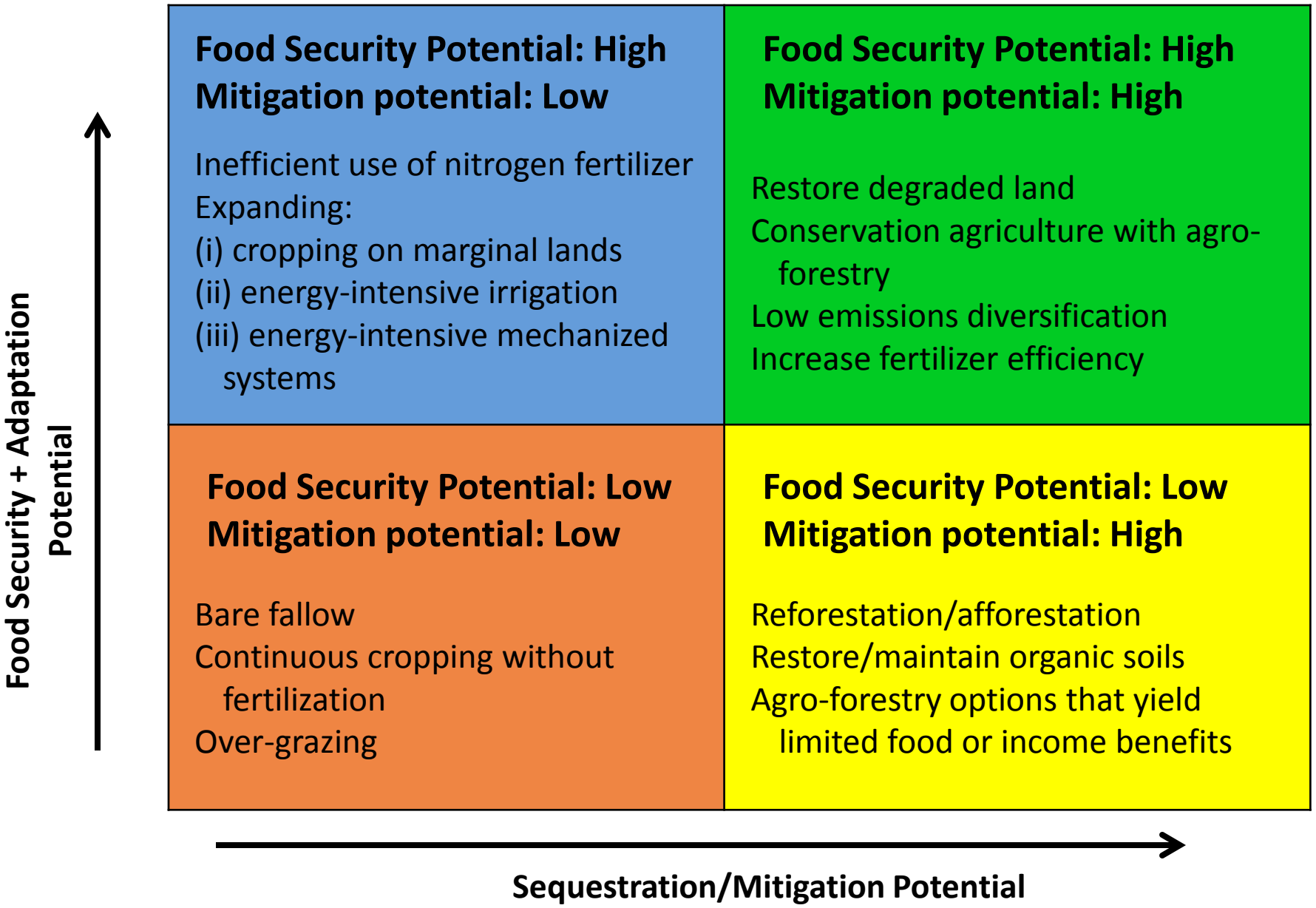
Assessing synergies & tradeoffs of practices



What barriers to adoption?

Tenure Security: lack of tenure security and limited property rights, may hinder adoption of SLM

Limited Access to Information, e.g. very low levels of investment for agriculture research and extension

Up-front financing costs can be high, whilst on-farm benefits not realized until medium-long term (credit)

Risk plays an important role

What role for insurance? safety nets?

Payments for mitigation to overcome barriers

High transactions costs, need for collective action

Project Framework

NEEDS ⟷ RESEARCH COMPONENT ⟷ OUTPUTS

Develop a policy environment & and agricultural investments to improve food security and provide resilience under climate uncertainty

What are the synergies and tradeoffs between food security, adaptation and mitigation from ag. practices?

What are the barriers to adoption of CSA practices?

Legal & Institutional Appraisal: mapping institutional relationships and identifying constraints

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POLICY SUPPORT COMPONENT

What are the policy levers to facilitate adoption and what will they cost?

Identifying where policy coordination at the national level is needed and how to do it

Facilitating national participation/inputs to climate and ag international policy process

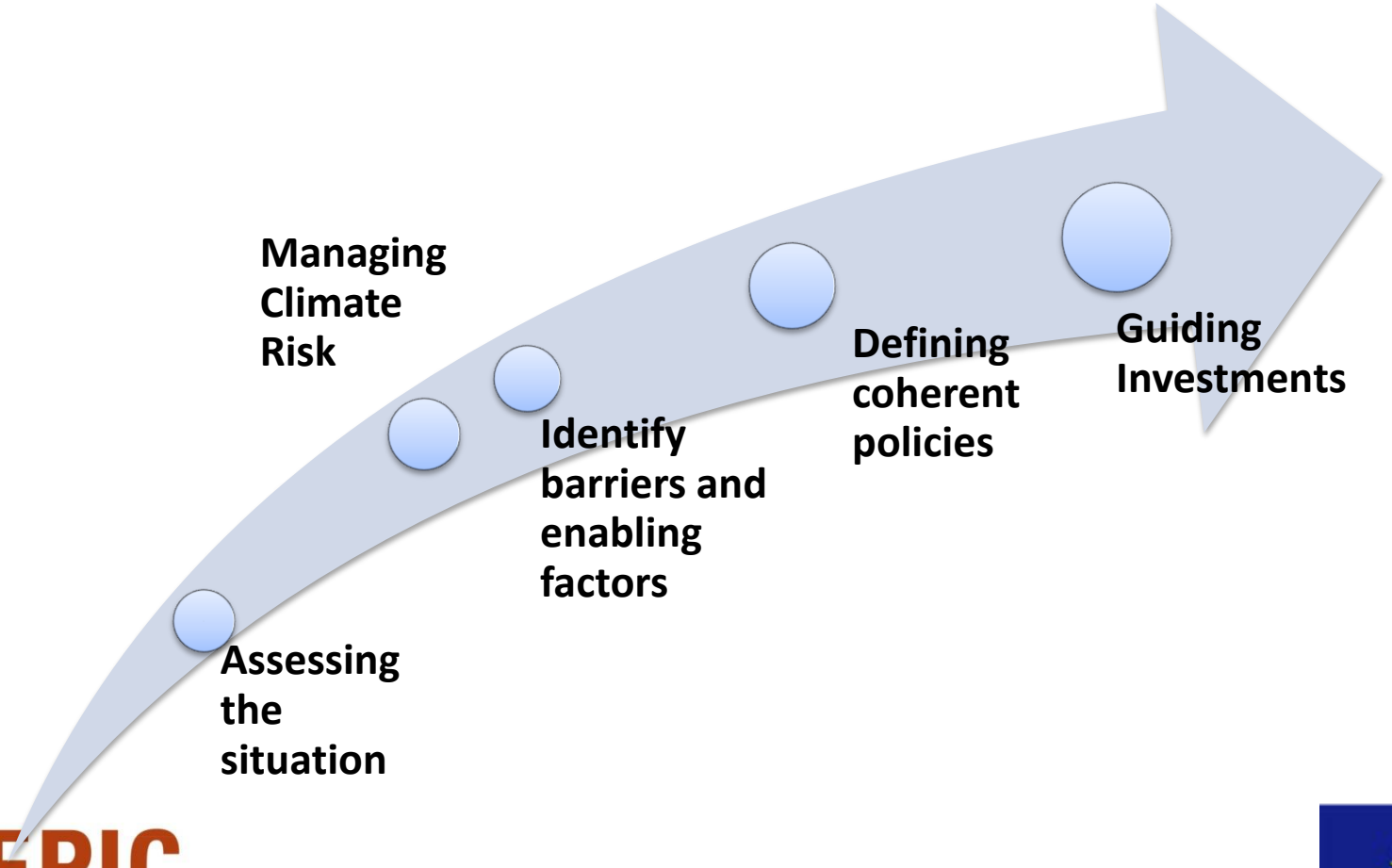
Evidence Base

Strategic Framework & Policy Advice

Investment proposals

Capacity Building

The Building Blocks of CSA logical chain



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The need for a "Narrative"

How to structure the different topics for policy advice and capacity building?

- Create a strong link between research, policy, and investment
- Need input and feedback from stakeholders
- Combine qualitative with quantitative
- Participatory scenario building:
  - Develop a storyline for scenarios
  - Identify key outcomes of interest
  - Quantify scenarios
- Combine narrative scenarios with policy simulations to provide insight

Activities with in-country Partners

1. Develop the narrative (participatory scenario building)
2. Dialogue with policy stakeholders in implementing Climate Change Action Plan for:
   - Food Security and Risk Mgmt
   - Sustainable Agricultural Land and Water Mgmt
3. Collaboration with in-country research Institutions:
   - Supporting master students, a PhD student and mentoring
   - Implement research activities
4. Coordination between climate change and agricultural policy (e.g. CAADP, MAL participation in UNFCCC)

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Focus on Zambian Agriculture

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Overview (1 of 2)

- Agriculture accounts for 18% GDP and 70% employment (mostly rural subsistence farmers)

- Rural poverty remains high at 80% (Chapoto et al. 2012, CSO)

Overview (2 of 2)

•Frequent rainfall anomalies and draughts since 70s with significant impacts on production (Jain, 2010)

• High rates of deforestation with an increasing trend: 250,000-300,000 ha/yr (ILUA 2008, 2010)

• Livestock contributes 35% of agricultural GDP and has significant potential to contribute to food security and mitigation (National Lvsk. Dev. Policy, 2012)

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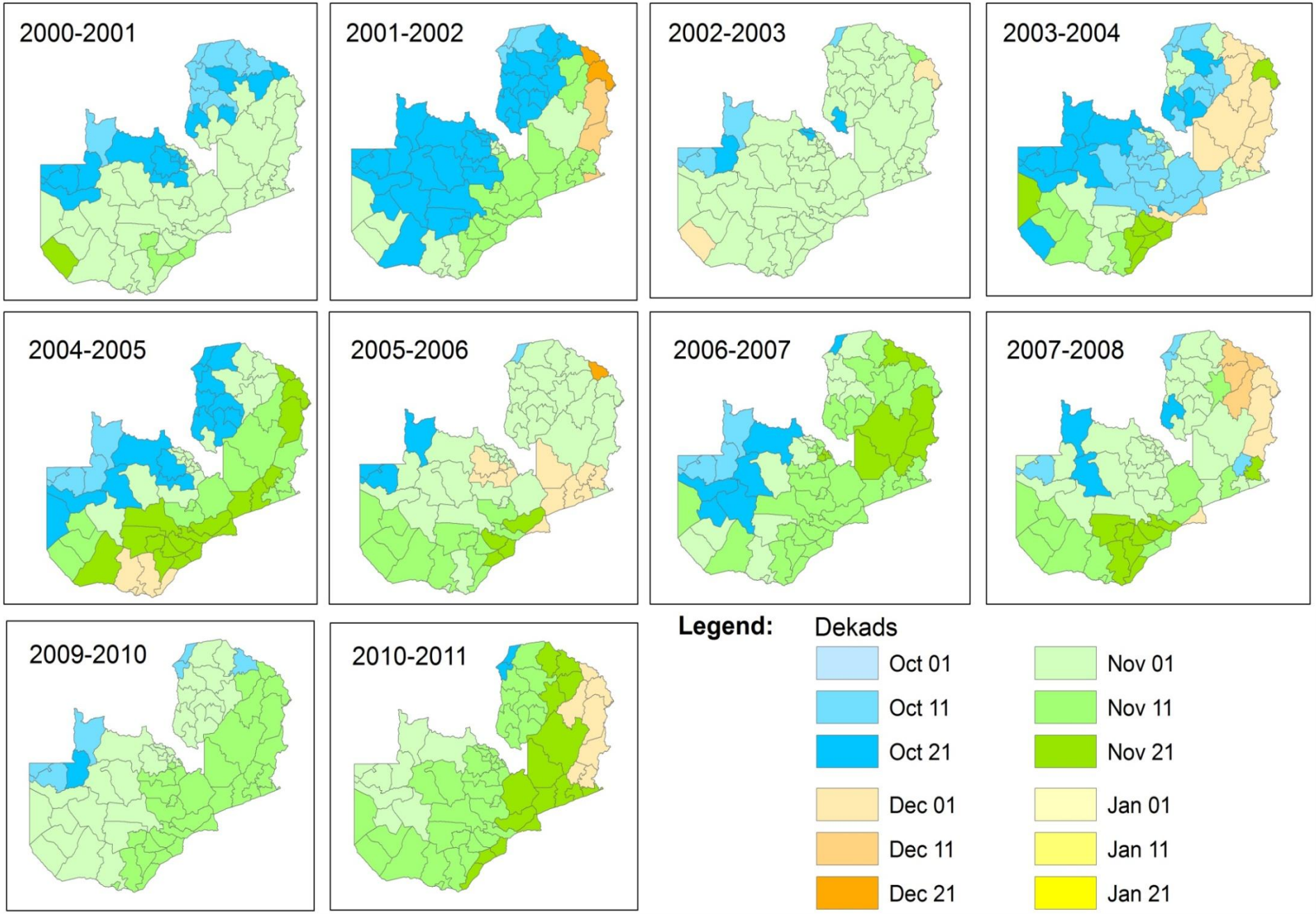
ZAMBIA: Onset date of rainy season (October-March 2000 - 2011)



CSA Priority Areas for Zambia based on initial stakeholder conversations

1. Sustainable land management (SLM)
2. Diversification of production (dairy, legumes)
3. Agriculture as a driver of deforestation

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Some descriptive stats (RILS 2008): SLM

- Planting basins or zero tillage: 5% of farmers on average
- Crop rotation: 60% of farmers
- Organic fertilizer use: 10% of farmers
- Differences by Land Size
  - Basins & zero tillage: more or less equally adopted by large & smallholders
  - Organic fertilizer: 20% of farmers with >20ha, 8% of those with <1.5ha
  - Inorganic fert: 67% vs. 23% for large&smallholders, resp
  - Timely fert: 51% vs. 20% had fertilizer on time, resp.

Descriptive stats: Livestock/Dairy

- Share of cattle holders: 25% nationwide, 58% in Southern and 40% in Eastern

- Southern province:
  - highest number of cattle holdings with ~16 heads on average
  - 35% produce milk
  - Low (37%) dairy market participation (after Northern & Lusaka)

Descriptive stats: Agriculture & Deforestation

Main drivers of deforestation (UN-REDD 2012):

- Agricultural expansion & shifting cultivation: most prevalent in Central and Northern
- Charcoal production: Central and Southern
- Fuel wood collection: Southern and Northwestern
- Logging: Western and Northwestern

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Next steps

- Conduct analysis of barriers and enabling factors to adoption and synergies & tradeoffs between various practices
- Cost & Benefit analyses of identified practices
- Risk management analyses
- Capacity building component: Masters and PhD theses on various CSA practices
- Capacity needs assessment
- Collaboration with other on-going projects to provide more evidence

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Expectations from the workshop 1/2

A platform for a constructive consultation with stakeholders to:

1. Address evidence to be provided,
2. identify constraints and enabling factors
3. tailor the project and its logframe to the specificities of the country
4. start and strengthen collaboration with the country partners throughout the lifetime of the project.

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Expectations from the workshop 2/2

Discuss:

1. **Agricultural practices** contributing to productivity/incomes for food security and, where possible, mitigation. Identify the **barriers to adoption** of these practices and potential **policies** needed to overcome them;
2. **Participatory processes** for policy/strategic framework/roadmap development;
3. **Identify enabling mechanisms** (institutional, policy, and financing)

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Goals of break-out sessions in Day 1

1. Contribute to a better understanding of the existing evidence base
2. Identify gaps in evidence base
3. Identify partners that can be instrumental in contributing to each outcome

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Thank you!

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