

## AGENDA 3: Promotion of mechanization Overall progress, analysis and recommendation

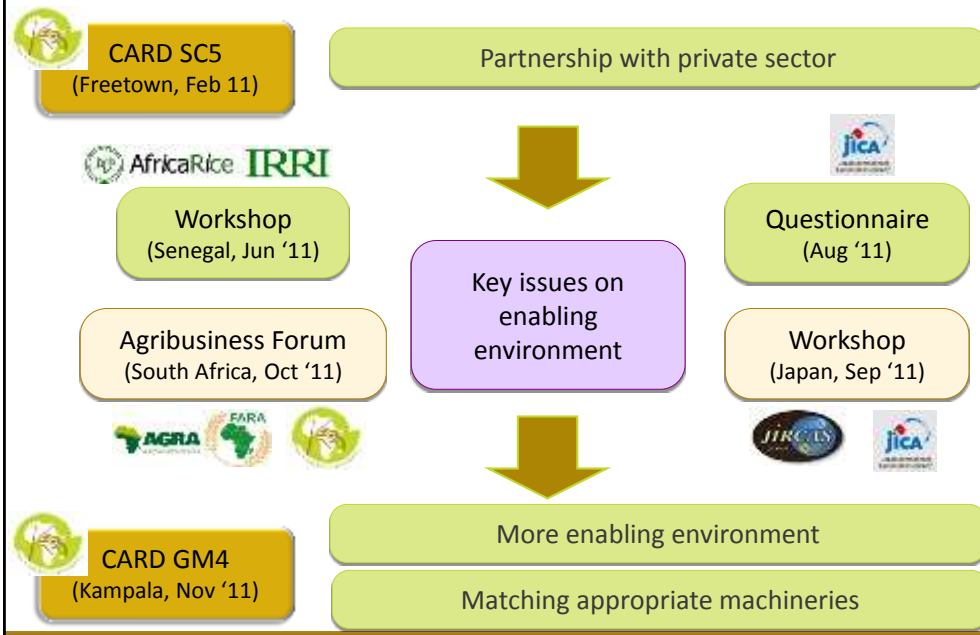
5 February 2013, Dakar, Senegal

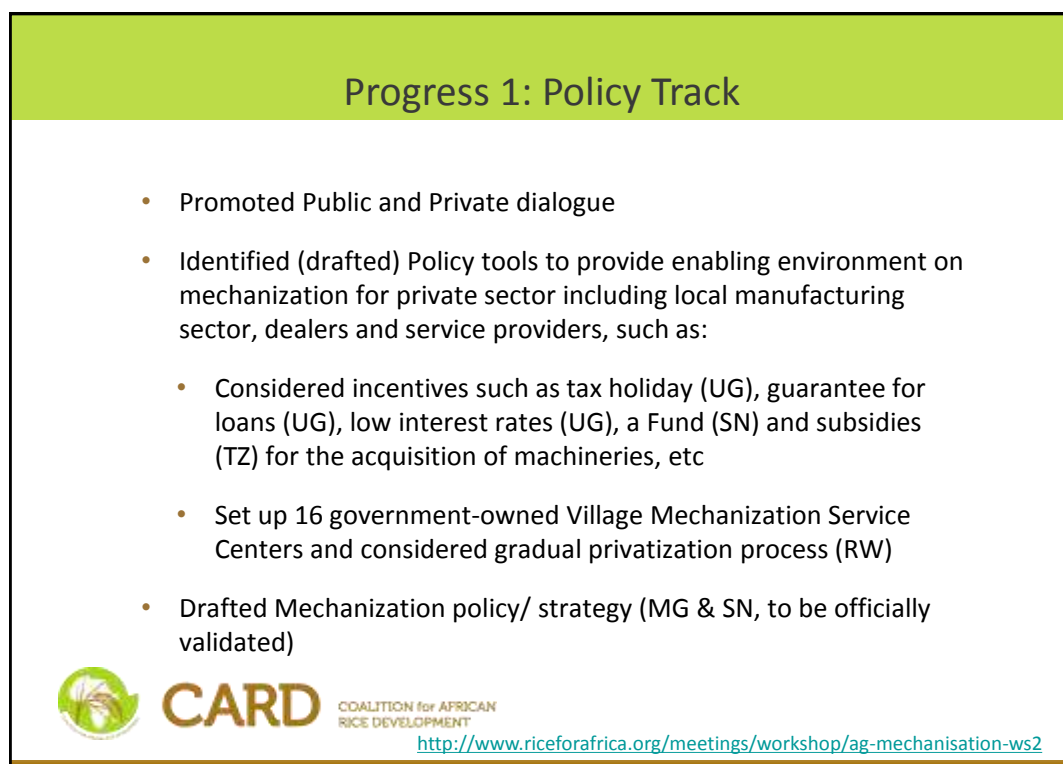
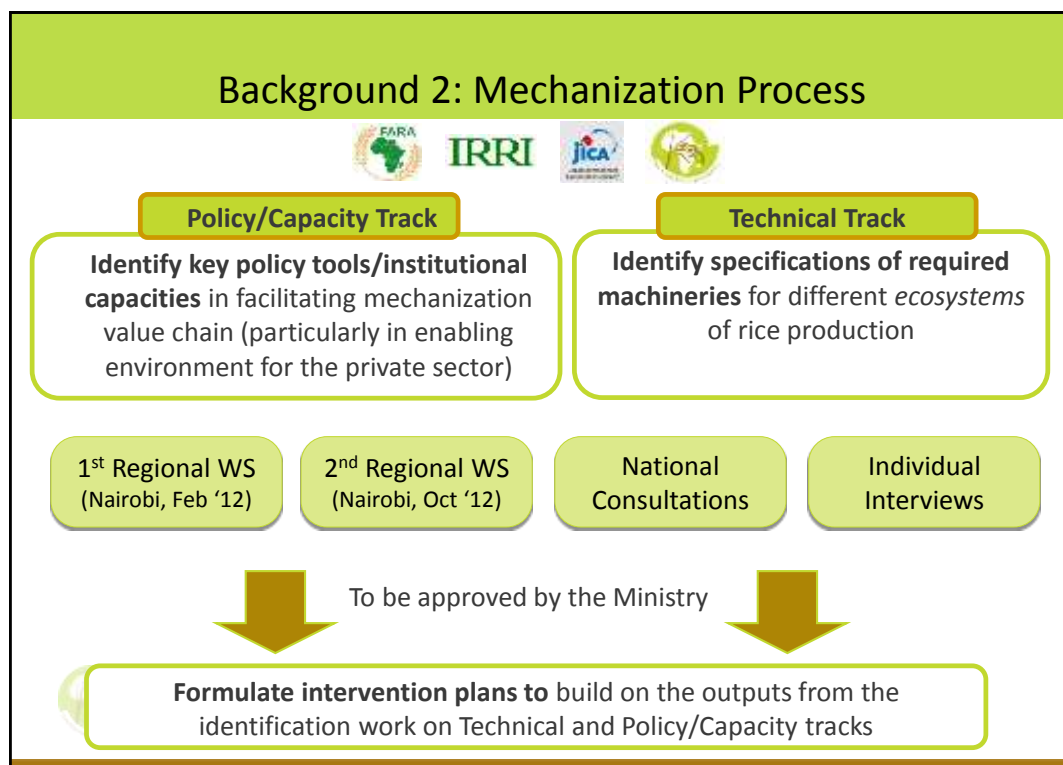


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### Background 1: Private Sector and Mechanization





## Progress 2: Technical Track

- Scenarios: Listed machineries to be manufactured/ assembled domestically in the short (3yrs), medium (10 yrs), long terms (beyond 10 yrs))
- Identified Institutional/ Organizational requirements for Testing & Certification (Legal Framework/ Facilities/ Human Resources) – Quality Assurance
- Conducted exercise of matching equipment with farm size and Selected machineries and implements
- Studied cost analyses of critical field operations (tillage, harvest, milling & others)
- Listed human resources and training needs of the stakeholders focusing on Agriculture machinery supply chain



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<http://www.riceforafrica.org/meetings/workshop/ag-mechanisation-ws2>

## Analysis 1: Overview

- Positive progress in providing enabling environment with strong commitments by country teams, vary from a country to another
- Is environment for private sector very favorable? – market size (machinery use per hector) vs needs/ huge potential of end-user market with low purchasing power against higher price, with limited access to finance
- Effort to identify technically appropriate machinery and implement, depending on farm size, other agro-ecological conditions and business size/ type, etc – still complex issues



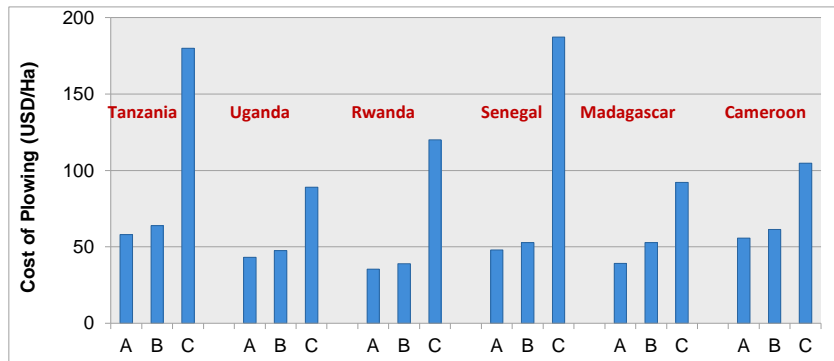
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### Analysis 2

- Key Analysis 1: Cost Advantages of Mechanization of rice field preparation

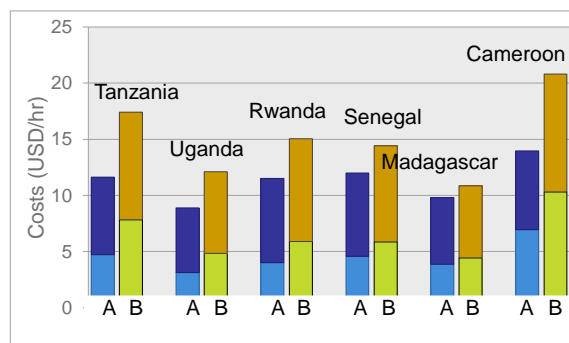


A: Mechanized (Self owned)  
 B: Mechanized (Custom hired)  
 C: Manual plowing



### Analysis 3

- Key Analysis 2. Capital Investment Options: Low-cost vs Median priced Power tiller Operations



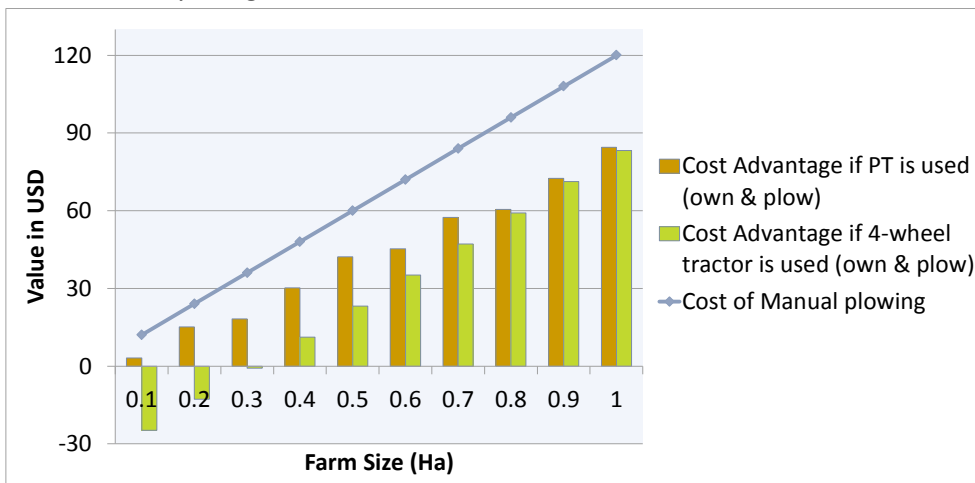
Fixed costs  
 Operating costs

A: Median priced PT  
 B: Low-cost PT



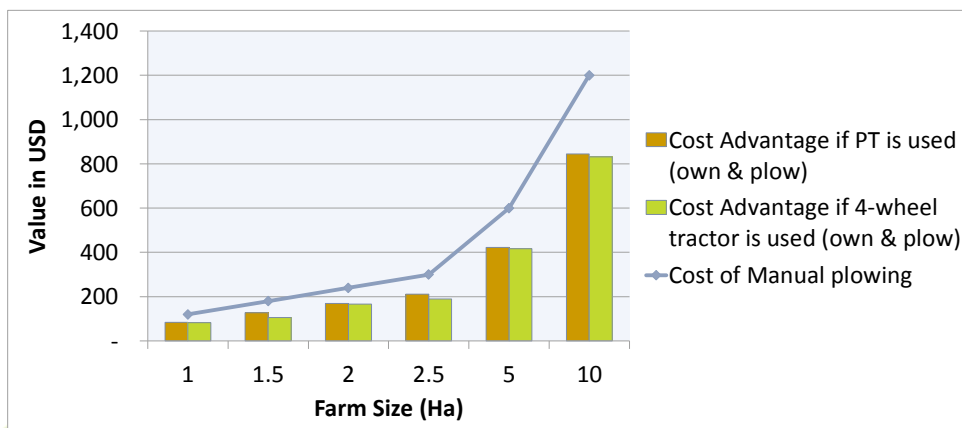
### Analysis 4 (1)

- Key Analysis 3. Draft Options for small and larger farms – A case study in Uganda



### Analysis 4 (2)

- Key Analysis 3. Draft Options for small and larger farms – A case study in Uganda



## Recommendation 1

- 1) Policy needs to be more friendly to private sector and coherent:
  - Agricultural mechanization promotion act, coherent policy and/or strategy be formulated and enacted/ implemented with the Government long-term commitments and budget allocation
  - Enabling environment – a balanced approach – more competition than more restrictions among private players, less distortion, e.g.
    - After-sale service improvement: warranty and long-term spare parts supply
    - Tax incentives: ease of import tariff on machinery and spare parts
    - Ease of Business: Fast track/priority custom clearance – much simpler than more complex
    - Rural network of supply and service provisions be encouraged through fiscal instruments and/or public-private partnerships



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## Recommendation 2

- 2) Technically appropriate machinery needs to be promoted:
  - Technical specifications of quality machinery and accessories should be identified/ elaborated and implemented for providing incentive schemes
  - Capacity Development of testing and certification organizations, Linking with international entities and prompt setting up of regional network on agricultural machinery testing and evaluation, for Information sharing
  - Human Resource Capacity Development including tractor operators, maintenance technicians and so forth
  - PPP for agricultural machinery development and service provisions be functioned



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### Recommendation 3

3) Continued effort for policy reforms:

- Policy Dialogue on fiscal, monetary, trade and technical measures at country level
  - Inter-ministerial dialogue
  - Wider-stakeholder consultations
- Advocacy at international and regional arena
  - Regional approach: networking test & certification, tariff issues
  - TICAD V side event for PPP
  - linkage with CAADP, UNIDO and other key players



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Thank you.  
Merci beaucoup.



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## Annex 1

<http://www.riceforafrica.org/meetings/workshop/ag-mechanisation-ws>

Item	Hard Copy File	Presentation	Doc No.
<b>Manual / Manuel</b>	Mechanisation Process Manual	MS Word ( <a href="#">English</a> / <a href="#">French</a> )	A
<b>Policy Tools</b>	Policy Tools and Related Actions	MS Word ( <a href="#">English</a> / <a href="#">French</a> )	B
<b>Policy Tool Analysis Form</b>	Policy Tool Analysis Sheet	MS Word ( <a href="#">English</a> / <a href="#">French</a> )	C
<b>Analytical Tool: Matching Farm Equipment Farm Size</b>	Matching Farm Equipment to Farm Size	MS Excel ( <a href="#">English</a> )	D
<b>Valuables: Matching Farm Equipment Farm Size</b>	Components of Costs involved in owning and using Farm Machineries and Implements	MS Excel ( <a href="#">English</a> )	E



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