Technical and Policy Track on Agricultural Mechanization in Uganda

CARD 2nd Regional Workshop for Promotion of Agricultural Mechanization
23 October 2012 in Nairobi

Contents

- 1) Technical Track
 - a) Machineries to be domestically manufactured,
 - b) Testing and Certification,
 - c) Human Resource and Training Needs,
 - d) Matching of Equipment
- 2) Policy Tools
 - a) Enabling environments
 - b) Institutional/Organisational Requirement
- 3) Country Roadmap

TT-1: Mechanization: List of machineries to be domestically manufactured in 3 years [1/3]

Machineries/ Implements (accessories)	Current Import Tariff & VAT	Why, if changed the category? (Advantages)
Mould board plough (ox/power tiller)	No import duty VAT: 18%	Already under production
Rice weeders	"	Already under production
Rice threshers	"	Already under production
Paddy cleaners / winnower	"	Already under production
Trailers (ox/tillers/tractors)	"	Already under production
Treadle pumps	VAT: 18%	
Sub-soiler /chisel plough		

TT-1: Mechanization: List of machineries to be domestically manufactured in 10 years [2/3]

Machineries/ Implements (accessories)	Current Import Tariff & VAT	Why, if changed the category? (Advantages)
Disc ploughs	No import tax VAT: 18%	
Planters (ox/tiller)	No import tax VAT: 18%	
Rice hullers	No import duty VAT: 18%	
Treadle pumps	VAT: 18%	Moved to short term

<u>Guidance</u>: Please give us here the most major maximum 5 machineries. If too many, please give those details in attached documents [A. Manual 2.].

TT-1: Mechanization: List of machineries to be domestically manufactured beyond 10 years [3/3]

Machineries/ Implements (accessories)	Current Import Tariff & VAT	Why, if changed the category? (Advantages)
Rice Destoner		
Rice Grader		
Paddy separator		
Paddy dryer		
Dehusker		
Reapers		Engine imported

<u>Guidance</u>: Please give us here the most major maximum 5 machineries. If too many, please give those details in attached documents [A. Manual 2.].

TT-2: Testing& Certification: Identify machineries, implements and technical capacity needs (Legal Framework/ Infra/ Human Resources)

- Technical Capacity Needs for testing & certification:
- Objective: To raise the standard of performance of machineries and implements

Country Name	Institutional Capacity	Certifying agency	Guidelines	Assistance
Uganda	Establish national institution for testing	Empower UNBS	Establish test codes, safety standards	Regional Network on agricultural machineries – UNIDO

TT-3: Human Resources: List human resources and training needs of the stakeholders focusing on Ag machinery supply chain (incl. Maintenance support in rural areas based on existing capacities)

Research & Development \rightarrow Raw material \rightarrow manufacturing/Outsourcing \rightarrow assembling \rightarrow testing \rightarrow certification \rightarrow marketing \rightarrow delivery systems \rightarrow maintenance & support

	R&D	Raw Materials	Manufacturi ng/ Outsourcing	Assemb ling	Testing	Certificati on	Marketing	Delivery System	Maintena nce & Support
Personnel	Engineers	Metallurgi sts	Mechanical Engineers, Electrical Engineers, Technicians, Artisans	Mechan ics, Technici ans	Engineers, Machine operators	Legal Advisors	Economist , Marketing Officer, Sales Engineers	Rural networkin g of dealers	Service Engineers, Mechanics , Technician s, Blacksmit hs
Training	CAD Design and modeling	-	SC: Advanced welding , fabrication, Blacksmith and foundry / Advanced machining	•	SC: Test procedure s, standards		SC: Sales and marketing	Entrepren eurship , machinery repair and maintena nce	Farm machinery repair and maintena nce

TT-4: Matching of equipments and Selection of machineries and implements, Cost analyses of critical field operations (tillage, harvest, milling & others)

Farm Size	Draft	Primary tillage implement	Width (m)	Secondary tillage	Width (m)
Small (?)	Power Tiller	Moldboard	0.25-0.4	Moldboard	0.25-0.4
Large (?)	4-wheel tractor	Disc plow	1.5-2.5	Disc plow, Disc harrow	1.5-2.5

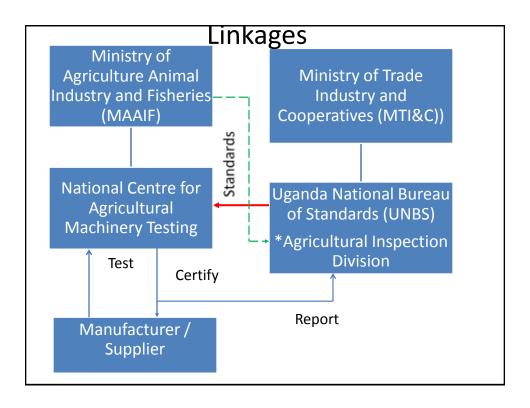
 Farm sizes will be determined after cost analysis (on-going)

PT_1&3: Policy Tools - Uganda

- 1. Establish testing, evaluation, safety inspection and certification of quality of agricultural machineries, implements and spare parts.
- 2. Build human capacity for use and maintenance of agricultural machinery /equipment
- 3. Improve access to finance for agricultural machineries through Smart subsidies, loan access conditions, guarantee for loans, soft loans, tax holiday.
- 4. Establishment of zonal tractor hire services through public-private partnership.
- 5. Strengthen linkages between research, training institutions, extension, farmers, and markets for effective agricultural mechanisation development and promotion.
 - a. Integration of agricultural mechanisation with good agricultural practices
 - b. Implement gender-responsive plans and designs of agricultural machinery and equipment.
 - c. Establish effective information systems and data bank on agricultural mechanisation
- 6. Promote agricultural machinery after-sales services

PT_2: Institutional/ Organizational requirements in implementing technical tracks (e.g. testing)

- Empower the Uganda National Bureau of Standards (UNBS) to establish Agricultural Machinery and test codes, and the National Center for Testing to certify agricultural machineries and implements.
- Promote alignment and consistency in standards of agricultural machineries and implements in Regional Networking
- The following chart shows the Institutional arrangement



CARD 2 nd Regional Workshop	ad Map: for Promotion	
Action	Dates	Remarks
2 nd Regional WS in Nairobi	22-24 Oct. '12	
Identification of core working group and stakeholders		CARD 2 nd Regional workshop participants
Meeting the Core working group to develop the zero draft report	08 Nov '12	
Preparations for the Core Working Group and Stakeholders Meeting		
Core Working Group and Stakeholders Meeting	15 Nov '12	Requires financial assistance from CARD
Finalization of report		CARD 2 nd Regional workshop participants
Submission of the report to the CARD Secretariat	15 Dec. '12	

Thank you for Listening!