Progress of Rice Farming Mechanization Process in Uganda

CARD 2nd Regional Workshop for Promotion of Agricultural Mechanization

22 October 2012 in Nairobi

Contents

Guidance: Presentation [25 mins] + Q&A (Clarifications) [5 mins]

1. (1) Chronology of events/ meetings

Date	Actions taken (meeting, etc) after March '12
19-03-2012	NRDS Taskforce drafted the following: - Publication of the NRDS - Rice data for 2008 - Rice data for 2011 - NRDS implementation activities
11-04-2012	NRDS Taskforce reviewed and approved the following: - Publication of the NRDS - Revised rice data for 2008 - Approved rice data for 2011 - NRDS implementation activities (profiles of new rice projects) approved.
03-07-2012	Policy Level Stakeholders' Consultation Meeting for Agricultural Mechanization

Guidance: Please give us here the most major maximum 10 events/ meetings, and/or summaries of individual interviews. If too many, please give those details in attached documents.

1. (2) List of some important participants

Policy Level Stakeholders' Consultation Meeting

No.	Name	Job Title	Organisation
1	Bitariho Deo	Custom Superivisor	Uganda Revenue Authority
2	Kaleebi Mathias	Standards inspector	Uganda National Bureau of Standard
3	Muliisa Klennie	Sr. Officer- Agric. Fin. Facility	Bank of Uganda
4	Tinkamanyire Julius	Sr. Mech. Engineer	Min. of Works and Transport
5	Kaddu Peter	Executive Manager	Uganda Manufacturers' Association
6	Farooqui Nawaaz	Project Coordinator	Farm Engineering Industry Ltd.
7	Opolot Charles	Director	Local Government Association
8	Odogola Wilfred	Lecturer	Busitema University
9	Mutabazi Sunday	Commissioner	Min. of Agriculture, Animal Industry and Fisheries
10	Rasit Pertev	Sr. Agric. Economist	World Bank

1. (4-a) Mechanization: List of machineries to be domestically manufactured in 3 years [1/5]

Machineries/ Implements (accessories)	Current Import Tariff & VAT	Why, if changed the category? (Advantages)
Mould board plough (ox/power tiller)	No import duty VAT: 18%	
Rice weeders	”	
Rice threshers	”	
Paddy cleaners	”	
Trailers (ox/tillers/tractors)	”	

1. (4-a) Mechanization: List of machineries to be domestically manufactured in 10 years [2/5]

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

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

1. (4-a) Mechanization: List of machineries to be domestically manufactured beyond 10 years [3/5]

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

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

1. (4-a) Mechanization: Outline of the strategies for manufacturing [4/5]

i) Capacity building

What engineering and business skills are needed for the manufactures to be successfully and sustainably operational?

•Advanced welding and fabrication / Blacksmith and foundry / Advanced machining
•CAD Design and modeling / Farm machinery repair and maintenance
•Entrepreneurship and investment skills in fabrication and manufacturing
•Standardization and quality control in fabrication and manufacturing

Who are the existing local manufactures that are adequate for such capacity training?

•***SAIMMCO*** *in Soroti, focusing on Draught Animal Power (DAP) implements and postharvest technologies,*
•***TONNET*** *currently manufacturing an assortment of postharvest equipment and spares.*
•***UMA and USSIA*** *umbrella body for a variety of engineering & technology bodies*

How should the government, with the assistance of the public / private sector of other countries, provide such capacity building opportunities to those manufactures?

•Establish national fabrication laboratory workshop at Agricultural Engineering Research Center. It will provide opportunity to develop ideas and create prototypes for new products. It will provide skills in designing and modeling. Facility for manufacture of specialized components not possible by local fabricators
•By upgrading of skills of trainers at vocational training schools
•Cost sharing by the manufacturers and government
•Strengthen and equip vocational training institutions

1. (4-a) Mechanization: Outline of the strategies for manufacturing [5/5]

ii) Infrastructure development
•Electricity , Piped water, road and railway network
iii) Policy tools (interventions)
•Incentives e.g. tax holiday, guarantee for loans, low interest rates •Enabling environment •Test & evaluation, safety inspection and certification of quality of machinery •Appropriation and standardization of machineries locally produced
iv) Drivers for change
•Uganda Manufacturers Association (UMA), Private Sector, MAAIF, Legislators, Ministry of Trade Industry, MoWT, Universities and Research Institutions

1. (4-b) Mechanization: Testing and certification [1/3]

Identify the current status/problems in:
i) Organizational structure;
Inadequate staffing level
ii) Regulation for test of quality/ inspection or certification;
Inadequate policy
iii) Facilities
No testing or certification facilities in existence. Proposal to rehabilitate Namalere Research and establish the agricultural machinery/equipment testing and certification centre
Lack of specialized testing equipment and facilities
iv) Human resources
Limited skills, inadequate personnel

Guidance: Please give us here the most major problems and/or summary of the current status only. Please attach documents if more details. [A. Manual 3.]

1. (4-b) Mechanization: Testing and certification [2/3]

Recommended testing items (machineries, implements, accessories/spare parts) which can be conducted domestically:
v) in 3 years;
Rice weeders, rice threshers and rice hullers, tractors, ploughs, planters, huskers,
vi) in 10 years;
Rice polishers, graders, dryers, de-stoners
vii) beyond 10 years;
Integrated rice mills, Compound rice mills

Guidance: Please give us here the most major machienaries only. Please attach documents if more details. [A. Manual 3.]

1. (4-b) Mechanization: Testing and certification [3/3]

Road Maps (who to do what, when) :
viii) Improvement of existing organizational structures, or if impossible, launching new organizations;
Ministry of Public Service to fill up vacant positions at MAAIF Hqrts and District Local Governments within the next 2 years.
ix) Development of required minimum facilities with different time horizons;
x) Recruitment of appropriate human resources and provision of training; and
xi) Linkage with international organizations
Permanent Secretary, MAAIF, on-going.

Guidance: Please give us here the brief summary only. Please attach documents if more details. [A. Manual 3.]

2. (1) Processing: Current Status of Rice Milling [1/3]

	Small <150kg/hr	Medium 150-300kg/hr	Large >300kg/hr
No of mills	398	9	1
Main source of paddy	Individual Farmers	Individual farmers, Traders	Private sector, individual farmers, out-growers
Mainly sell the milled rice to?	Rural shops/ brokers	Retail/ wholesalers	Exports/ wholesalers, supermarkets
Major problems?	High % of broken grains, Stones. Poor postharvest handling and processing. Poor drying methods. Poor performing rice mills	High % of broken grains, Stones. Poor postharvest handling and processing. Poor drying methods. Poor performing rice mills	Inadequate rice supply. Limited access to specialized repair and maintenance services. Poor quality paddy

Guidance: Please find attached the Questionnaire.

2. (2) Processing: Current Market Situation [2/3]

	Urban	Rural
Total Volume (tons)	101,500	43,500
% of local rice	70%	30%
Grades of the most popular rice	2	No grades
Price of the most popular rice ($/kg)	Approx. US$ 1.5	Approx. US$ 1.0
Import Tariff (%)	75%	75%
Price difference between local and imported rice of same type (%)	0%	0%
Consumers' preference	Aromatic, Whole to broken, Sticky to non-sticky	Aromatic, Whole to broken, Sticky to non-sticky
Determinants by consumers	Price, cleanness, level of broken grains, Brand name	Price, cleanness, level of broken grains, Brand name

Guidance: Please find attached the Questionnaire.

2. (3) Processing: Standard and Grading System [3/3]

Any law/ policy on 'grading system' for rice sold in the markets?
Yes, Uganda National Bureau of Standards
If yes, which grades and how?
Milled Rice UNBS Standard US41 2005 Grade 1 (whole grain 90%, broken 10%) Grade 2 (whole grain 75% broken 25%) Grade 3 (whole grain 50% broken 50%)
Institutional Capacity: Which institution(s) is responsible for implementing milling standards and grades of rice sold in market? •Uganda National Bureau of Standards
What are the limitations in implementation of grades and standards? •Lack of Awareness •Inadequate capacity by UNBS •Poor quality of rice processing Machinery •Implementation of policies •Lack of rice quality testing facility

Guidance: Please find attached the Questionnaire.