

MINISTRY OF AGRICULTURE, ANIMAL INDUSTRY AND FISHERIES

FORT LUGARD AVENUE, ENTEBBE, UGANDA

INCEPTION REPORT

BY

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TRAINING: PROMOTION OF AFRICAN RICE DEVELOPMENT FOR SUB-SAHARAN AFRICAN COUNTRIES

Geographical location of Uganda



1. Basic Information

Organization, Position, and duty

(a) Onep Samuel George

Organization: Agricultural Engineering and Appropriate Technology Research Center (AEATREC), a research center under National Agricultural Research Organization (NARO)

Position: Mechanical Engineer / Research Officer

Duties related to rice production:

- Supporting NRDS implementation through researching and developing appropriate post-harvest technologies
- Training rice millers and farmers on post-harvest handling and marketing

(b) Mucunguzi Cleopas

Organization: Ministry of Agriculture, Animal Industry and Fisheries (MAAIF)

Position: Senior Agricultural Officer, Food Security/ Program Officer, Rice

Duties:

- Coordinate activities for rice commodity value chain development – NRDS progress
- Prepare work plans and reports for activities of intervention in rice commodity in the country
- Prepare briefs about the interventions on rice commodity in the country
- Communicate rice interventions and their progress to the public
- Take part in preparation of policies, strategies and road maps in the rice industry
- Focal person for CARD

2. Duties of Ministry of Agriculture, Animal Industry & Fisheries

- Formulate policies, strategies and roadmaps for the development of the rice commodity value chain development
- Play a leadership role in implementation of NRDS
- Track the progress of the NRDS
- Create an enabling environment for the investments in the rice commodity value chain development
- Coordinate institutions involved in the development of the rice commodity value chain.

All the above roles are implemented and coordinated in the Department of Crop Production.

3. Involvement in the NRDS and CARD related Activities

- Formulated a seed road map by collecting prior information and participated in the CARD working week for the assignment (25 – 29 November, 2013).
- Presented a summary of the seed road map at workshop in Nairobi (4 – 6, February, 2014) together with the other 22 Sub-Saharan African countries (Cleopas Mucunguzi made a presentation).

- Organized CARD working week (April 18 – 22, 2016) to prepare a proposal for increased rice seed production proposal to be taken up by a World Bank project – Agricultural Cluster Development Project (ACDP). Other assignments were also accomplished within the working week and these included: a roadmap for M&E for the NRDS, A program for developing a mechanization strategy and an input in mechanization studies for rice production in Eastern Uganda to be taken up by a project called Policy Action for Sustainable Intensification of Ugandan Cropping Systems (PASIC).

4. Current Situation of NRDS and Rice Sector in Uganda

The goal of National Rice Development Strategy (NRDS) is to ensure rice self-sufficiency in Uganda by 2018 with a target production of 680,000 MT. NRDS is currently in its 8th year of implementation and the achievements include:

- An institutional framework for coordinating rice commodity value chain development activities in Uganda was established. Rice Steering committee; Rice Technical Committee and the Rice Industry Secretariat (RIS) were put in place. The RIS composed of four staff was strengthened to carry out day today activities of the rice related activities in order to streamline coordination function. The Secretariat has four staff – Commissioner Crop Production, Rice Program Officer, Assistant Rice Program Officer and the Secretary.
- A seed roadmap was developed to give a direction for investments in rice seed industry.
- There are various key interventions being implemented to achieve the NRDS: Research has been intensified in terms of cleaning varieties, releasing new varieties, training of farmers, extension workers, millers and traders, increased water for production, and improved postharvest handling technology.
- Several training and technical manuals were developed – postharvest handling guidelines, rice cultivation manual and several agronomical practices charts.

The ongoing activities concerning NRDS implementation include:

- **PRiDe Project** – This project has been running since 2011 by JICA and Government of Uganda and is ending in October, 2016, however, there has been an extension for another 17 months. It has contributed to 5% of the NRDS implementation in terms of production (production increased by 20,000 MT) for a period of five years.
- **FIEFOC 2** – this is a project being undertaken in the Ministry of Water and Environment (MWE). It is aiming at rehabilitation of five irrigation schemes in Uganda for mainly rice production and also crop intensification and postharvest handling.

5. Current Situation on Planning, Implementation, Operation and Management of Rice Processing, Storage, Transport and Marketing Infrastructure

Rice produced in Uganda is mainly processed by small scale millers who comprise of about 90% of all the millers in the country. Most of these millers use the old technology of engelbergs and poor quality milled rice is the result with some stones and broken rice. The drying is mostly done by the farmers themselves using direct sunlight and thereafter delivers to the milling machines or

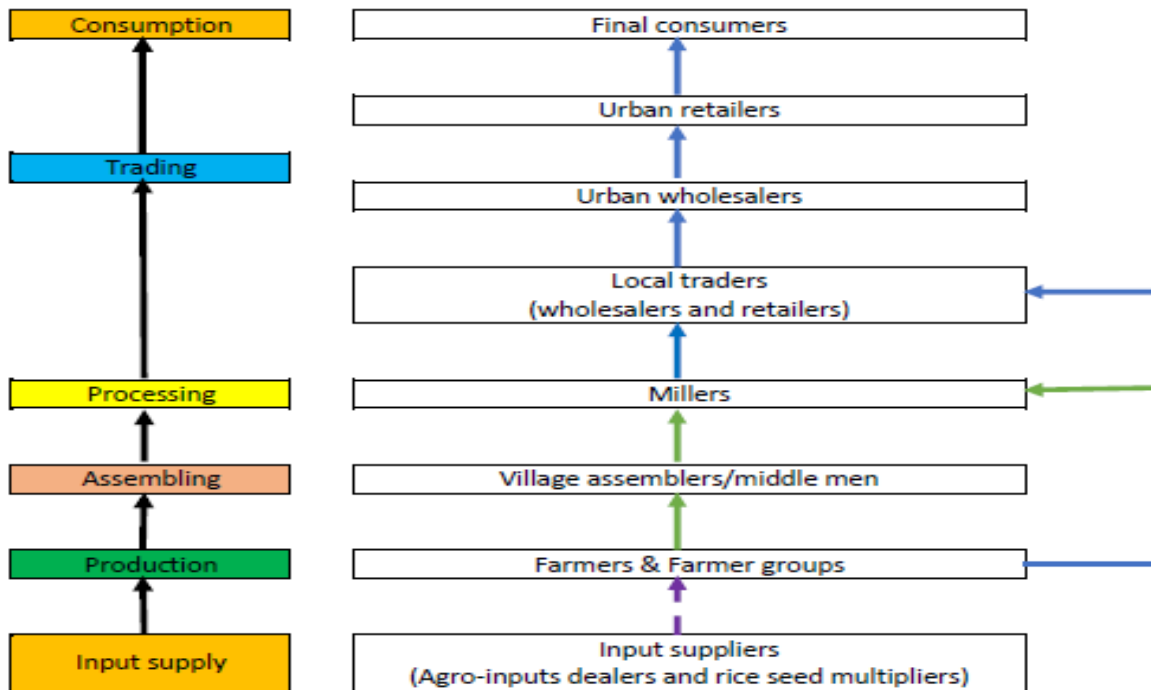
middlemen buy from them, mill and sell to the market and the product is mainly not branded but sold in sacs. Few large processors like Tilda, Upland rice millers who comprise of 10% produce better quality rice which is packaged and branded. They dry their rice using driers which ensures better quality

Large scale processors have silos for storage both un-milled and milled rice with better ventilation and moisture control mechanisms. Small scale farmers, who are the majority lack storage facilities and sometimes store their produce in their own houses. Another scenario is where middlemen buy farmers' rice and store it at millers' premises.

Transportation of rice is mainly done by middlemen/businessmen who buy rice from farmers and either mill or sell to the millers for further processing. Roads from farmers' fields are in bad conditions and this increases costs of transportation. However, areas where milling machines are located have better roads and electricity. The capital city where most rice is sold is located far from where rice production takes place.

The biggest percentage of rice on the market follows the marketing channel in figure I below. This is the channel that is fed by the small holder farmers who produce more than 90% of the rice in the country. This rice is not branded and packaged and is sold in the urban community markets and in many shops. It is packed in either 50 kg or 100 kg bags and at selling to the final consumer it is repacked to 1 – 10 kg packages depending on what quantity the consumer wants. However, big farmers produce, mill and market their own rice that is branded and packaged. This rice finds its way in the supermarkets and big shops where the rich and the middle class do their shopping.

Fig. I: Rice Value Chain Map for Uganda



Source: Adapted from Dalipagic and Elepu, 2014 and Kilimo Trust, 2012

Challenges in Rice Processing, Storage, Transport and Marketing in Uganda

- High cost of processing because of high costs of electricity, diesel, repair facilities and services
- Most processors operate below their technical capacity due to low quantity of rice produced by farmers
- Poor road infrastructure especially in lowland ecologies thus affecting marketing
- High transport costs
- Fluctuating prices
- Low quality processed rice

It is important to note that Ugandan economy is liberal in nature. Therefore, rice processing, storage and marketing infrastructures are privately operated. Most processing/ milling is done by private businessmen who mill on behalf of middlemen who buy from farmers and sell to traders. The storage is mainly done at millers' premises and after milling the rice is marketed by middlemen who sell to traders in shops and community markets as illustrated in the rice value chain map in fig. I. It should be noted that the Central Government plays a role of promoting processing and better storage by providing an enabling environment for the private businesses to flourish. On this note the policy framework is in place for example; The National Grain Policy guided by the vision of having *"a globally competitive grain sub-sector for food security, income generation and industrialization"*. The leading government Ministry responsible for

implementation of this policy is Ministry of Trade, Industry and Cooperatives (MITC). There is a National Rice Development Strategy responsible for the development of the whole rice commodity value chain with the main aim of achieving rice self-sufficiency in Uganda by 2018 with a target of producing 680,000 MT. The leading government ministry for implementing the strategy is Ministry of Agriculture, Animal Industry & Fisheries (MAAIF).

Challenges in Planning, Implementation and Operation of Processing and Marketing Infrastructures in Uganda

- Low quantity and quality rice production. Small scale farmers who produce more than 90% of rice in the country produce low quantity and quality rice that can feed the processors.
- The farmers are scattered in different locations in the country which makes it hard for planning of Rice Processing Complexes hard.
- Poor road infrastructure
- Low coverage of electricity and its intermittent outages

Better planning and operation of processing and marketing infrastructure can help address challenges in rice processing and marketing in the following ways:

- It leads to organized marketing and streamlined marketing channels
- Rice complexes set up for processing are crucial in downward multiplier effect of organized input access and credit access by farmers to improve production and productivity
- Improved quality of processed rice on the market can actually be a reality.
- Infrastructure in terms of roads, electricity can be improved for efficient and effective operations
- It leads to improved skilled and knowledgeable manpower.

Our Tentative idea for solving the challenges and improving the current situation in planning, implementation and operation of processing and marketing infrastructures in Uganda

- Operationalization of Public Private Partnership Act. Huge investments are needed in processing and marketing infrastructure and this calls for combined efforts of public and private sectors. There is a need for funding from governments and better management from the private sector guided by regulations in the PPP Act.
- More public investments are needed to develop road infrastructure and improve electricity geographical coverage.
- The linkage between research and extension services should be strengthened in order to improve technology adoption and adaptation
- Communication in government programs should be enhanced so that the information reaches the public.

Cases where rice processing, transport and marketing are done in a well-organized, effective and efficient manner in Uganda include:

1. Tilda Uganda Limited: This is a private company that leased land with well-constructed irrigation infrastructure from Government. The infrastructure was constructed by the government in early 1960s. The company is located in Bugiri District in Eastern Uganda,

150 km from the capital city, Kampala. It has a mechanized farm and a processing unit with better management. The rice produced at the farm is stored, dried, processed at the farm and market to the supermarkets and export.

There are other processors who do similar work but at a much lower scale than Tilda. These include: Pearl Rice and Upland rice Millers. All these are located in Eastern part of Uganda.