RICE PRODUCTION INFRASTRUCTURE- KENYA

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Kenya and her neighbours
INTRODUCTION

• Rice: introduced in Kenya in 1907 from Asia

• third most important cereal crop after maize and wheat.

• Consumption is on the increase due to urbanization and change of eating habits

• National consumption in 2017: 538,370 metric tones against a production of 124,800 metric tones of paddy

• Deficit is met through imports
INTRODUCTION

Great potential exists for development of this crop (Approx. 1.3 million ha for irrigated rice & 1.0m ha (Rain fed upland and rain fed lowland)
MWEA IRRIGATION SCHEME

• Mwea is the biggest rice producing scheme in Kenya
• Located in Kirinyaga county: 100 kilometers north of Nairobi
• The main scheme covers about 8000 hectares and supports more than 6000 farm families.
• Out-growers: 2000 hectares
• Expansion area: 2400 hectares through construction of Thiba dam
Rice growing areas

Kirinyaga County

Location of Mwea irrigation scheme

Other rice growing areas
Location of Mwea irrigation scheme
Background

- 1953: Established; by British Government


- The Ministry of Agriculture ran the scheme until 1966 later handed over to the National Irrigation Board (NIB)

- NIB took over the management of all national irrigation schemes.
Background continued

• It is divided into five sections/Blocks: Tebere, Mwea, Thiba, Wamumu and Karaba for ease of water management.

• Irrigation water supply: from river Nyamindi and Thiba

• The main varieties grown are Basmati 217/370, ITA, BW196 and IR 2793.
Before NRDS
Development

New technologies developed and adopted
Development

Mechanization
Other impacts

• Average paddy yield for main crop increased from 22 (2012/13) bags to 26 bags (2014/15)
• Reduced water conflict in the scheme
• Average ratoon yield increased from 5 bags (2013) to 14 (2014)
• Private sector involvement in mechanisation has widened
• Involvement of County government and other players in rice extension
Scheme management

National government – Ministry of Agriculture & Irrigation

County government

Offer extension services

National Irrigation Board

Maintain irrigation and drainage infrastructure, water supply in the main canals, research, seed maintenance

Advisory committee

- Maintain and control water supply from the secondary canals to the rice fields
- Maintain field hygiene in the units
- Lobby for support from County government

IWUA

Farmer groups

Mobilize payment of O&M fee to NIB

Policy & training

Feedback
Other roles played by NIB

• Collaborate with the Water Resources Management Authority, to formulate and execute policy in relation to national irrigation schemes
• Collaborate with farmers in scheduling crop establishment in the scheme
• Conduct research, maintain seed.
• Mobilize resources for development of national irrigation schemes.
MARKETING

NIB played this role until 1998 when farmers rebelled

Currently rice marketing is organized by:
• Individual farmers or
• Through farmer cooperative (Mwea Rice Growers Multipurpose)
Mwea Rice Growers Multipurpose (MRGM) cooperative society

- The cooperative stores, mills, grades and packages the rice. Supply to major consumers through supermarkets, hospitals, schools, traders and direct sale to consumers

Other services

- Mechanization (land preparation, drying, harvesting, transport) to members and other farmers in the scheme
- Loans to members
COOPERATIVE STORES
Outcomes from cooperative engagement

• higher incomes to farmers
• reduced cost of services provided by the cooperative hence improved production efficiency
• send children to better schools and health facilities
• Improved housing
• farmers have opened up new land for rice on their own initiative (out-growers) thus expanding the scheme.

On the whole, the socioeconomic status of the entire area has improved
Upcoming developments due to rice commerce in Mwea
Challenges in the scheme

• Poor irrigation infrastructure: access roads, canals & dams
• Inadequate water due to the increasing number of farmers, drought
• Inefficient water use technologies- lining of canals, Water Saving Rice Culture
• Lack of mechanized transplanting
Type of canals in the rice field
Other areas requiring attention

- Introduction of high yielding varieties
- Better post harvest technologies
- Development of variety specific agronomic packages
- Development of organized market and marketing systems
- Value addition in rice and rice byproducts
Rice retail market
Thank you