RICE PRODUCTION INFRASTRUCTURE- KENYA

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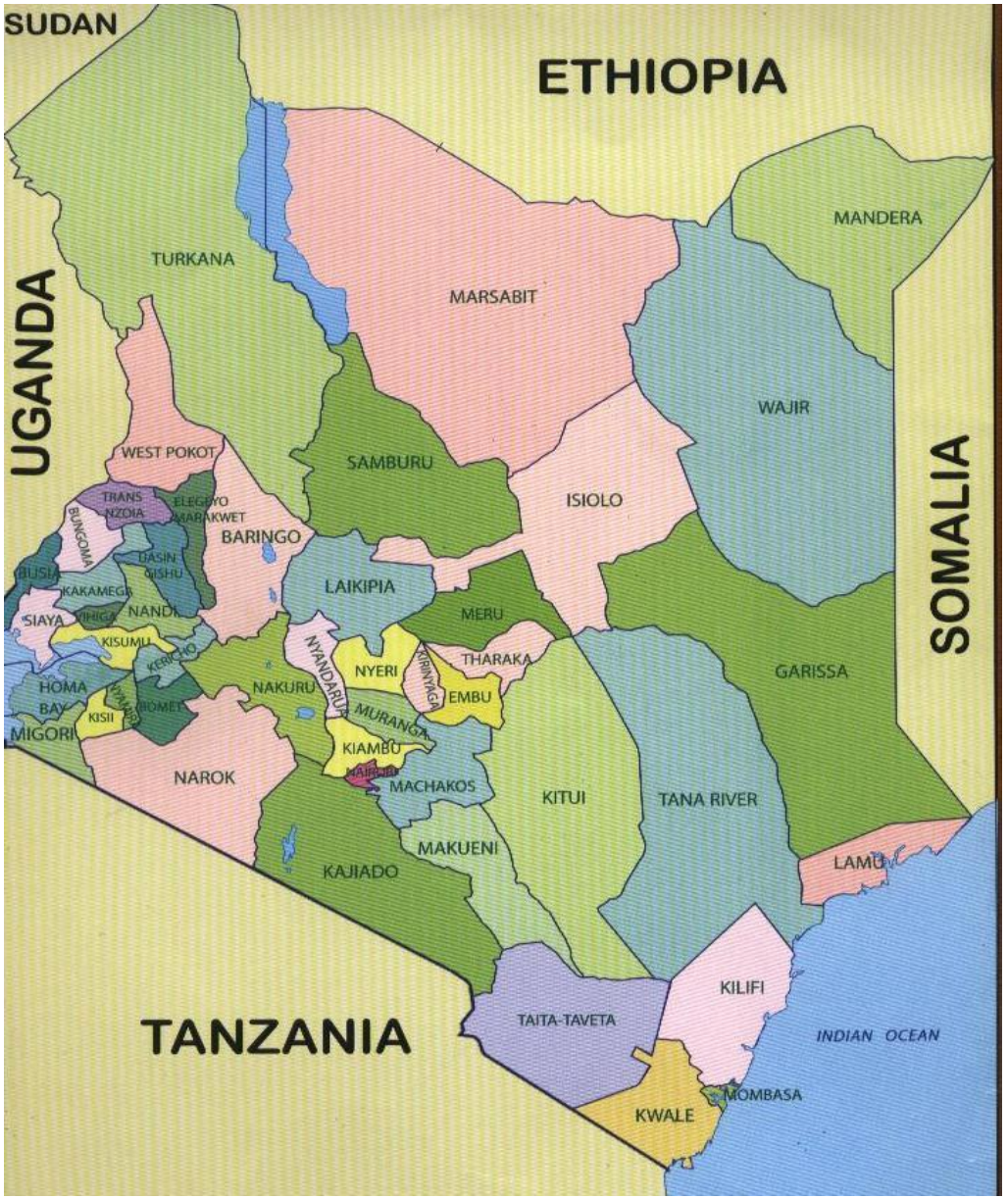
Kenya and her neighbours



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

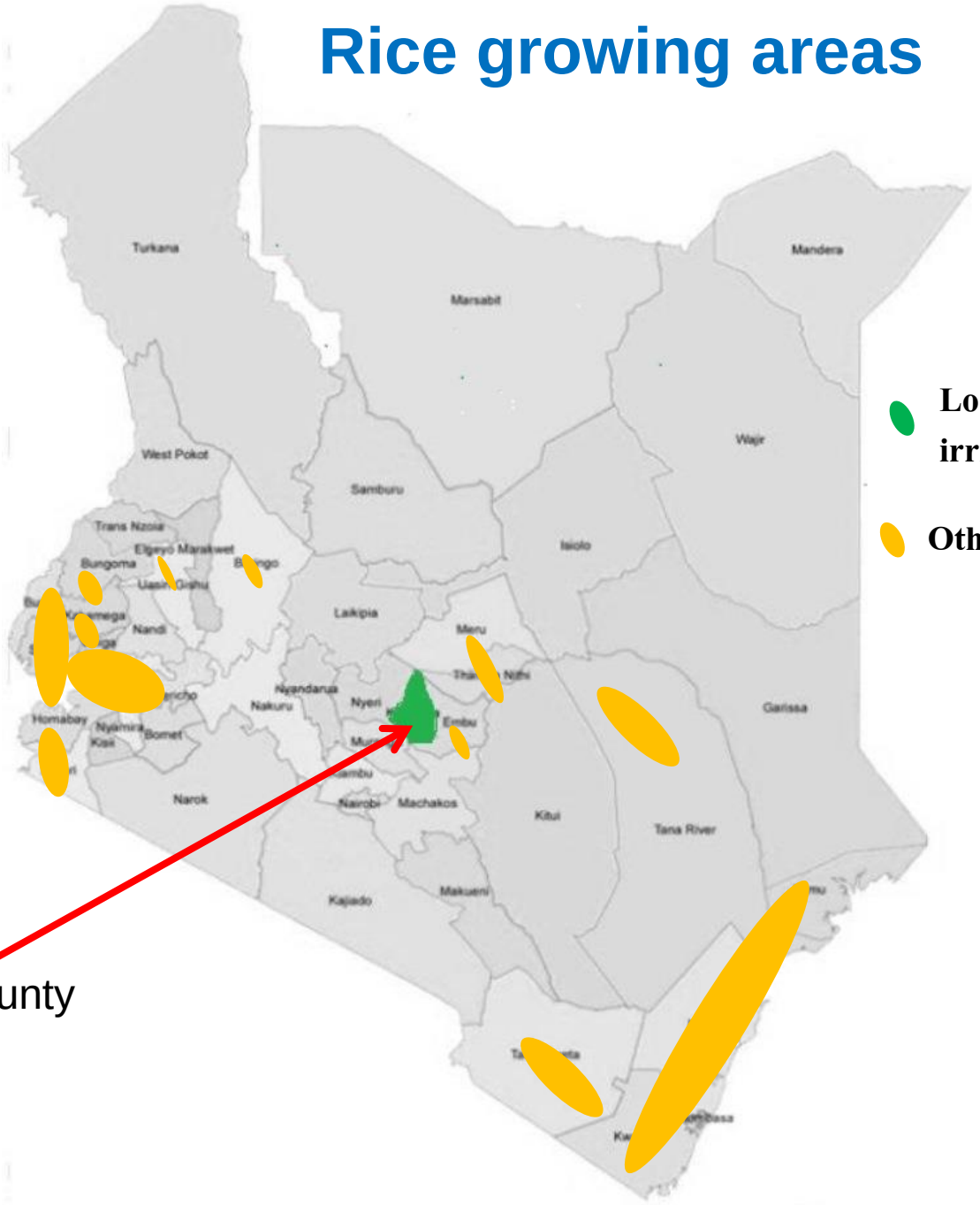
INTRODUCTION

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)

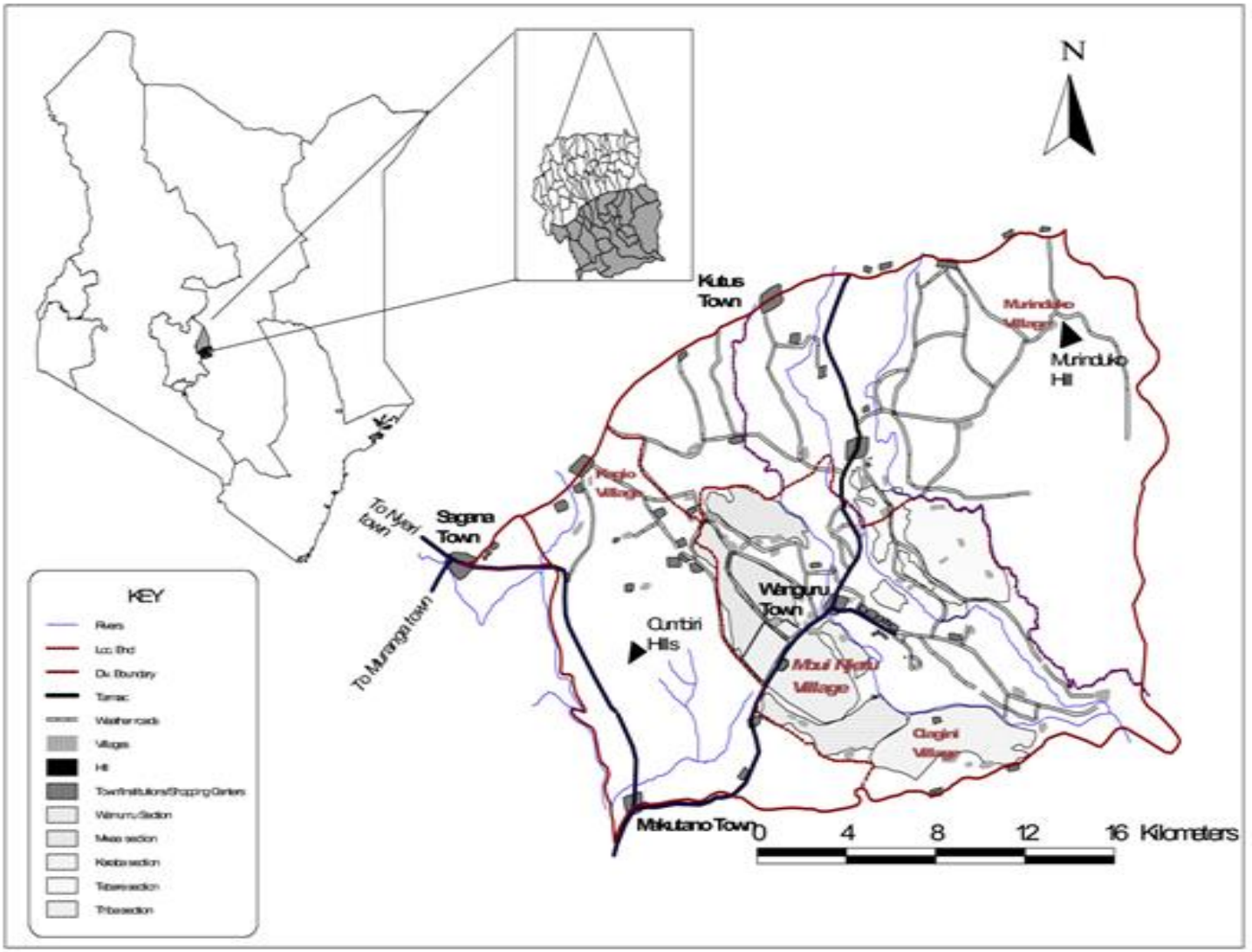
MWEA IRRIGATION SCHEME

- 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



Location of Mwea irrigation scheme



Background

- 1953: Established; by British Government

- 1963: Handed over to the Government of Kenya at independence.

- 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

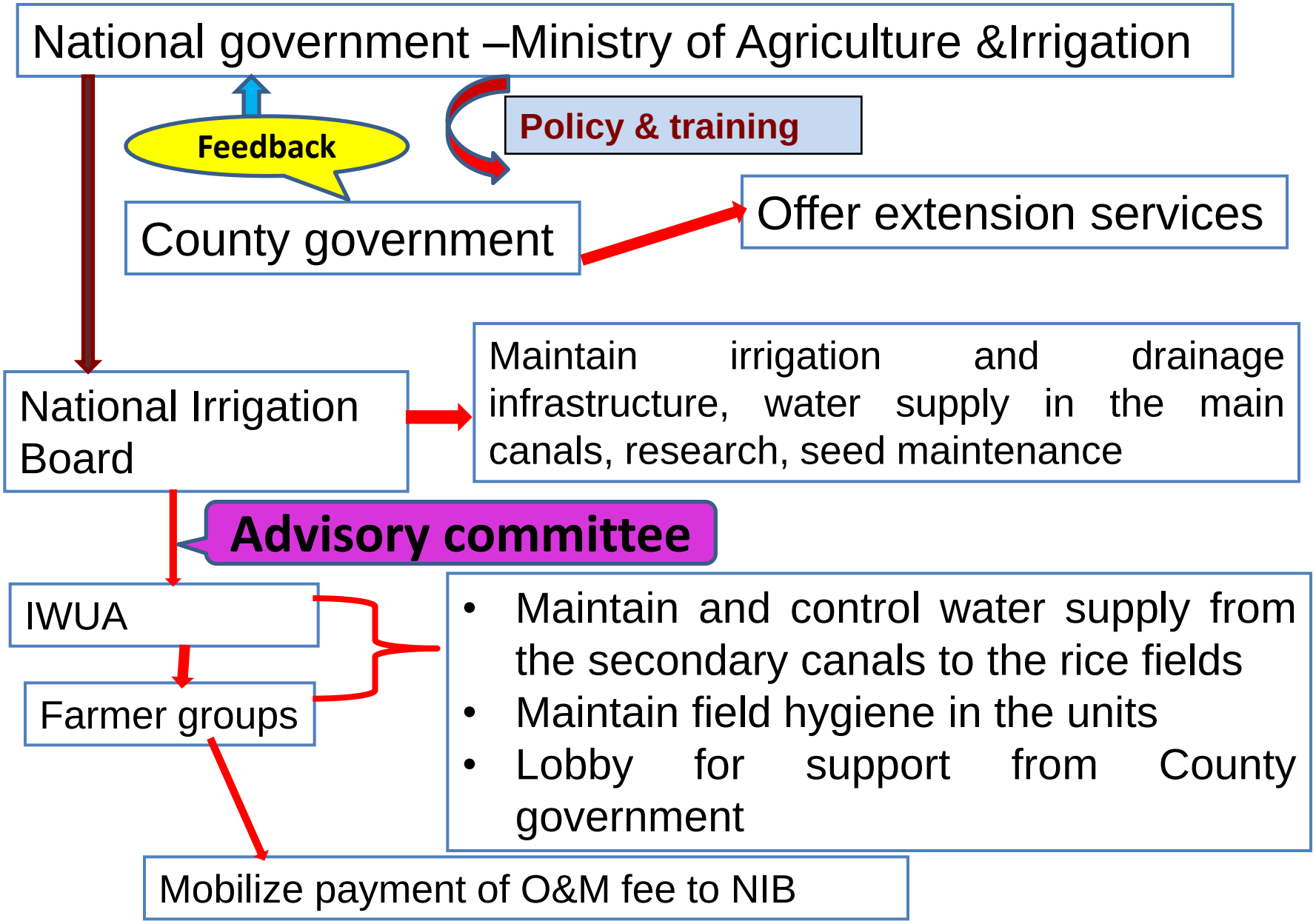
Development

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



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