REGIONAL OPEN DAY
KALRO-SRI MTWAPA SUB-CENTRE
21ST SEPTEMBER 2017

Report by:
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Introduction

Kenya Agricultural Livestock Research Organizations (KALRO) is mandated to promote, streamline, coordinate and regulate all aspects of research in agriculture and livestock development, and also promote the application of the research findings and technologies in the country. KALRO is committed to undertake outreach activities to disseminate new technologies through various platforms.

The Sugar Research Institute (SRI) under KALRO embraces open days as a dissemination tool to reach out its stakeholders within the sugar industry. SRI, Technology Transfer department conducted farmers needs assessment survey within coastal regional and subsequent results revealed that there was need to create awareness with regard to sugarcane production technologies for increased yields and wealth creation within the area.

This year’s regional open day was organized at one of the SRI’s centre in Mtwapa, Kilifi County, the activity was held on 21st September 2017 at SRI Mtwapa centre, the theme of the day was "Adoption of climate smart technologies for enhanced food security and income generation".

The occasion was graced by the CEC Ministry of Agriculture Kilifi County. Other external and internal guests included;

1. Director of Agriculture, Kilifi county
2. County Commissioner, Kilifi county
3. County Administrator, Kilifi county
4. Institute Director, Sugar Research Institute
5. Institute Director, Industrial Crops Research Institute (ICRI)
6. Centre Director, Sugar Research Institute (SRI)
7. Centre Director, Industrial Crops Research Institute
8. European Union project manager
9. Heads of departments, SRI
10. Farmers’ society representatives
11. KALRO - ICRI and SRI staff

Stakeholders
The following stakeholders from within the county were invited to exhibit their products during the function:

1. Kenya Plant Health Inspectorate services (KEPHIS)
2. Pest Control Products Board (PCPB)
3. KISCOL sugar company
4. Ministry of Agriculture, Kilifi county
5. Agricultural Training Centre (ATC)
6. Agricultural Technology Development Centre
7. Seedco supply
8. East Africa Seed Company
9. Sygenta Coast Farmcare
10. Ministry of Energy
11. Crop protection Africa, chemicals
12. Equity Bank
13. The County government of Kilifi
14. Kenya Commercial bank

Technologies demonstrated
The technologies that have been generated by the institute were displayed as follows:

- **Breeding Aspects**
  - Sugarcane varieties
  - Hybridization process

- **Agronomic Practices**
  - Weather forecasting aspects in Agriculture
  - Soil sampling techniques
  - Land preparation
  - Inter-row cultivation
  - Sugarcane setts
    - Single eye bud
  - Planting methods
    - End to end
    - Overlapping
    - Pine apple
  - Fertilizer application
    - Top dressing
  - Boarder maintenance
  - Crop diversification
    - Maize and sugarcane
  - Harvesting techniques
    - High cutting
    - Level cutting
    - Stacking cane
  - Ratoon management
  - Trash alignment
• **Agricultural Engineering**  
  o Soil and water conservation  
  o Irrigation and Drainage  
  o Environmental aspects (Tree cover)

• **Cross cutting issues**  
  o HIV & AIDS  
  o Alcohol & Drug Abuse  
  o Gender issues

**Recommendations**
During plenary session various personalities from the both the county and research institutes gave out the following recommendations for implementation from the farmer and the researcher, this would ensure smooth continuity of sugarcane farming within the region:

**Research related**
- More farmers’ education required in the area  
- New varieties to be made readily available to farmers  
- Establishment of demonstration plots in the area  
- Advocate for establishment of a sugarcane processing plant within the county  
- County government to partner and collaborate with the researcher to improve sugarcane farming sector within the county

**Farmer related**
- Farmers urged to ensure correct sugarcane farming methods that will improve livelihoods.  
- Adopt the newly released varieties recommended for the zone for increased yields  
- Embark on crop diversification to ensure food security  
- Establish more tree cover to curb effects of climate change within the county  
- Embrace agriculture as an enterprise to generate income, create employment and improve living standards.

**Conclusion**
The open day was successful and farmers were empowered with more knowledge concerning best sugarcane production technologies with the county.
PICTORIALS

Open day banner

Sugarcane Breeding centre Mtwa office

Green houses for breeding sugarcane

Sugarcane Breeding process

Who KALRO IS

Livestock and fruit orchard at ICRI
TECHNOLOGIES DISPLAYED

Soil sampling apparatus

Sugarcane setts

Single eye bud setts

Planting methods

Inter-row cultivation

Sugarcane Intercropping with maize
Sugarcane harvesting

Harvesting techniques (poor cutting)

Ratoon management

Cane management

Water conservation

Tree cover: Seedlings
FARMERS’ EDUCATION

Registration of farmers

Research Assistant, SRI explaining to stakeholders on the need to conduct soil sampling in sugarcane farming

Research Scientist, SRI explaining to farmers on sugarcane breeding process and varieties recommended for coastal region

Research Assistant, SRI explaining to a farmer on harvesting techniques for proper yields

A Research Assistant, ICRI explaining to farmers on how to establish a multi-storey garden at home

Research Assistant, SRI explaining to farmers on land preparation, planting techniques and fertilizer application
A Research Scientist, SRI explaining to farmers the need for intercropping and border maintenance in sugarcane farming.

Research Assistant enlightening farmers on the need for tree cover in sugarcane farming.

Human Resource officer, SRI creating awareness on HIV&AIDs, Gender mainstreaming and Drug and Alcohol abuse in the sugar industry.

Institute Director, ICRI, Guest of honour (centre) and Head of Technology Transfer, SRI at Banana tissue culture stand.

Institute Director, ICRI (right) and HTT, SRI leading the guests in touring the fields.

A Research Assistant, SRI explaining to guest the process of sugarcane setts preparation for planting.
GUEST OF HONOUR TOUR

A Research Scientist explains the hybridization process and sugarcane varieties recommended for coastal region.

Guest touring mulching site

Guests touring the crop diversification unit

A Research Scientist explaining sugarcane dissemination aspects to guests

Touring of the water catchment (dam)

Touring of the sugarcane harvesting unit
Touring of the sugarcane trash management unit

Touring of the Agroforestry unit

A Research Assistant explains sugarcane crossing in the green house

Touring of the green house

The guest of honour engaging in a tree planting exercise

The Officer in charge, SRI Mtwapa office (left) assisting the Director of Agriculture, Kilifi county in tree planting exercise
PLENARY

Guest of honour, CEC Agriculture, Kilifi county giving a speech

The Institute Director, Industrial Crops Research Institute (ICRI) addressing farmers on behalf of the Director General KALRO

Institute Director, sugar Research Institute (SRI) giving his address

Centre Director (right), SRI addressing farmers, sign language interpreter (left)

Head of Technology Transfer (HTT), SRI giving vote of thanks

Sarakasi dancers entertaining the audience