

# Coastal Agriculture

## *Report Presentation*

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# Outline

- ▶ Background and Context
- ▶ Place of Agriculture in Kenya's Economy
- ▶ Coastal & Marine Agriculture
- ▶ Benefits of Coastal Agriculture
- ▶ Challenges
- ▶ Opportunities
- ▶ Governance framework
- ▶ Conclusions and Recommendations

# Background and Context

- ▶ Global oceans & seas cover more than 72% of the earth's surfaces
- ▶ Provides food, and Livelihoods (World Bank, 2017).
- ▶ Over 5 million jobs (UNCTAD, 2012; Malshini, 2019).
- ▶ European Commission est. BE contributes €500 Billion per year (Malshini, 2019)
- ▶ UNDP Policy Brief, 2018, est. Western Indian Ocean is > US\$22 billion,
- ▶ Kenya's share slightly over US\$4.4 billion per year

# Place of Agriculture - Kenya

- ▶ Backbone of the Kenyan Economy, Pre-colonial times to date
- ▶ Acs for 34.1% of GDP (2020)
- ▶ Post Independent Kenya focus = Land Transfer initiatives, promotion of small scale farming, and promotion of cash crop farming
- ▶ As of 1980, 80% of working Kenyans made a living from Agriculture
- ▶ Two farming systems (by 2010) - Rainfed & Irrigated Agr
- ▶ Rainfed (82%) > Irrigated (18%)
- ▶ 3 Scales - Small, Medium and large scale
- ▶ Divisions- Crop, Livestock & Fisheries

# Place of Agriculture - Kenya

- ▶ Crops (27.8% of GDP, 2020)
- ▶ Crops ac for 55% of Agr Exports
- ▶ Tea Leading in Exports -Ksh 104 billion in 2020
- ▶ Livestock ( 4.0% of GDP 2017)
- ▶ Livestock a/cs for 30% of Agricultural Exports
- ▶ Agr Contributes 65% of total Kenyan Export
- ▶ Agr Employs 69% of Kenya's Economically active population
- ▶ Controbutes 75% of the Kenyan industrial raw materials

# Coastal and Marine Agriculture

- ▶ Coastal Counties ac for 17% of Kenya Pop
- ▶ 75% of Land lies in arid and semi arid zone
- ▶ 25% is none agricultural, 50% suitable for ranching and 25% for crop farming - Cashew nuts, sisal, cassava and Millet, mainly rainfed agr
- ▶ Irrigation plays a key role
- ▶ Agr Contributes 90%, 80.6%, 65%, of HH income in Lamu, Kwale and Kilifi respectively



# Agr Initiatives



<b>Name</b>	<b>Crops</b>	<b>AREA</b>	<b>Location</b>
<b>Galana-Kulalu irrigation scheme</b>	Sugarcane, maize and fruits	400,000 ha	Galana and Tana rivers
<b>Ramisi sugar irrigation</b>	Sugarcane	8000 ha	Kwale County
<b>Bura (East and West) irrigation scheme</b>	Green grams, cowpeas, maize, cotton, watermelon and onions.	2500 ha	Lower Tana River
<b>Hola irrigation scheme</b>	Maize	872 ha	Lower Tana River
<b>Kinango Water harvesting (Mabasheni)</b>	Horticultural	51 ha	Kwale County
<b>Kinango Irrigation Project</b>	Horticultural	152 ha	Kwale County
<b>ChallaTuhire Irrigation Project</b>	Maize and horticultural	2500 acres	Taita Taveta
<b>Njukini Irrigation Project</b>	Maize & horticulture	700 acres	Taita Taveta

# Other Agr Initiatives

- ▶ Kenya Climate Smart Agriculture Project
- ▶ Kenya Coastal Development Programme
- ▶ Cashew nut & sesame production & marketing -Farm Africa&Ten Senses Africa
- ▶ Coastal Rural Support Programme, 1997
- ▶ (Vijabiz) by the Technical Centre for Agricultural and Rural Cooperation (CTA) and the USTADI Foundation

# Challenges

- ▶ Low Agricultural productivity
- ▶ Little storage capacity (Mwache Dam)
- ▶ Poor market facilities, arrangements and low bargaining power  
High pre and post harvest losses
- ▶ Low value addition
- ▶ Inadequate research extension
- ▶ Poor or insufficient access to affordable credit
- ▶ Lack inputs quality control and inspection personnel
- ▶ Over-dependence on rain-fed agriculture
- ▶ Climate Change
- ▶ Competition for limited fresh water

# Challenges ...

- ▶ Siltation, Pollution and eutrophication correlated to use of pesticides and ferts.
- ▶ Use of traditional outdated methods
- ▶ Declining Agr performance
- ▶ Limited High Potential agricultural Land (only 17%)
- ▶ Limited Diversification
- ▶ Limited Exploitation of Regional markets
- ▶ Poor and Inadequate rural infrastructure
- ▶ Lack of a comprehensive Land use Policy
- ▶ Low GoK allocation to the sector

# Opportunities

- ▶ Land available
- ▶ Indian Ocean Waters
- ▶ Emerging technologies
- ▶ Existence of Collaborating Institutions
- ▶ Available markets
- ▶ Accreditation
- ▶ Agr identified as Key Pillar in Vision 2030
- ▶ Agr Learning institutions available

# Opportunities ...

- ▶ New emerging agr technologies
- ▶ Available National , regional ang global markets
- ▶ Kenya has accreditation and membership to various regional and international bodies such as
- ▶ ICA, WOCCU, ACCOSCA, ICA AFRICA, OIE, IBAR, IFAD, FAO
- ▶ Increased supportive policies
- ▶ Improvement in education, health, security and infrastructure

# Policy Framework ...

- ▶ Kenya Vision 2030
- ▶ Sessional Paper No. 10 of 2012
- ▶ National Agriculture Soil Management Policy
- ▶ Kenya Veterinary policy
- ▶ Sessional paper No.2 of 2008
- ▶ Sessional paper No.3 of 2009 for the National Land policy
- ▶ Sessional paper No.3 of 2013
- ▶ National Irrigation policy of 2015
- ▶ National Agricultural Sector extension policy (NASEP)
- ▶ National Food and Nutrition security policy



# Legal framework...

- ▶ The Constitution of Kenya 2010
- ▶ Crops Act No. 16 of 2013: The Act was established to provide for the growth and development of agricultural crops.
- ▶ Agriculture and Food Authority (AFA) Act, 2013:
- ▶ The Kenya Agricultural and Livestock Research Organization (KALRO) Act 2013
- ▶ The Science, Technology and Innovation Act 2013
- ▶ The Biosafety Act, 2009.
- ▶ Irrigation Act 2019
- ▶ Agricultural Finance Act Cap 323, 1991 (revised 2012)
- ▶ Seed and Plant Varieties Act Cap 326, 1991 (revised 2012)

# Conclusion

- ▶ Agriculture is admittedly and overall, the backbone of Kenya. The sector has so much untapped potential that would guarantee a steep rise in not only the GDP but also on the quality of life. Ranging from the planting, nurturing through harvest, the processes involved are demanding but they certainly pay handsomely for all the stakeholders involved. Given the vast areas of agriculture that exist in the coastal regions ecosystem, when coupled up with modern means of farming and more suitable seeds and breeds, so many people can be involved in the feeding of the nation and its trading partners. The Blue Economy is not an ancient concept globally, therefore the country should not feel like it has been left behind. There are very many partners in the Blue Economy sectors who through research can unearth everyday new potentials within the sector. This can potentially guarantee improved standard of living and sustainable exploitation of the agricultural resources of the Blue Economy. Should the challenges presented by this study be addressed, then the country, and indeed the blue economy, stands to gain exponentially from developments in the sector

# Recommendations ...

- ▶ Post harvest Loss Management Strategy by County
- ▶ Laws & Policy Overlaps , duplication increase conflict, reduction in optimization
- ▶ Extensive awareness creation by CGs, NGOs & CBOs
- ▶ Enhance greater participation of the locals, & women
- ▶ Quality farm inputs - Seed, Ferts., pesticides etc
- ▶ Modernization -esp storage
- ▶ Value addition

# END

▶ Below Agr Pictorial

















Any approach to circumvent the limits of modern farming must break the monoculture and thus the underlying causes of unsustainability