



**7th & 8th November
Nairobi, Kenya**

**TITLE: Digital Climate Smart Agriculture: Financing
Climate Change Adaptations**

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#ALE2023 #AgriFinALE2023

FAO DIGITAL SYSTEMS AND PLATFORMS

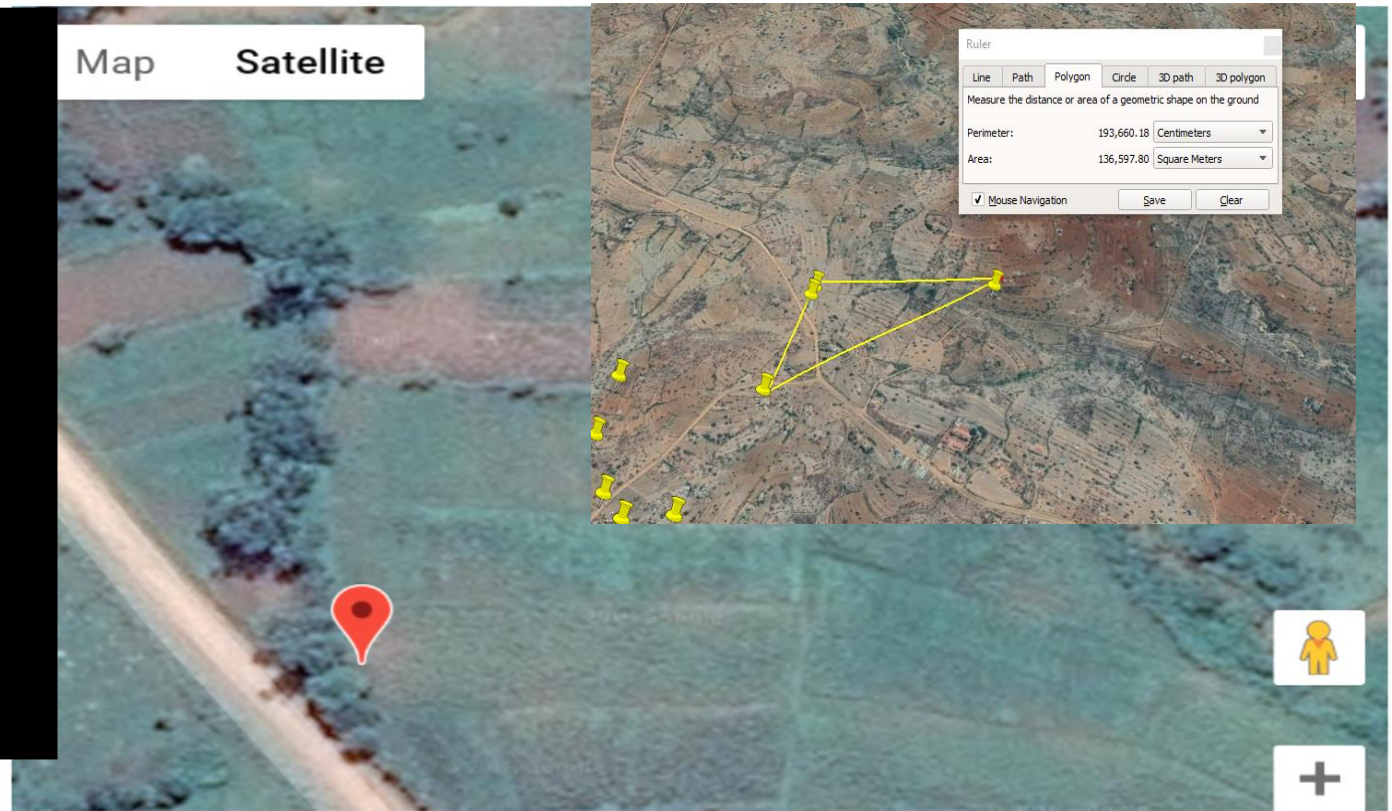
- 1. The Kenya Integrated Agricultural Management Information System (KIAMIS)**
- 2. Digital National Land Management Information Systems (NLMIS)**
- 3. Monitoring Land and Water Productivity (WaPOR) using Remote Sensing**
- 4. Youth Digital Engagement and Community**
- 5. Agricultural Data for development & Digital Innovation and Use Cases for impact: Digital for Rural Access to Finance & Market and Digital Villages Initiative (DVI)**



**The Kenya Integrated Agricultural
Management Information System
(KIAMIS)**

DIGITIZNG + GEO-REFERENCING FARMERS + FARM -6M+

- Farmer Bio Data
- County
- Sub-county
- Ward
- Location
- Sub-Location
- Village
- Farm Size + GPS

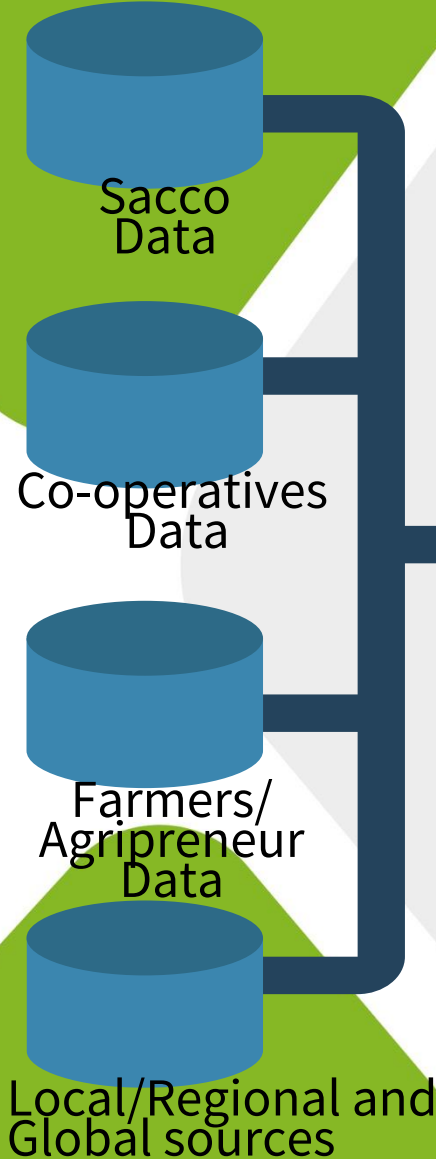


17. Beatrice Gesare

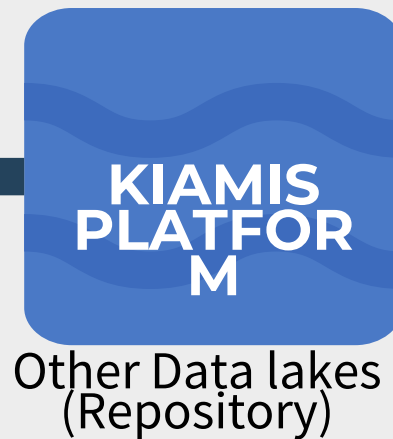
Profiling farmers and mapping farm details including Geo-location and farm size

KIAMIS: LEVERAGING TRANSACTION DATA FOR INNOVATION

DATA SOURCES



INNOVATIONS/ DIGITAL SOLUTIONS



Digital National Land Management Information Systems (NLMIS)

GOAL: Improved food and nutrition security, livelihoods and sustainable development in Kenya through equitable and secure access and management of land as per Vision 2030





WELCOME TO

AFRICAN YOUTH AGRIPRENEURS

Today he is a farmer who uses his background in IT to run a successful agribusiness near Nairobi.



Alex Kiheru

Farmer

but I was not interested.

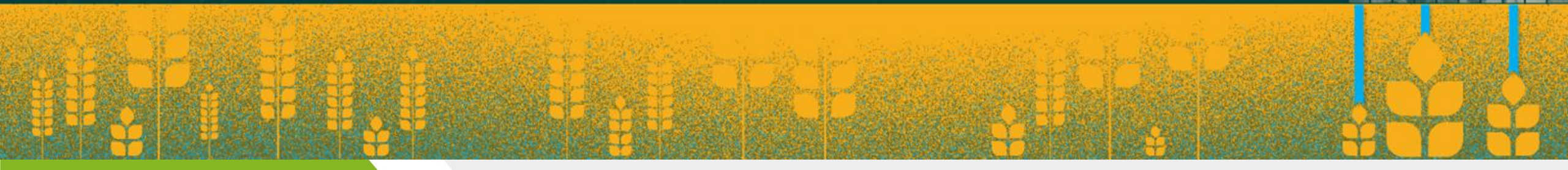


Food and Agriculture Organization
of the United Nations

WaPOR

FAO's portal to monitor Water
Productivity through Open-access
of Remotely sensed derived data

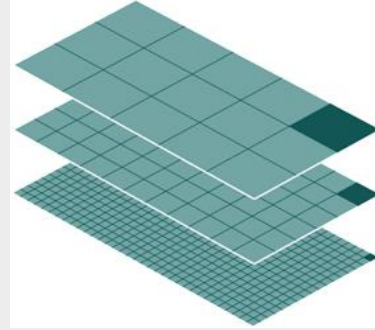
Monitoring land and water productivity by Remote Sensing (WaPOR phase 2)





WaPOR

- WaPOR portal provides actionable information
- Near real time database using satellite data - monitoring of agricultural water productivity at different scales
- Every 10 days data on biomass development and water consumption (actual evapotranspiration), agro-climatic parameters on a daily basis.

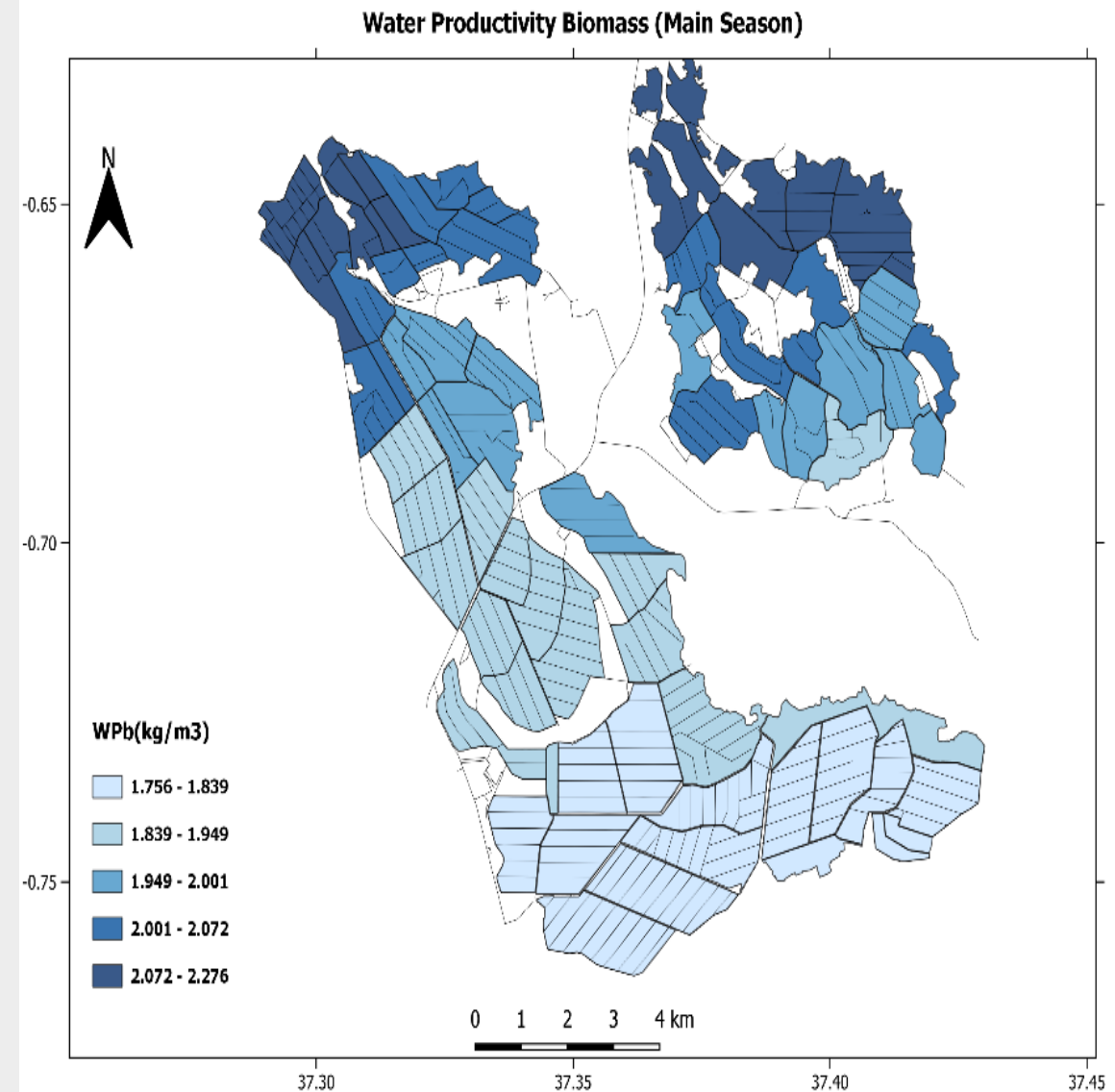


Spatial
résolution
250m
100m
30m

Applications (Kenya)

Mwea IS; Water productivity biomass = (AGBM/AETI)

- Plant Village Nuru app: WaPOR data for Farmer advisory and FAW risk context
- Water Productivity analysis for the Mwea Irrigation Scheme for Irrigation Management Monitoring
- Water Productivity analysis combined with Insitu Soil moisture sensors in Galana Kulalu food Security project



Building a water and food secure future where no one is left behind



wapor.apps.fao.org

wapor@fao.org

www.fao.org/in-action/remote-sensing-for-water-productivity

Agricultural Data for development & Digital Innovation and Use Cases for impact: Digital for Rural Access to Finance & Market and Digital Villages Initiative (DVI)

- It supports innovative engagement in agriculture by youth and women, increased productivity, market access, resilience and enhanced rural socio-economic well-being.

A smiling man wearing a straw hat and a plaid shirt is talking on a mobile phone. He is standing in a field with a herd of brown cows in the background. The scene is set outdoors with mountains visible in the distance under a cloudy sky. The image is framed by green geometric shapes on the left side.

**CONTRIBUTION TO CLIMATE FINANCE
& ADAPATATION**

Contribution to Financing Climate Change Adaptations

- Digital platform contribute to reducing GHG emissions (low-carbon initiatives, encourages energy efficiency, renewable energy- can lead to carbon credit financing
- Adoption of digital platform can help reduce the vulnerability of farmers and natural systems to the impacts of climate change- provide data to de-risk and credit scoring
- Enhance mitigation and adaptation to climate leading to profitability and income



Thank You!