



# **The Kenya Agriculture Carbon Project : Instruments and incentives for sustainable soil carbon sequestration**

## Project Area:

Western Kenya

## Crediting Period:

**2009-2029**

## Reached:

Farmers: 29,497

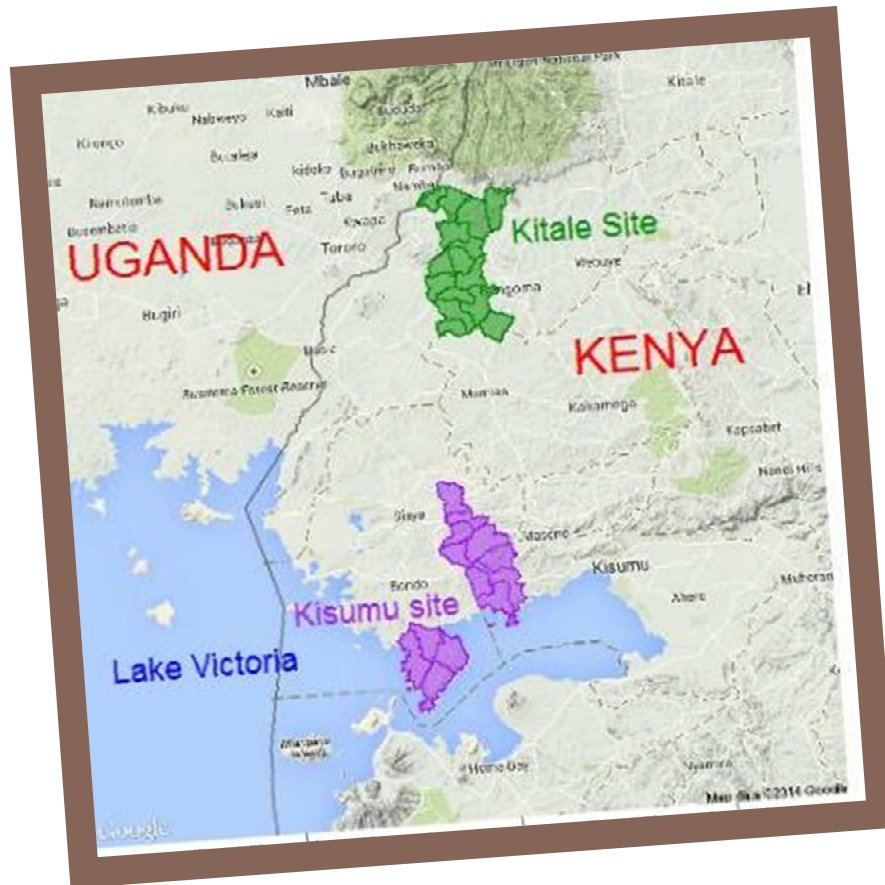
Farmer groups: 1,730

## Hectares under SALM:

21,966

## Methodology:

SALM Adoption



# Sustainable Agricultural Land Use Management (SALM) practices



## AGRONOMIC PRACTICES



## NUTRIENT MANAGEMENT



## WATER MANAGEMENT



## TILLAGE AND RESIDUE MANAGEMENT



## AGROFORESTRY



## RESTORATION AND REHABILITATION



## LIVESTOCK MANAGEMENT



## EFFICIENT ENERGY PRODUCTION



Vi Agroforestry





Cover Crop

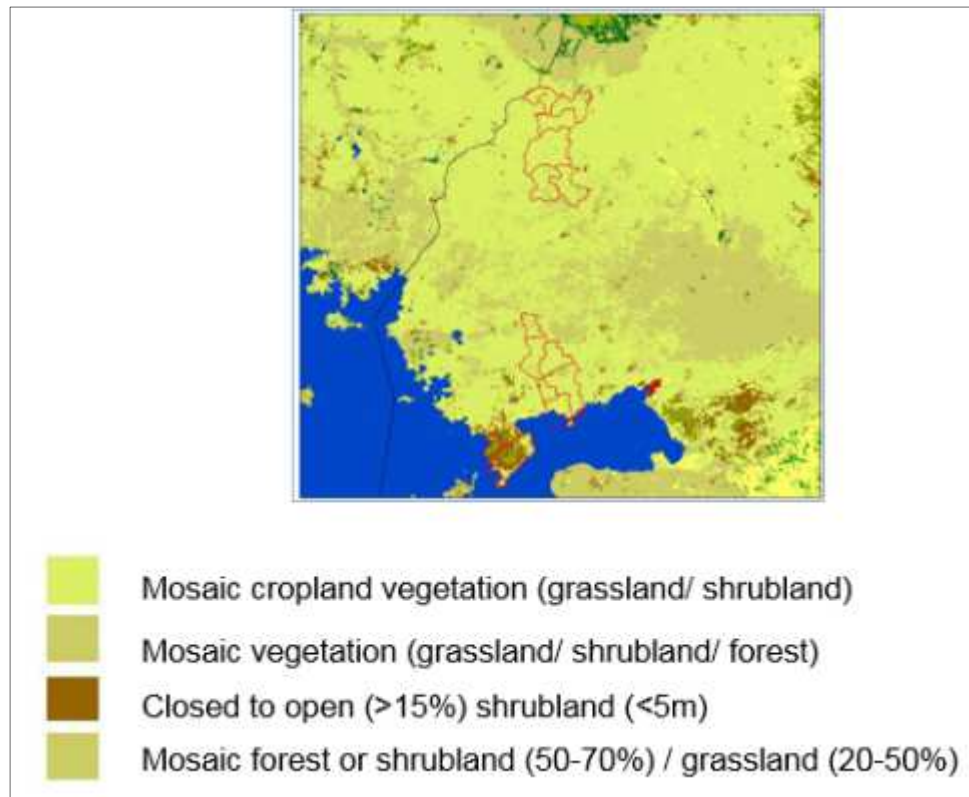


Pile Compost  
Mr. Lukhubi in  
Bumula





# Will land use change in 20 years?



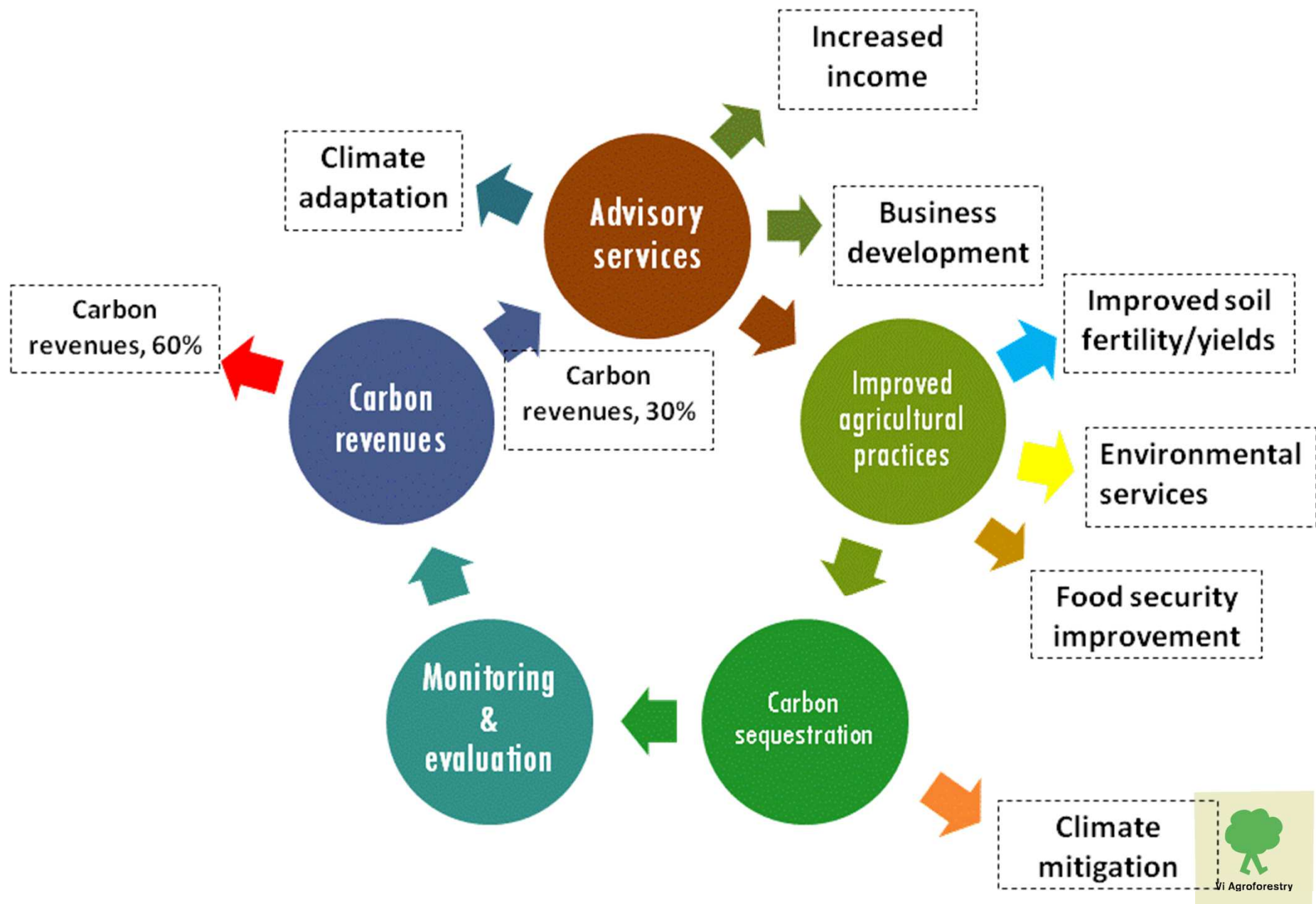
- From the land use map, the project land is dominated by a mixture of cropland and grassland where the project is implemented.
- Since SALM activities are implemented within the individual farms on cropland and grassland no project activity will be implemented on forest land.

## **Will demanding legal land ownership lock out women, youths and men who own family through family?**

- Most farmers in the project area had their land registered by government but had not processed their Title deeds (it requires money).
- Land ownership in project region is private (freehold) and the family has both access and control. Land is owned in two major categories among most farmers. Based on the household monitoring in the project, land under full ownership is about 48 % and full ownership within the family is 52 %
- Thus access and control is assured for ownership within family.



# What did we do?



## What did we do?

- The wider project area is largely dominated by farming. This reduced sudden change of land use in recent years to come.
- Most farmers have inherited land within their family line and the registered names are of their grand fathers etc. We worked with village elders and community members to ascertain this.
- Recognition of family owned land, made it possible for women and youth to participate.





## What did we do?

- We were not changing the land use and therefore the issue of locking out access to land did not arise.
- Instead we were optimizing sustainable use of the soil.
- Benefits from the project are not just about soil carbon .





## Kenya Agriculture Carbon Project - purpose

- Restore agricultural production to increase farm productivity and diversify food sources
- Increase farmer's resilience to climate change
- Contribute to reduce green house gas emission (CO<sub>2</sub>)

# SALMs CARBON SEQUESTRATION POTENTIAL

- Agronomy 0.98 tCO<sub>2</sub>e ha<sup>-1</sup> yr<sup>-1</sup>
- Nutrient management 0.62 tCO<sub>2</sub>e ha<sup>-1</sup> yr<sup>-1</sup>
- Tillage and residue management 0.72 tCO<sub>2</sub>e ha<sup>-1</sup> yr<sup>-1</sup>
- Water management 1.14 tCO<sub>2</sub>e ha<sup>-1</sup> yr<sup>-1</sup>
- **living biomass mitigation potential:**
- Agroforestry 0.72 tCO<sub>2</sub>e ha<sup>-1</sup> yr<sup>-1</sup>

*(source- AFOLU CFD Template Revised April14, 2005)*



# Constraints and difficulties in the implementation of soil carbon sequestration mechanism's

## As regards the complexity of land tenure regimes:

- If full ownership is required, those who own land within family would be locked out of the project.
- Land owners may not disclose land ownership documents and sizes for fear of the unknown intentions thus a challenge to use area in calculations.
- Where smallholder farmers are involved, it is involving to map out the numerous farms to get the Total area.





# How soil carbon sequestration practices could be promoted without weakening tenure security

- In the example of KAP, SALM adoption is carried out on land where there is full ownership and also ownership through the family. Where such ownership is missing, doesn't qualify to be part of KACP and this strengthens the tenure security for the KACP adoption areas.

