# Food Security Visualizations Karamoja Region – Uganda By Valerian Micheni



# **Project Objectives**

- The overall project objective was to develop a data visualization dashboard using Tableau
- Specific Objectives include
  - Review and understand food security data from Karamoja region Uganda
  - Conduct any data cleaning as may be required
  - Develop a tableau Dashboard

#### Introduction

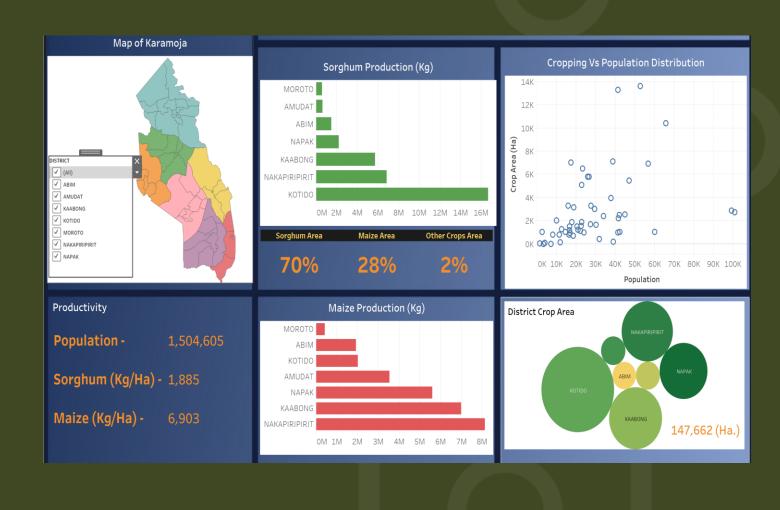
- Karamoja region is the most food insecure region in Ugdanda, Located in the northern part of the county
- Food Security data of two main staple crops (Maize and Sorghum) from 7 districts in the region was presented
- Data Included; Population, yields, Area under crops, and shapefiles at the district and sub-county level
- Data was checked using python for cleaning purposes
- No much cleaning was done as data was largely complete

# **Findings**

- Sorgum and Maize were found to be the most commonly groun crops in the area Occupying 70% and 28% of the crop areas while other crops covered 2%
- Kotido District Had the Highest production of Sorghum while Nakapiripirit had the highest Maize Production
- Sorghum covered 94% of crop area in Kodito, while Maize covered 35% of crop area in Nakapiripirit
- Moroto District had the lowest production for both crops
- There was a relationship between the population and crop area where there was less cropping in the more densely populated places

## **Analysis**

- Dashboard was created using tableau public
  - Contents: Map of Karamoja, population and productivity figures, Production figures for two crops in Kgs, Visualization of the crop area per district and a scatter of crop and population were created.



### Conclusion

#### From the Data Visualized it was observed as follows:

- Sorghum and Maize continue to be the most significant crops in the region
- Nakapiripirit District had the highest maize production despite the crop covering only 35% of the crop area
- Abim and Moroto have the lowest crop production areas. These areas are likely to be the most food insecure in the region as housholds access to food may be limited due to low production
- There is need to collect more seasonal data so as to develop trend analysis and inform on production over time

### Recommendations

Based on the observations, it is recommended as follows:

- Since Sorghum and Maize have show potential in production for the region, there is need to keep promoting them
- Nakapiripirit Has a big potential for maize production despite the crop covering only 35% it had highest production hence need to promote its cultivation more
- There is need for more interventions in Abim and Moroto being most vulnerable in terms of food insecurity due to their low production
- More resources should be allocated for continuous data collection to enable trends analysis

# Thank You