FOOD SECURITY ANALYSIS TOOL FOR KARAMOJA SUB-COUNTY

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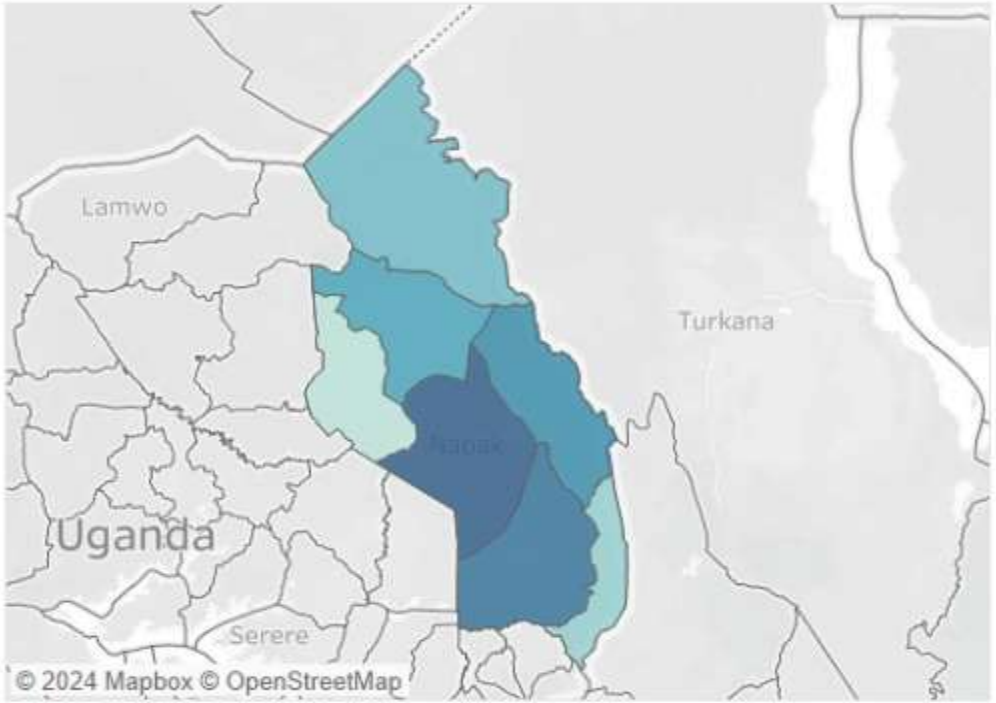
RESEARCH QUESTIONS

- 1.How does the average yield of sorghum and maize compare to their total productivity across different sub-counties?
- 2.How do changes in crop area relate to variations in average yield of sorghum and maize across different sub-counties?
- 3.What is the comparative productivity of sorghum versus maize in different sub-counties and how does it relate to the crop area?
- 4.How does the total population of a sub-county correlate with the total crop area dedicated to sorghum and maize?

OBJECTIVES

1. To evaluate the relationship between the average yield (S_Yield_Ha for sorghum and M_Yield_Ha for maize) and total productivity (S_Prod_Tot for sorghum and M_Prod_Tot for maize) across subcounties. To identify patterns or discrepancies in yield versus productivity, providing insights into areas where productivity may be disproportionately high or low relative to yield.
2. To analyze the impact of total crop area (S_Area_Ha for sorghum and M_Area_Ha for maize) on average yields (S_Yield_Ha and M_Yield_Ha). To determine if larger crop areas correspond to higher or lower yields and assess the efficiency of land use for sorghum and maize.
3. To compare total productivity for sorghum (S_Prod_Tot) and maize (M_Prod_Tot) within subcounties. To understand how crop area (S_Area_Ha and M_Area_Ha) influences productivity levels, and identify regions where one crop is significantly more productive than the other.
4. To explore the relationship between total population (POP) and total crop area (Crop_Area_Ha) for both sorghum (S_Area_Ha) and maize (M_Area_Ha). To determine if higher population densities correspond with larger or smaller crop areas, and assess how population dynamics might influence agricultural land use.

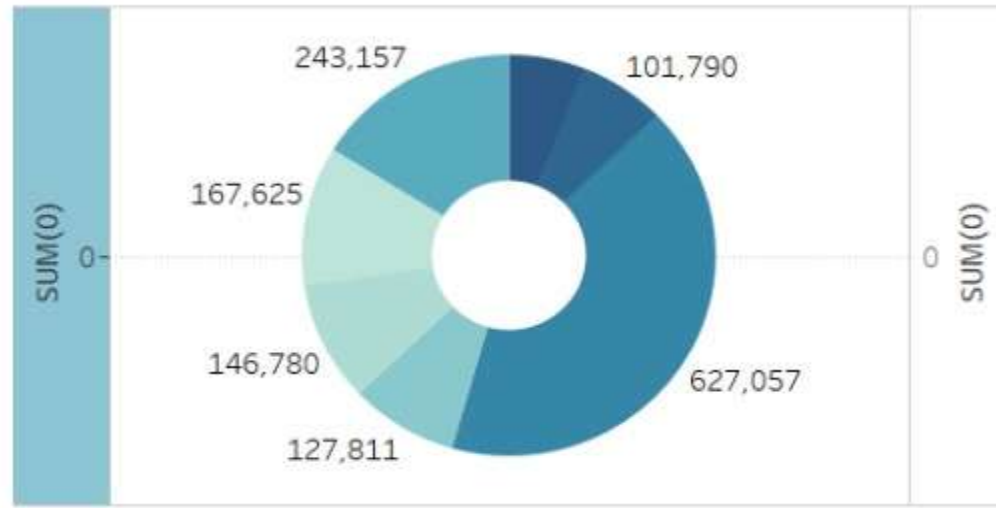
KARAMOJA SUB-COUNTY

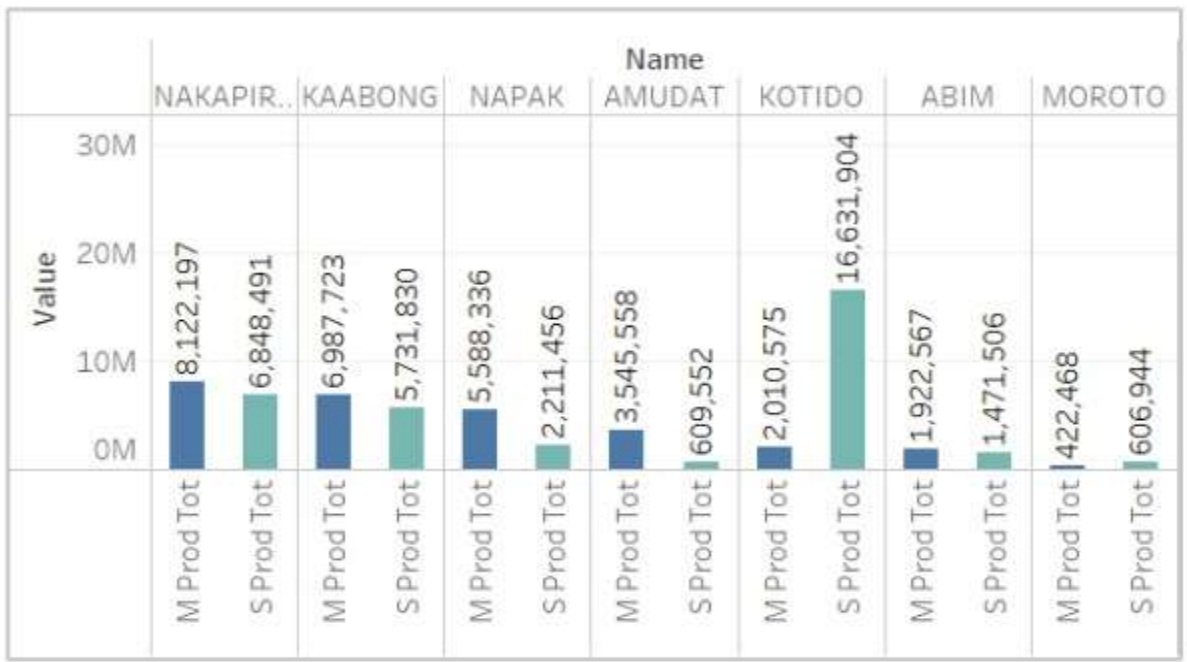


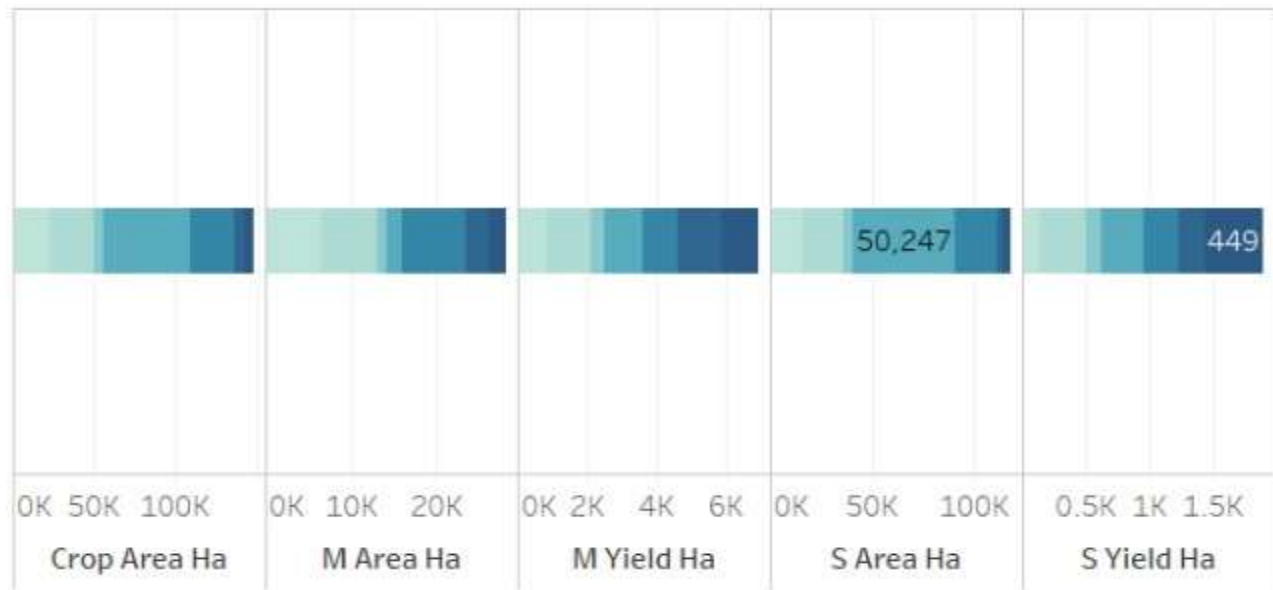
Dname2014
- ABIM
- AMUDAT
- KAABO..
- MOROTO
- NAKAPI..
- KOTIDO
- NAPAK

Name

	ABIM	AMUDAT	KAABONG	KOTIDO	MOROTO	NAKAPIRIPI..	NAPAK
S Prod Tot	1,471,506	609,552	5,731,830	16,631,904	606,944	6,848,491	2,211,456
S Yield Ha	449	205	279	331	128	356	137







RECOMMENDATIONS AND CONCLUSIONS

RECOMMENDATIONS

- Utilize the satellite-based yield monitoring tool to validate yield predictions, refine measurement accuracy, and assess correlations with environmental stressors. Leverage these insights to enhance decision-making and optimize resource allocation, ultimately improving food security efforts in Karamoja

CONCLUSION

- The satellite-based yield monitoring tool for Karamoja effectively identifies yield patterns and productivity levels. By comparing satellite data with actual yields, analyzing accuracy factors, and correlating yields with environmental stressors, the tool provides valuable insights for NGOs. This enhances decision-making and resource allocation, contributing to improved food security in the region.