



Presentation on Monitoring of Food Security in Karamoja ✨

By Group 6

Context:

Karamoja, a semi-arid region in northeastern Uganda, faces chronic food insecurity, with 45% of its 1.3 million people experiencing crisis-level or emergency-level food shortages as of mid-2024, driven by erratic rainfall, prolonged droughts, cattle rustling, and high poverty rates. Over 112,000 children and pregnant women require urgent malnutrition treatment, exacerbated by poor dietary diversity and limited access to food markets.

- The purpose of this project is to visualize crop yield using satellite data

Data Sources;

- Satellite yield estimates
- Population and crop area tables
- Shsfiles for districts and sub-counties



Key Insights:

- Districts with the lowest maize yield include
- Sub-countries with the highest sorghum productivity per capital are
- Some regions need urgent NGO intervention

Business Recommendation:



- Prioritize low-yield area
- Monitor enhancements for improvement
- Diversify the type of crops cultivated



Future Work

- Explore multi-year datasets for trend analysis and climate correlations using precipitation data.
- Integrate API for real-time X posts on pest outbreaks in Karamoja for dynamic alerts.
- Potential impact is better resource allocation, reducing food insecurity by identifying emerging gaps early.

The background features a large, irregular, light brown organic shape. Two thin, dark brown circles are drawn over this shape, one on the left and one on the right, partially overlapping the brown area and each other.

Thank you!!