Data Understanding

In the downloaded zip file, there were 2 main folders containing data:
1. Shapefiles
    - Boundaries of Uganda Subcounties
    - Boundaries of Uganda Districts
    - Crop Type Map for Sorghum (i.e. position of the Sorghum fields)
    - Crop Type Map for Maize
2. Tables
    - Yield and Population per Sub County
        - POP: total population for the sub county
        - S_Yield_Ha: average yield for sorghum for the sub county (Kg/Ha)
        - M_Yield_Ha: average yield for maize for the sub county (Kg/Ha)
        - Crop_Area_Ha: total crop area for the sub county (Ha)
        - S_Area_Ha: total sorghum crop area for the sub county (Ha)
        - M_Area_Ha: total maize crop area for the sub county (Ha)
        - S_Prod_Tot: total productivity for the sorghum for the sub county (Kg)
        - M_Prod_Tot: total productivity for the maize for the sub county (Kg)
    - Yield and Population per District

Notes:
The district yield and population table is smaller than the sub county yield and population table, should attempt a join or relationship

Created a relationship using the name column and the district name table in either tables
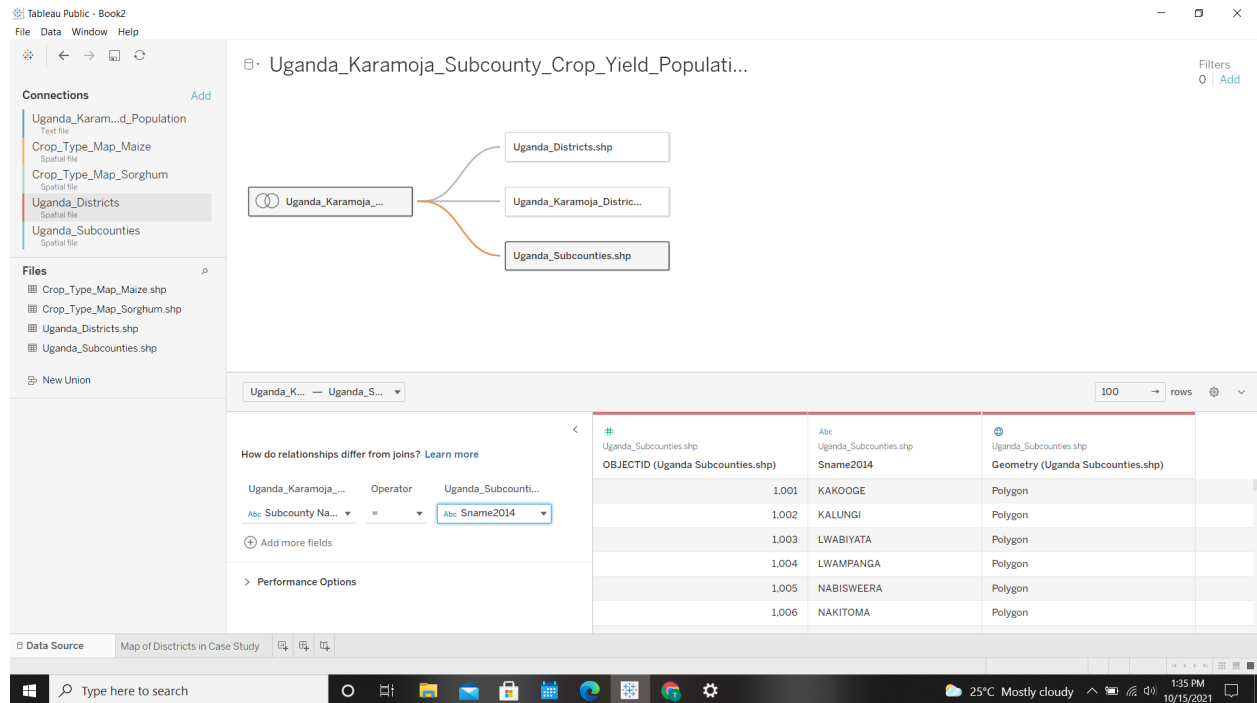

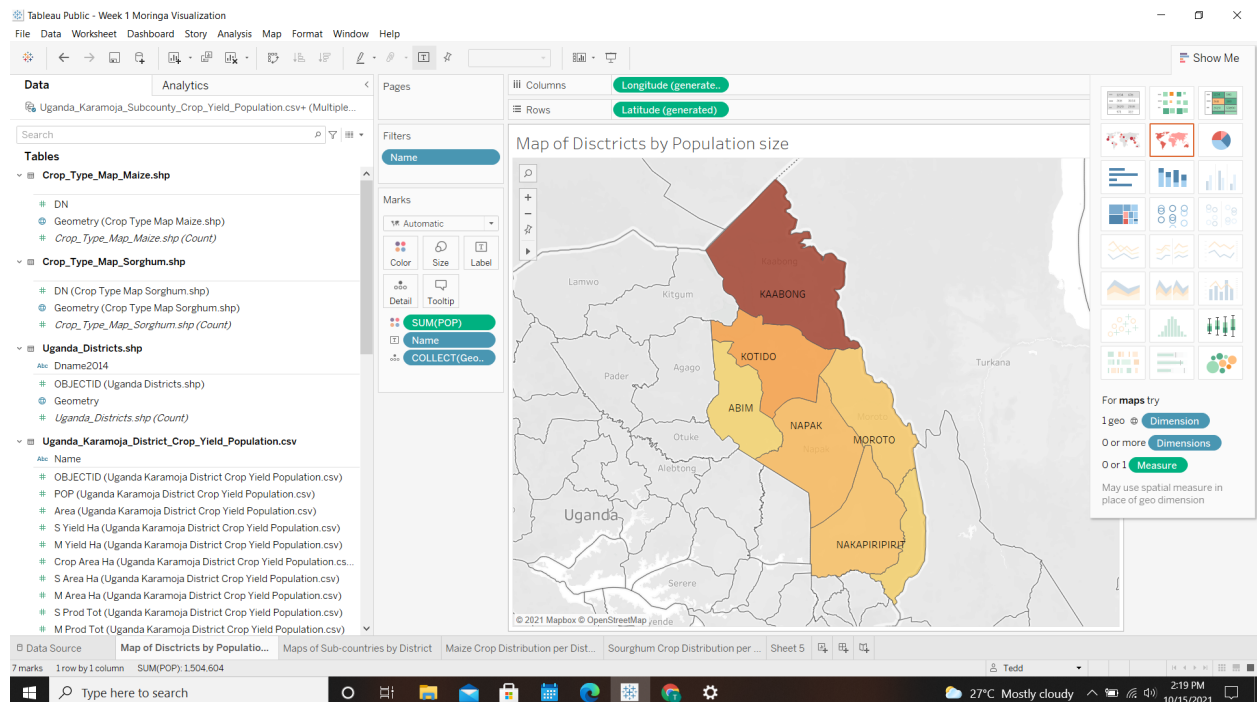Created a join using the same variables as above relationship, new table has both tables information.
Next step is to connect all the tables with the spatial information files
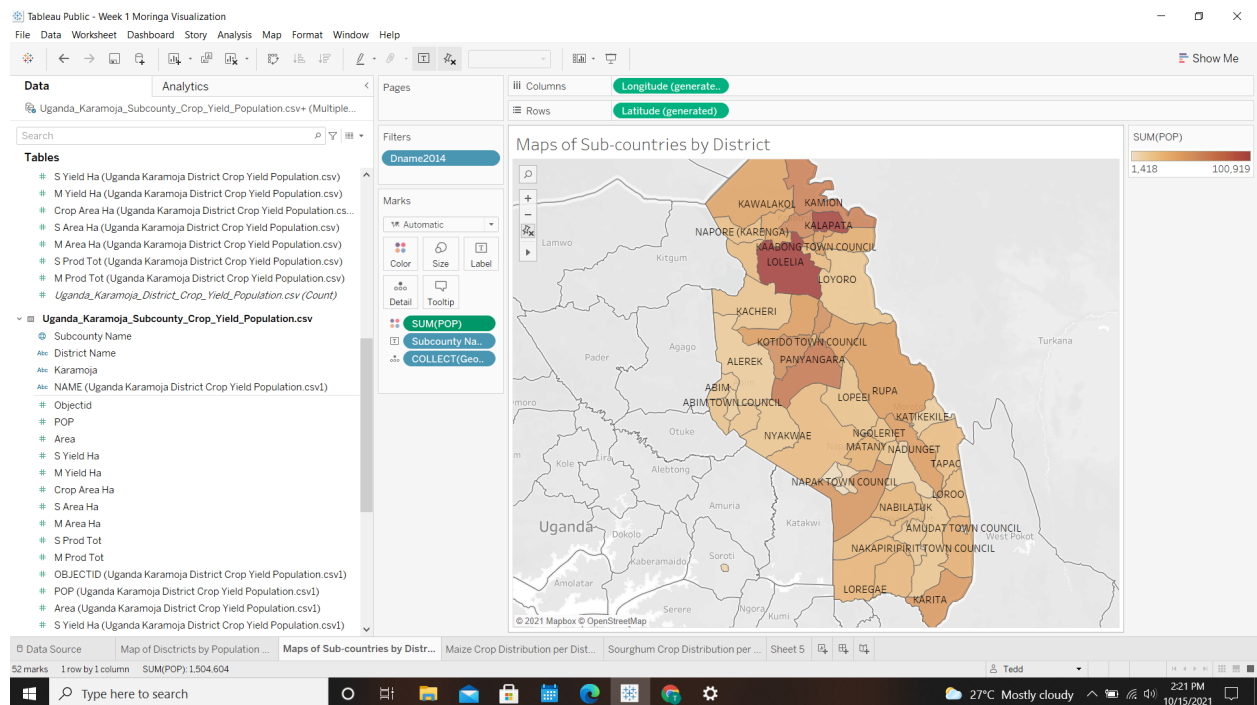
Data Exploration

After connecting all the spatial files to tableau, the next step is to connect the joined table to the spatial files for districts and sub counties
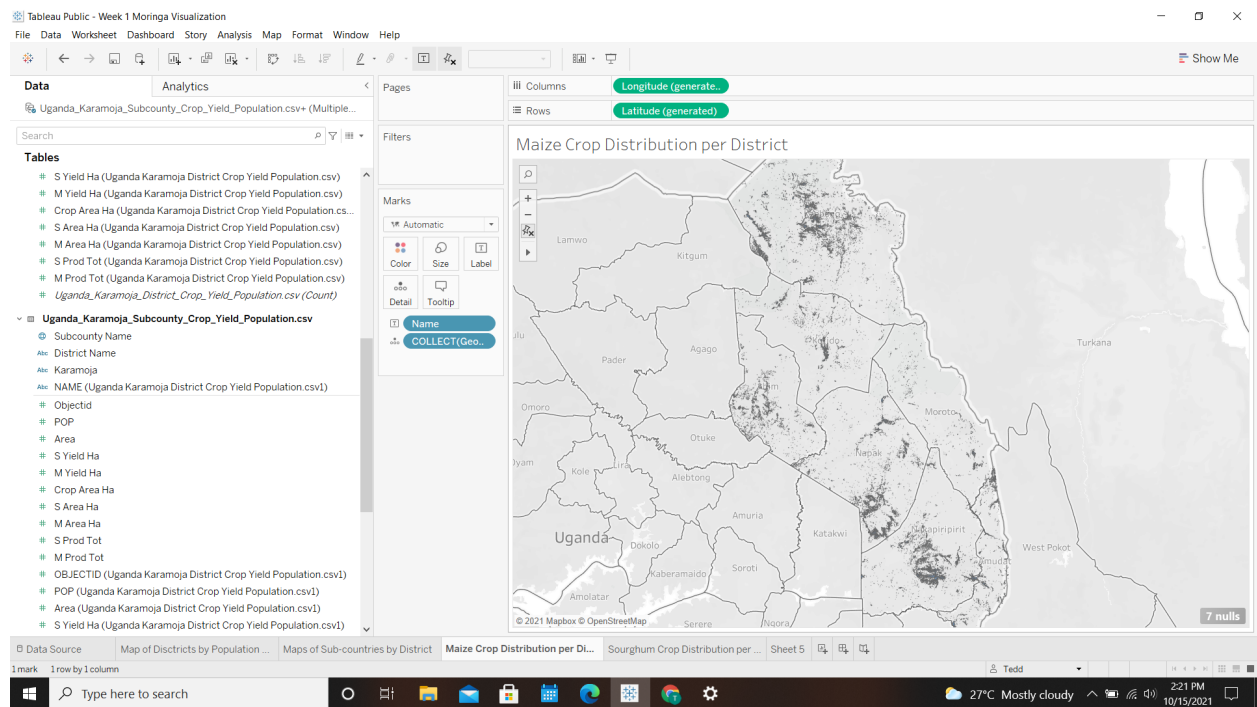

Create maps to visualize the districts, sub counties and crop distribution for both maize and sourghurm
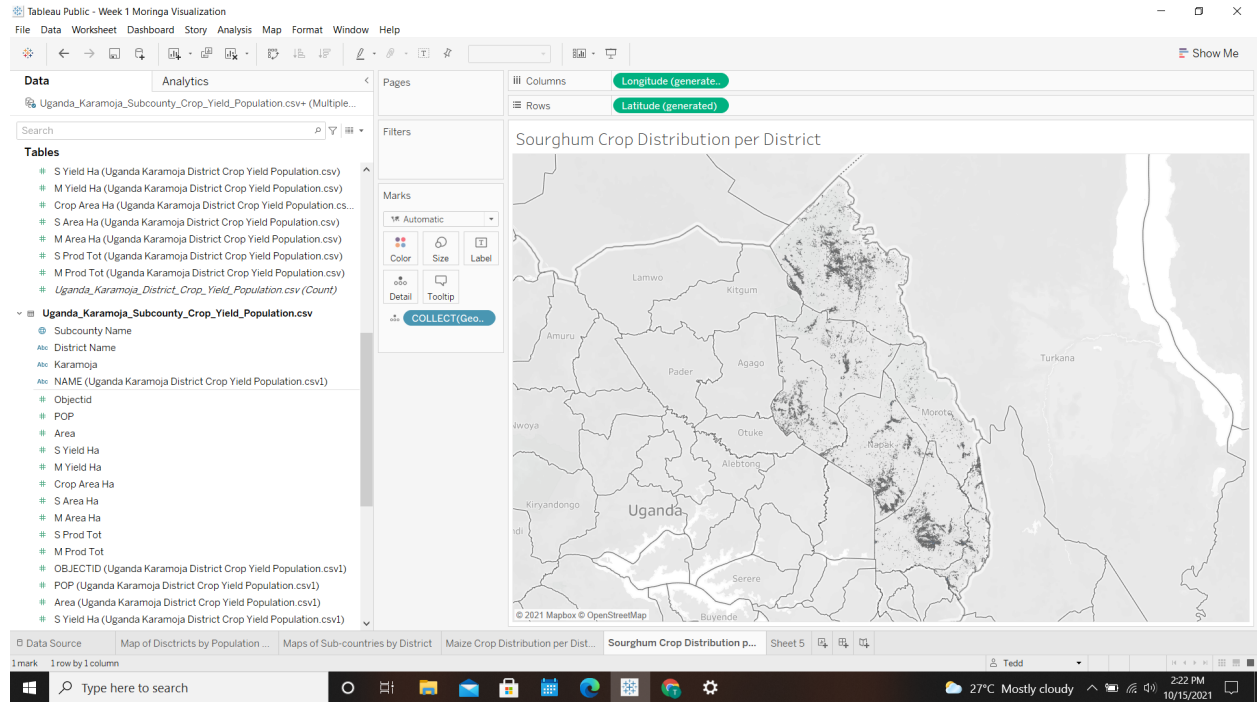

Districts colored by population

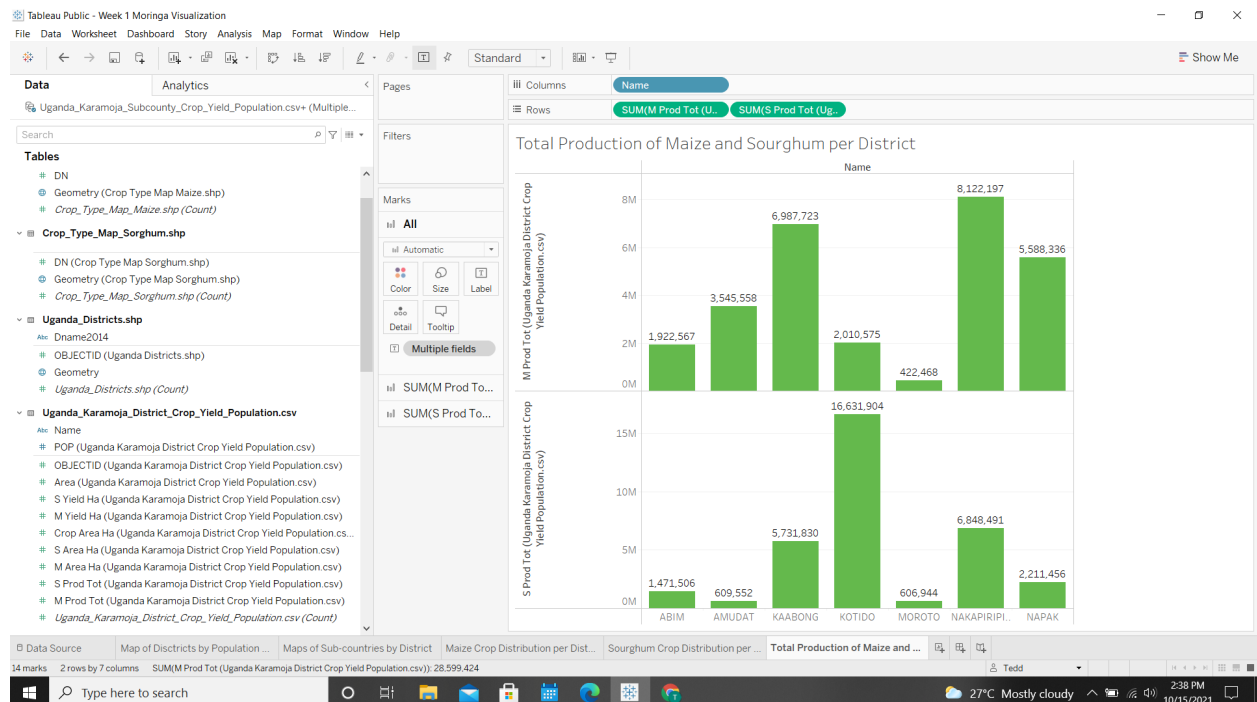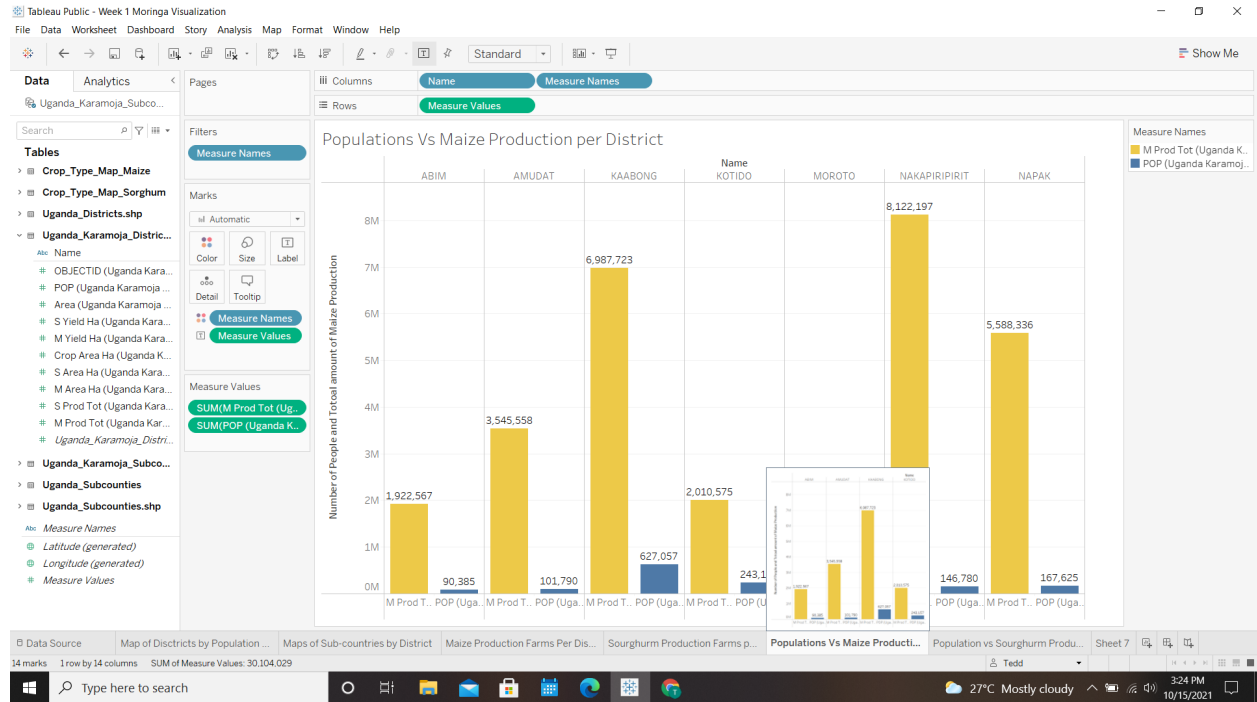sub counties in the districts again by population

The maize crop distribution
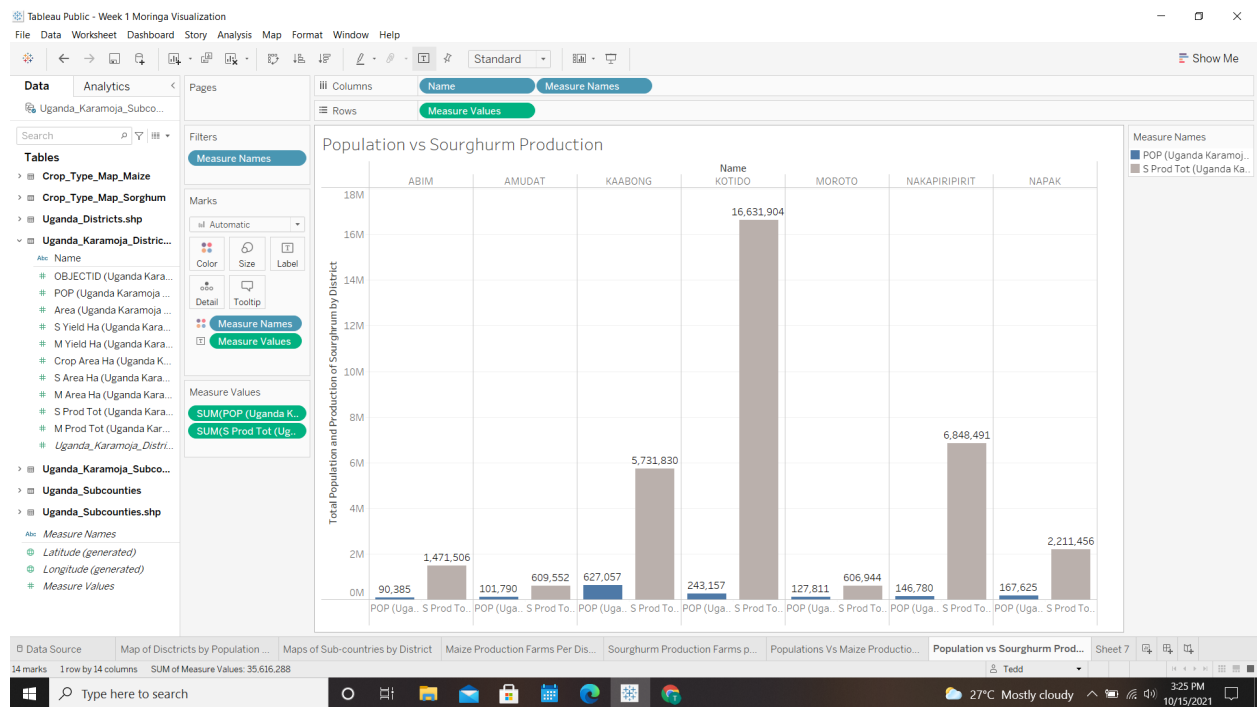
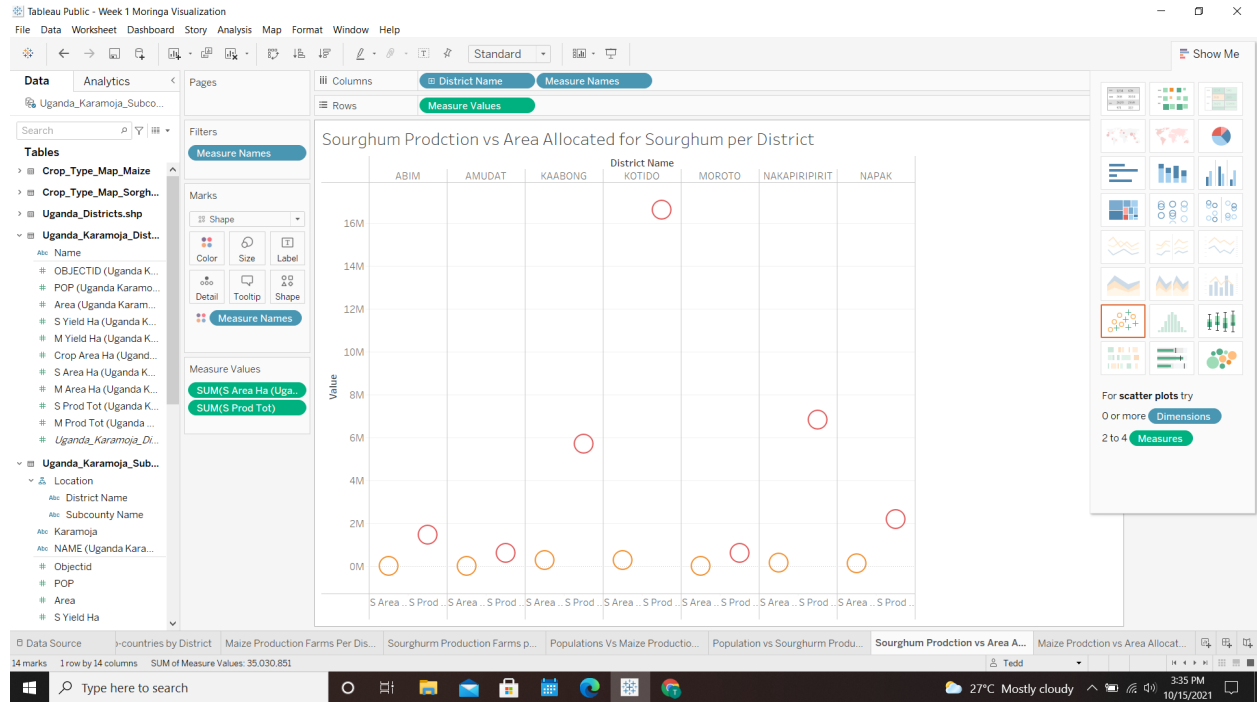Sourghurm crop distribution

Data Analysis

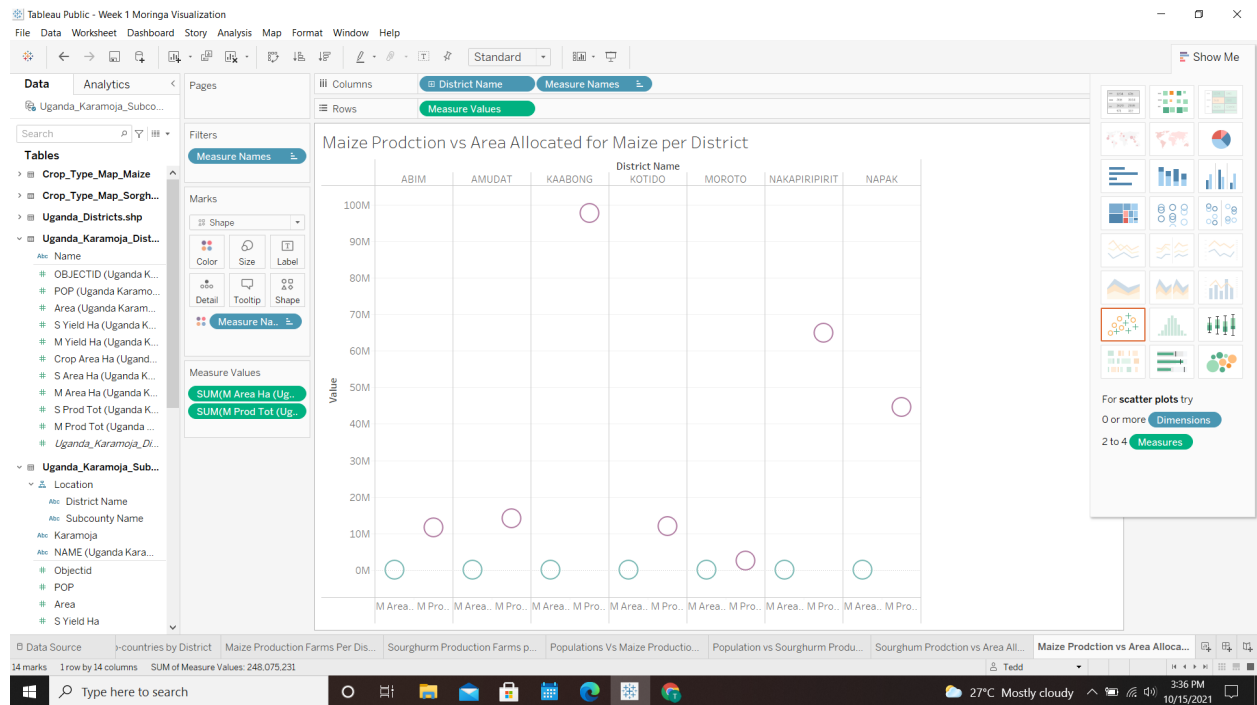Total production of sorghum and maize for each district
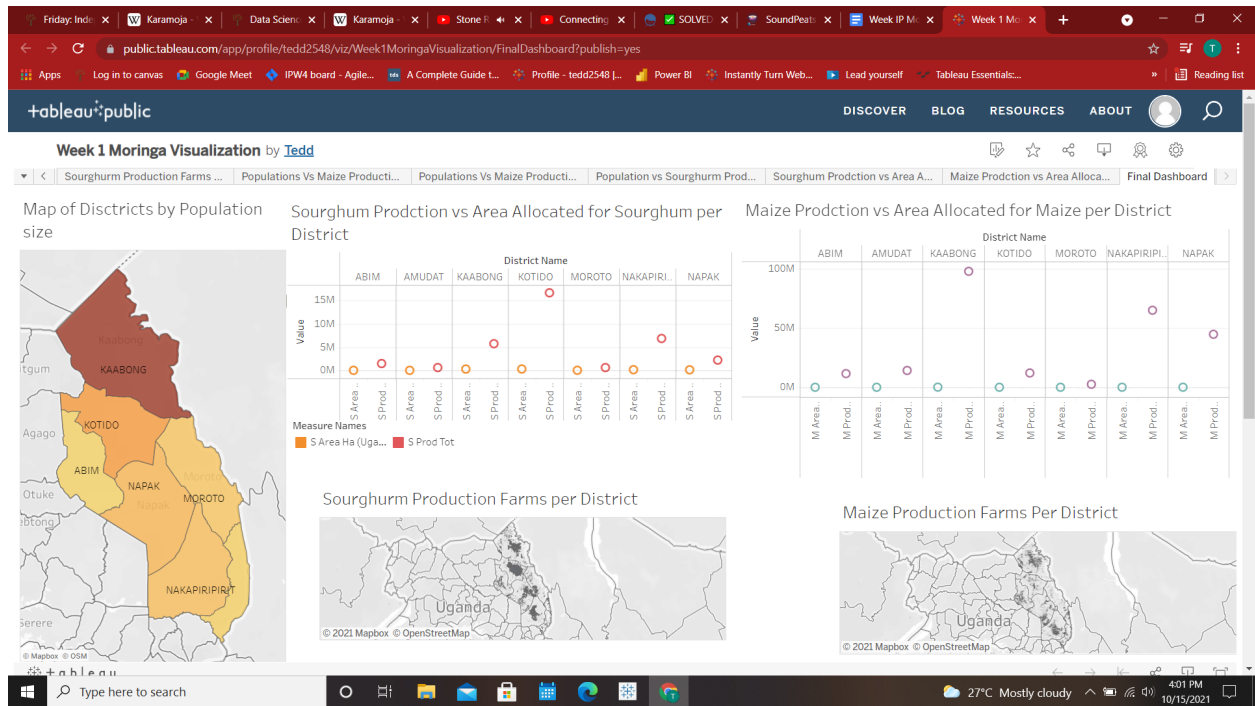
Maize production vs population

Sorghum Production vs population

Sorghum production against area allocated for sorghum

Maize production against area allocated for maize

Final Dashboard

N:B
Made the location names of district and sub counties into a hierarchy, named Location