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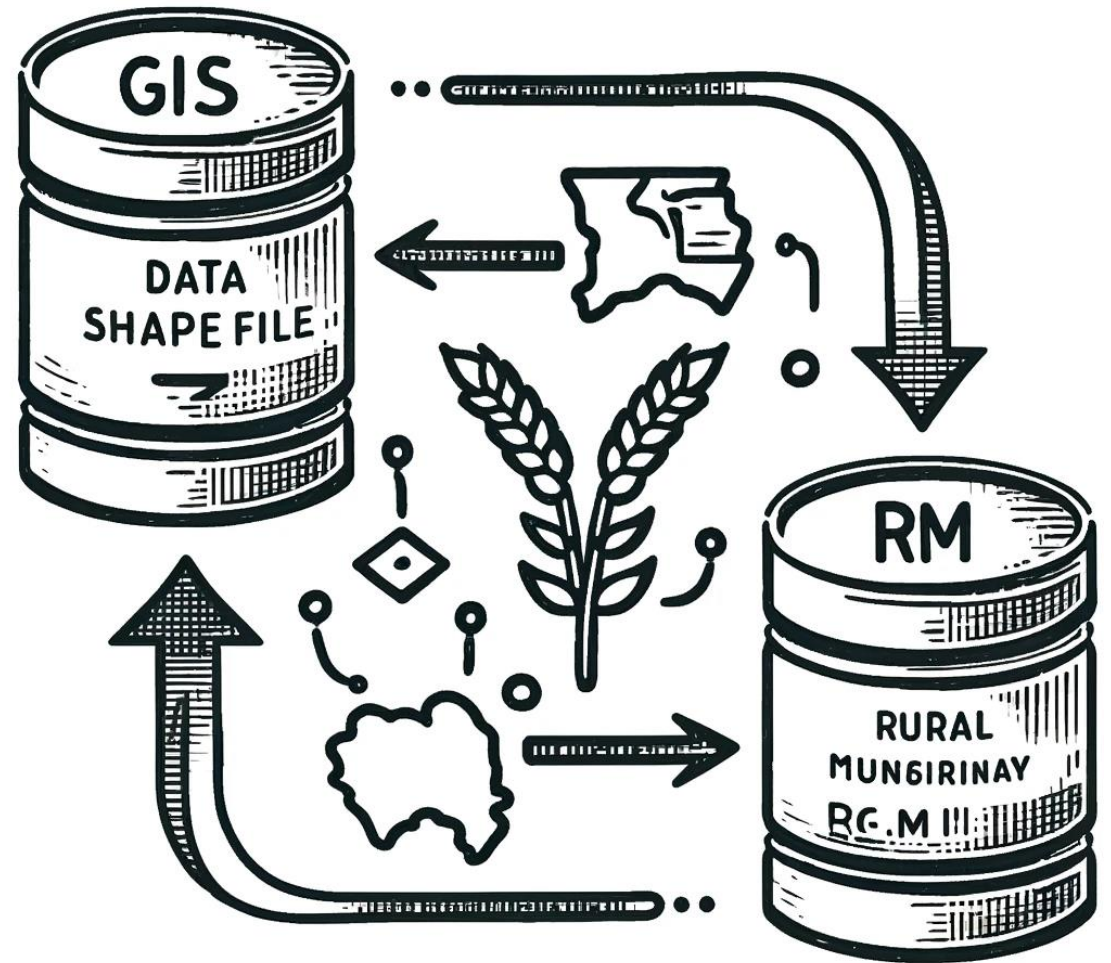
Crop Yield Analysis and Clustering

Data Analysis and Clustering for Rural Municipalities

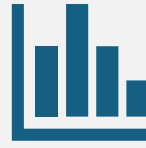
Adel Baabbad

Data Collection

- RM Shape File GeoHub
- Crop Yields by Rural Municipality (R.M.)



Exploratory Data Analysis (EDA)



UNDERSTANDING DATA
STRUCTURE AND
CONTENTS



IDENTIFYING DATA QUALITY
ISSUES



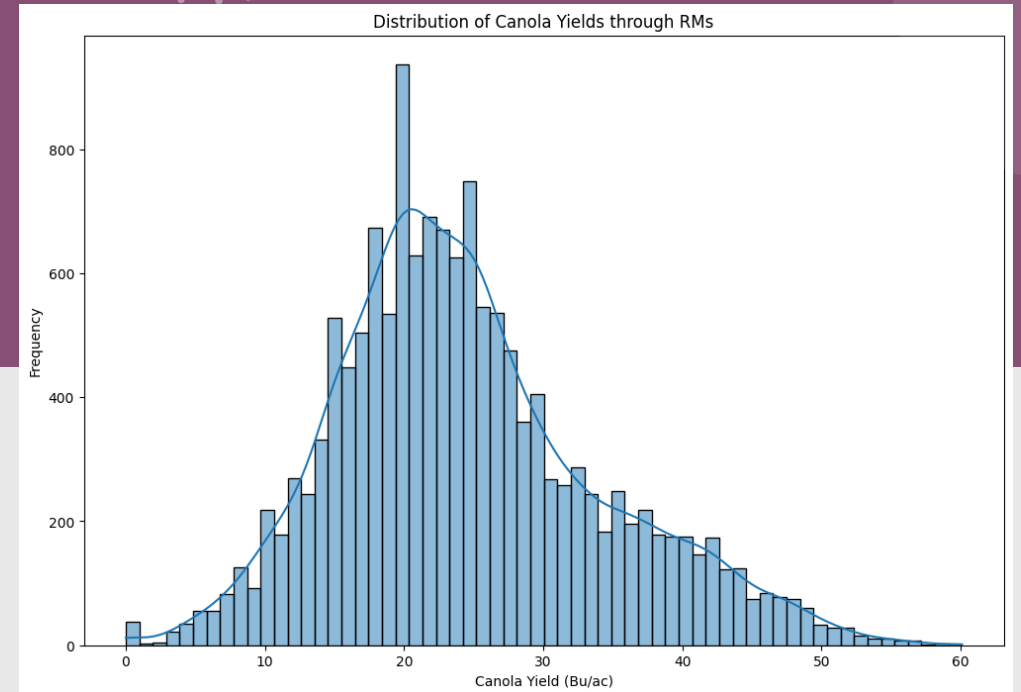
SUMMARIZING KEY
CHARACTERISTICS



DETECTING AND
UNDERSTANDING
RELATIONSHIPS

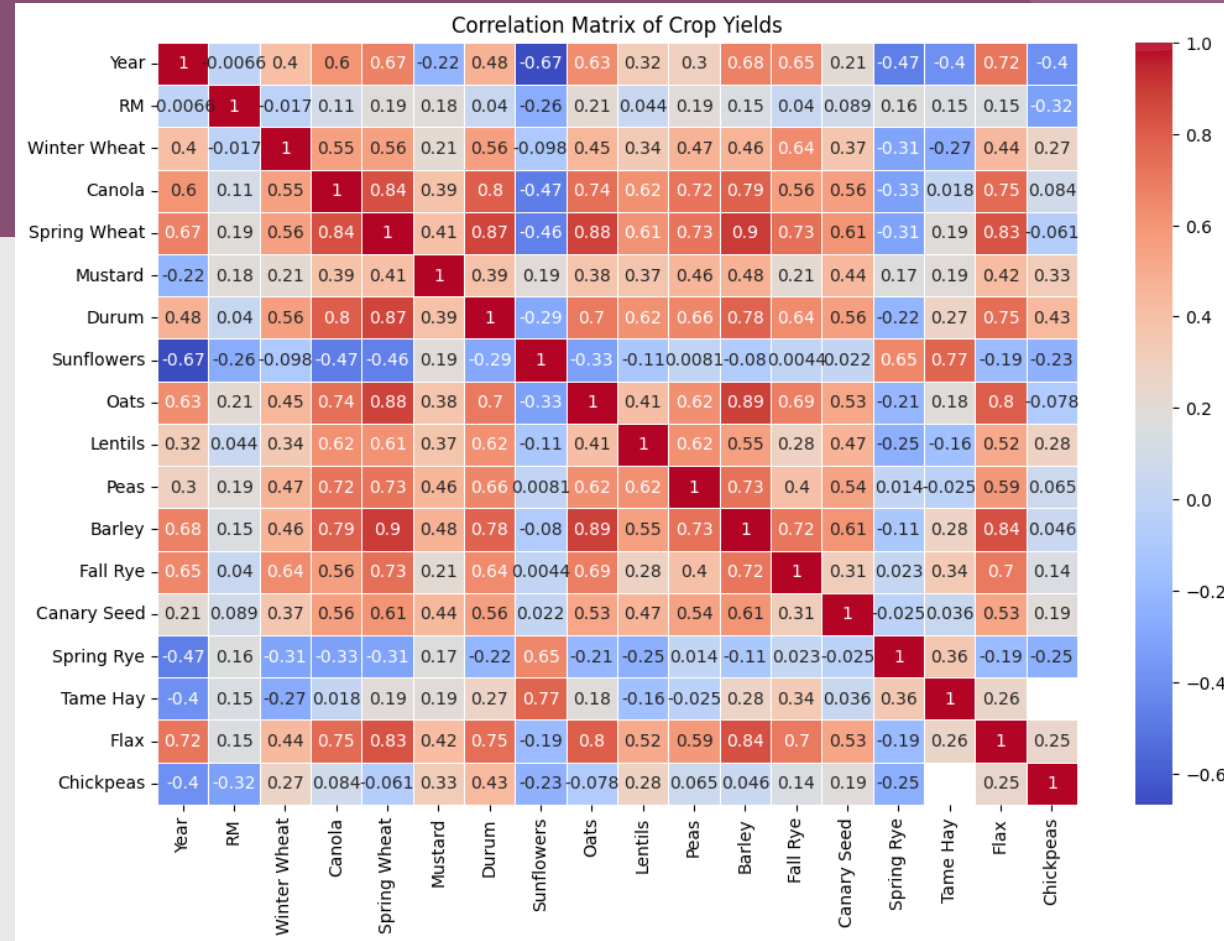
Yield Distribution Through RMs

- This plot shows the distribution of Canola yields across different Rural Municipalities.



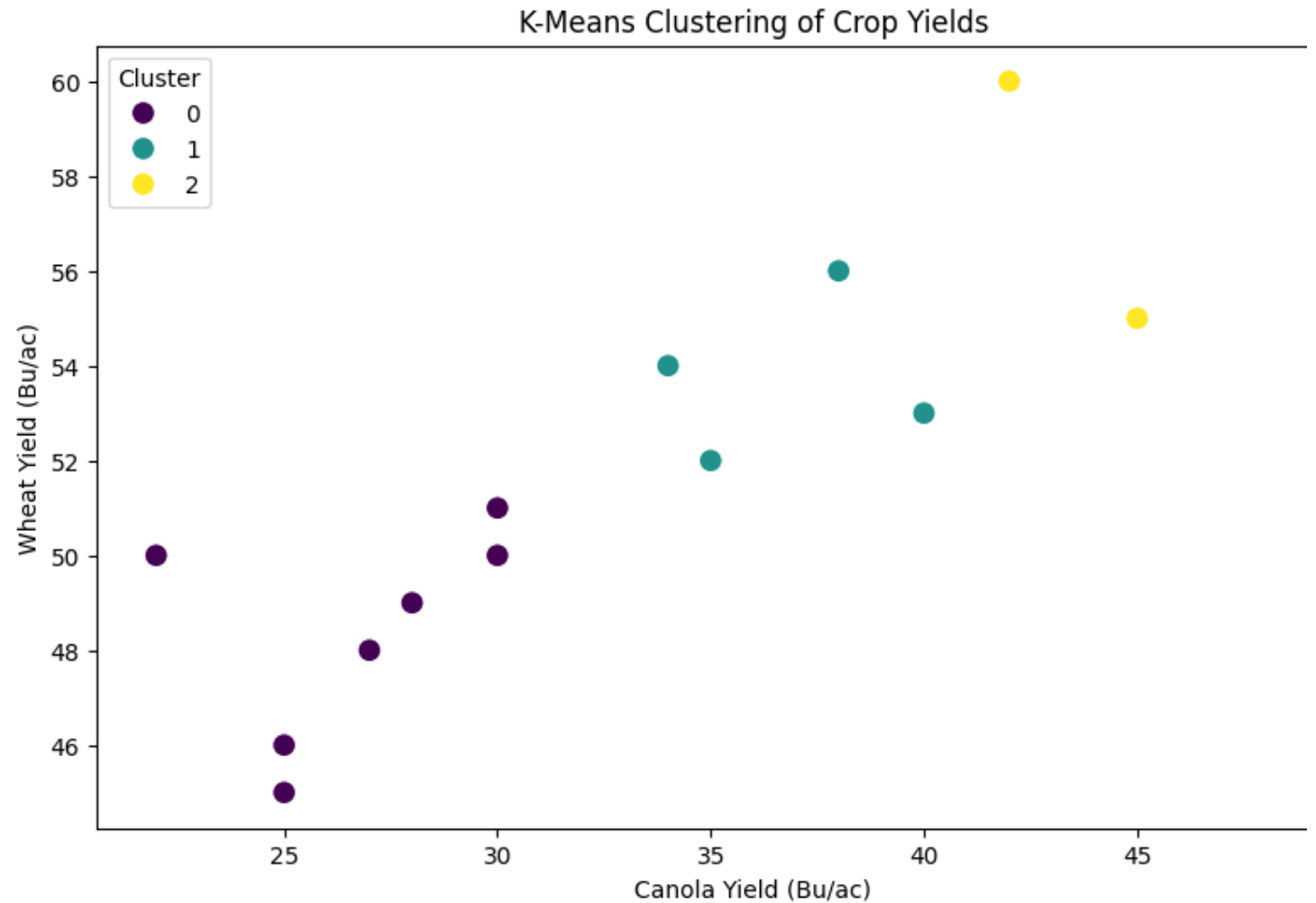
Correlations Between Crop Yields

- This heatmap visualizes the correlations between different crop yields, helping us understand interdependencies.



Clustering Analysis

- Identification of Homogeneous Regions
- Targeted Agricultural Practices
- Predicting Crop Yields
- Climate Impact Analysis
- Breeding and Research



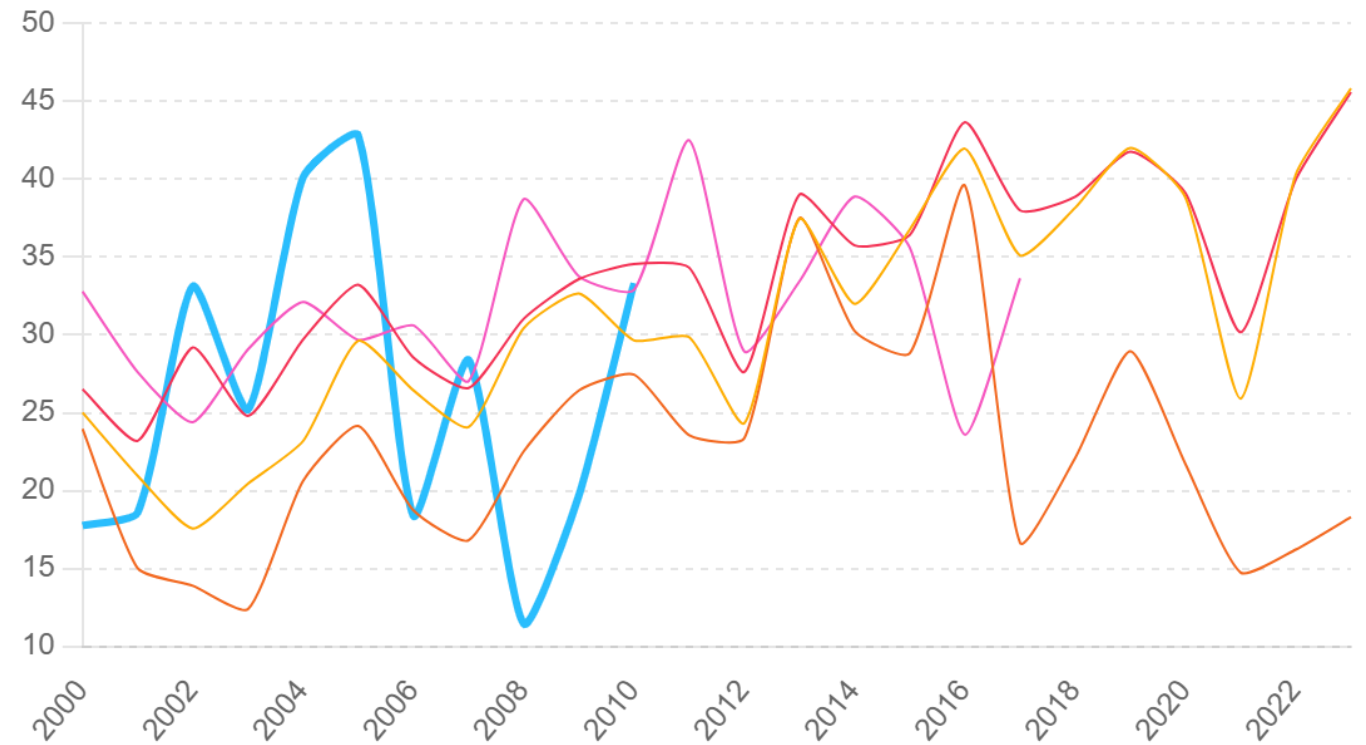


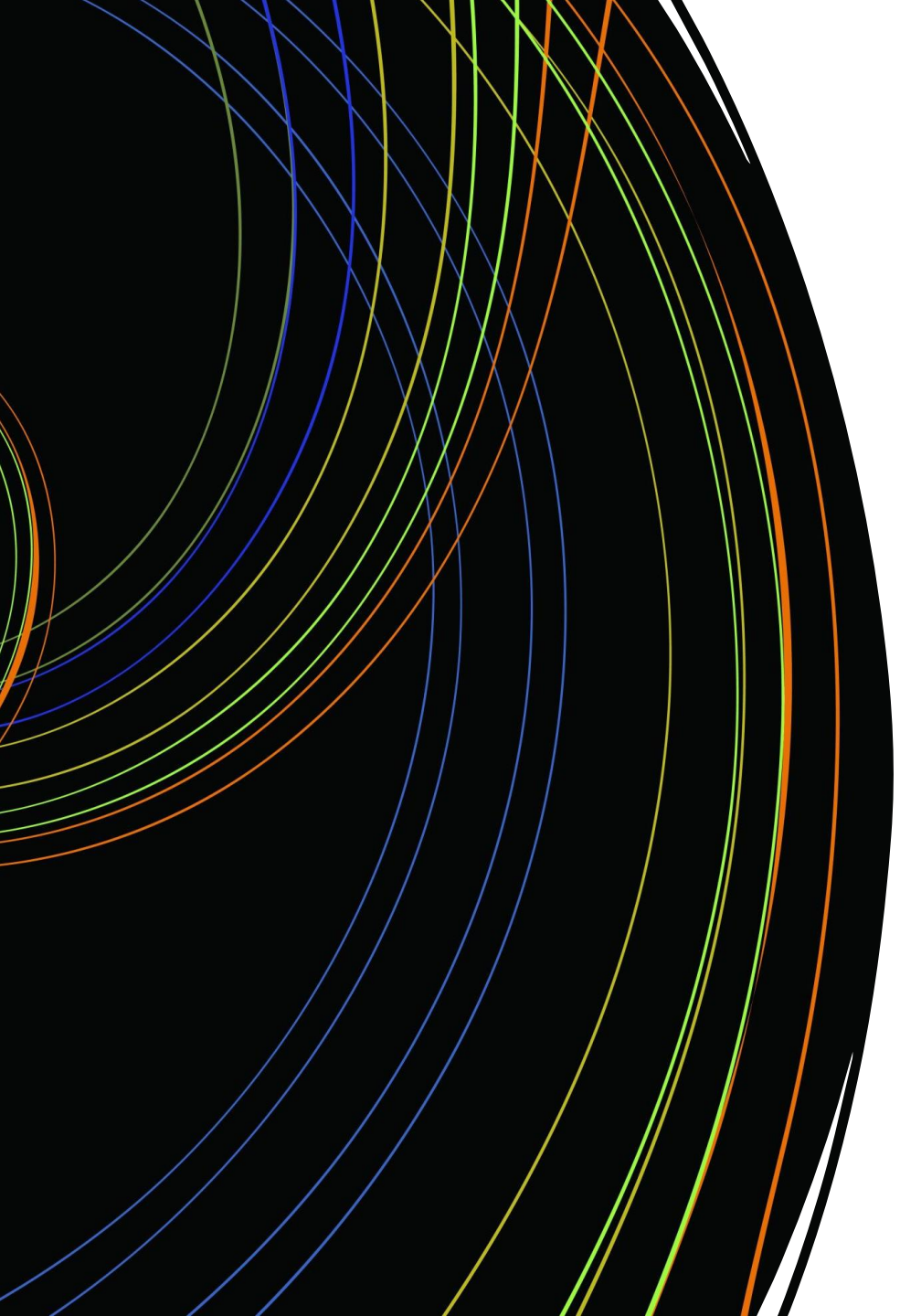
Canola Yield Clusters

- Cluster 0: 21.06 Bu/ac
- Cluster 1: 27.43 Bu/ac
- Cluster 2: 28.37 Bu/ac
- Cluster 3: 32.22 Bu/ac
- Cluster 4: 34.18 Bu/ac

Average Yield Trend for Each Cluster

- This chart shows the average yield trends for each identified cluster.





Thank You

