

# TANZANIA WATER WELLS PREDICTION

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# Background

- Tanzania with a population of 570,000, there are over 60,000 wells across the country
- Its government estimates that only 61% have basic water access while 39% still lacks basic water supply.

# Agenda

- Business Problem
- Problem statement
- Data Overview
- Analysis
- Modelling
- Recommendation
- Conclusion



# Business Problem

- Tanzania has made a significant progress towards access to water and sanitization



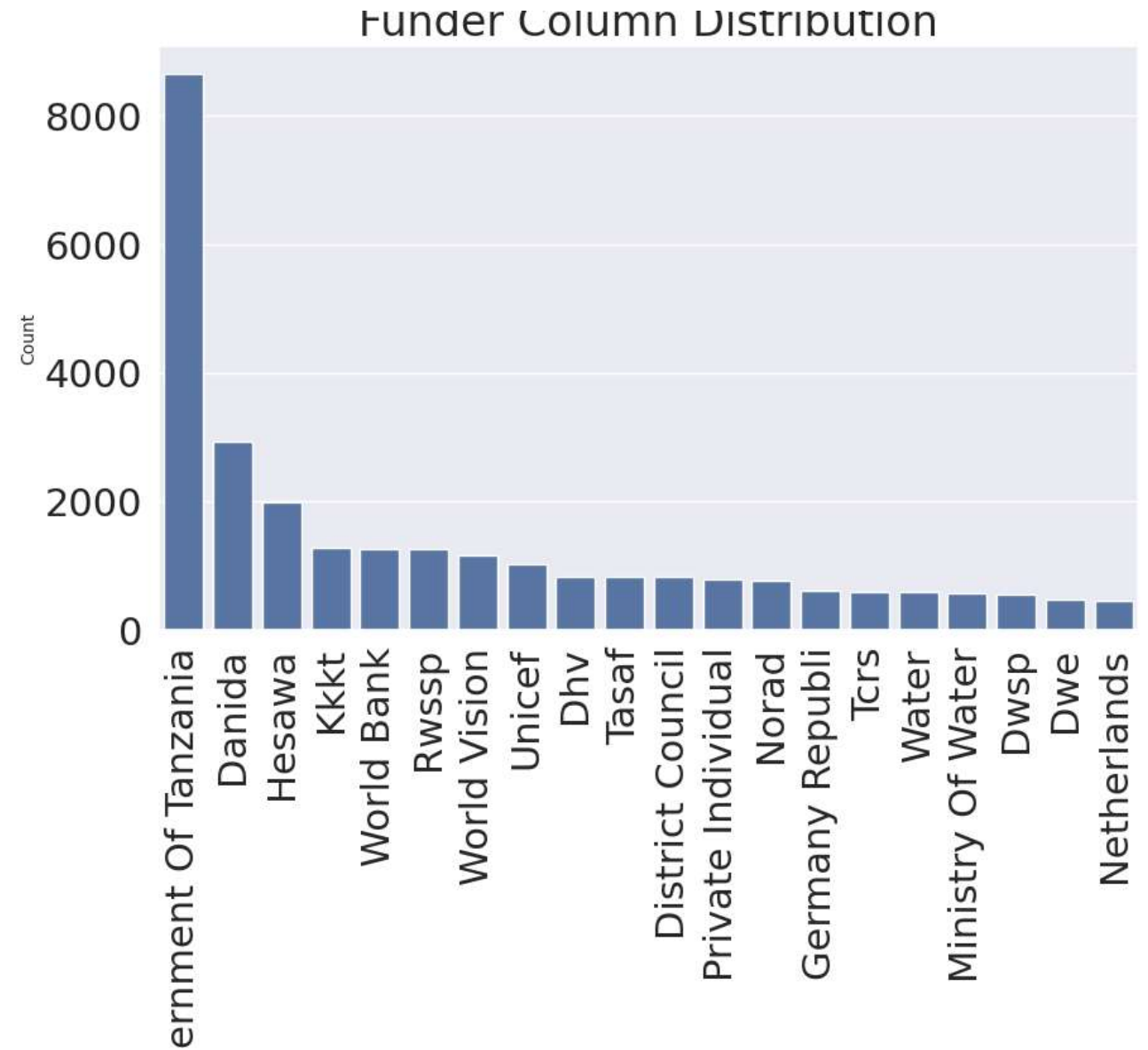
# Data Overview

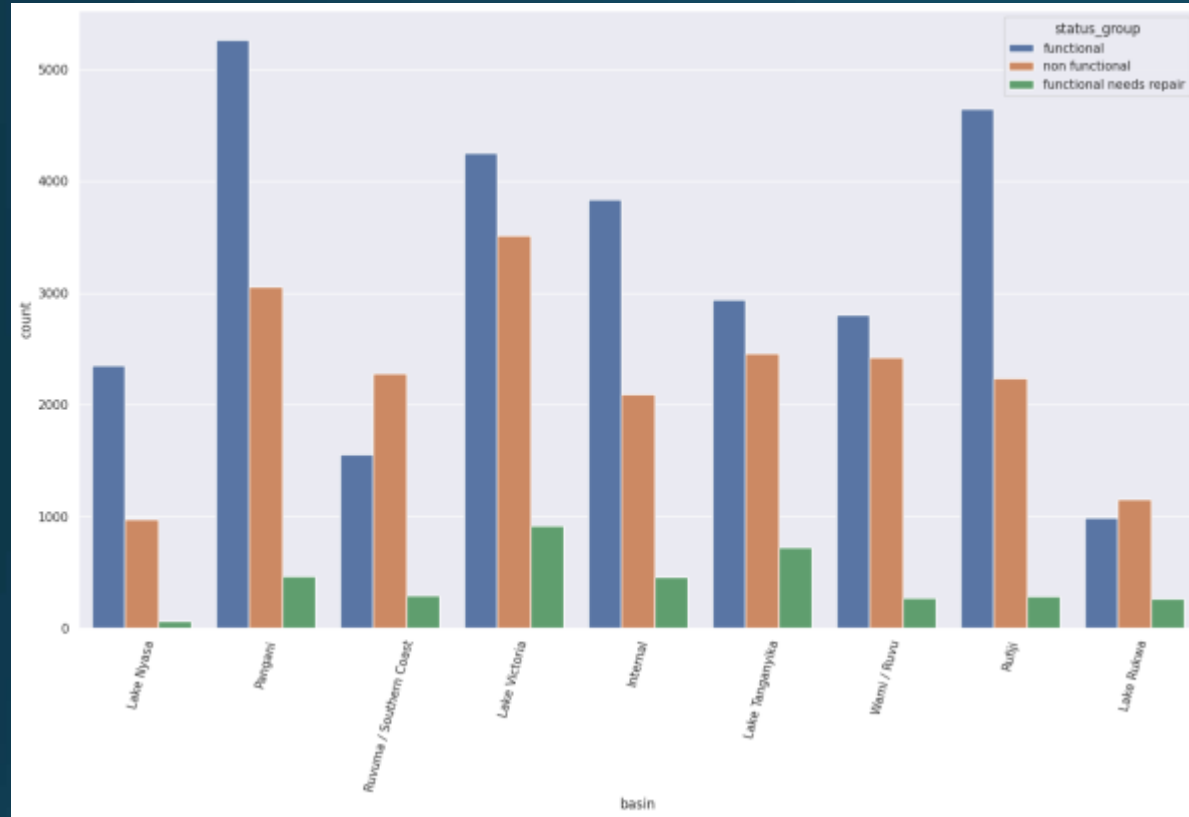
driven data-  
Tanzanian water wells



# Analysis

- Univariate nongraphic analysis

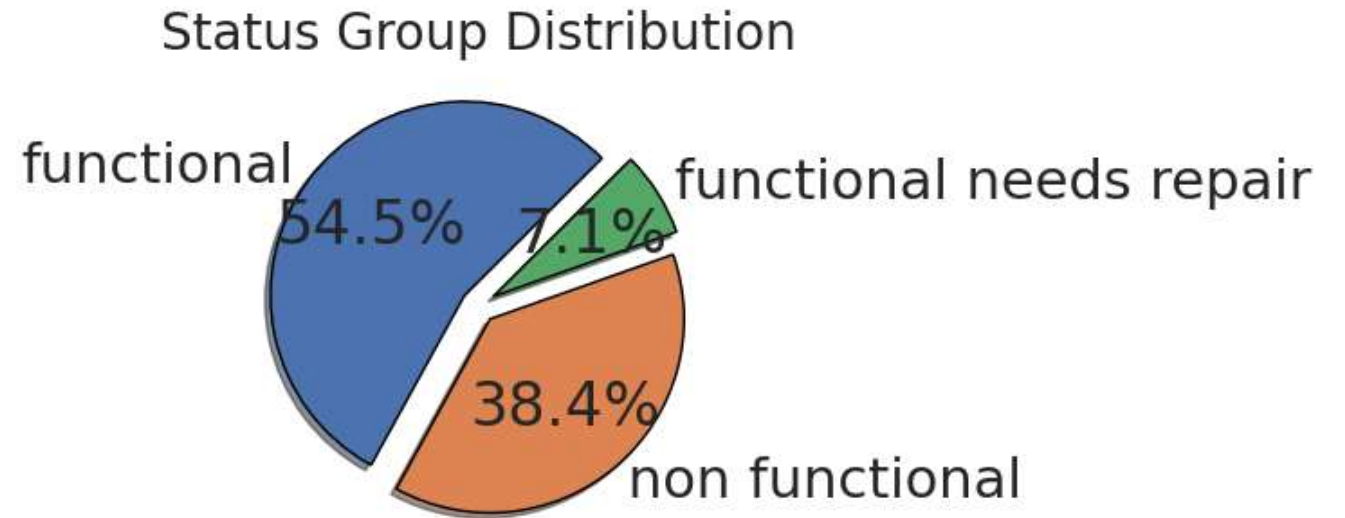




Bivariate analysis

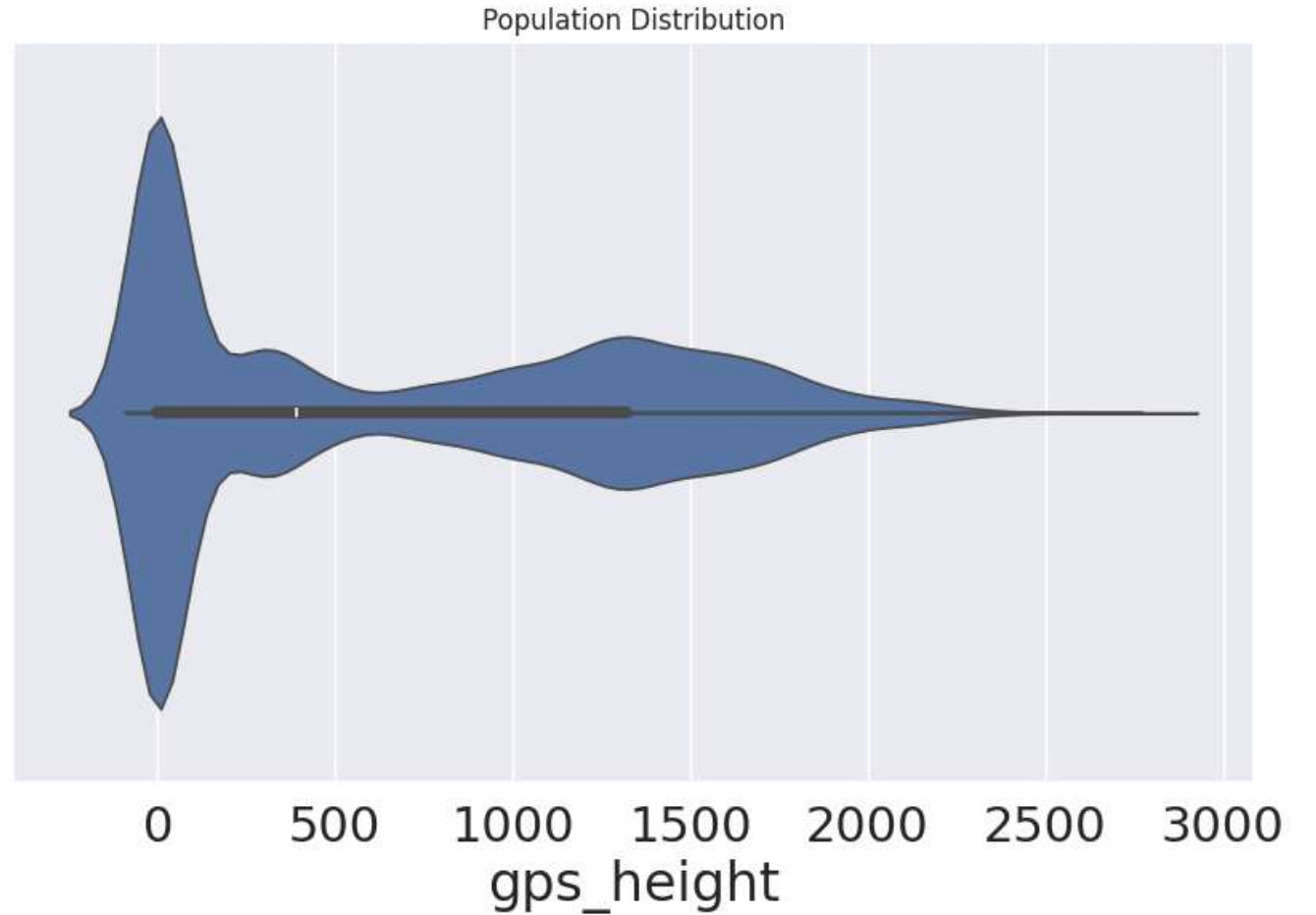


# Status Group Distribution





# Population Distribution



# Modelling

- Recall is the main metric of model selection
- Our model predicts non functionalities while minimizing false negative

## Best Model

Random Forest Classifier

# Recommendation

- The UN Habitat should investigate access of water supply in urban areas for their initiative in addition to fixing and building their water pumps then they would be making tremendous contribution towards 2030 agenda to achieve sustainable Development Goals

# Conclusion

- The model did well with continuous training but with more updated data it can make better predictions and improve on its performance

**Together let's improve Tanzania water wells!!**



**THANK YOU**