

Tanzanian Water Wells



Water pump functionality in rural schemes
Danayt Aman

Background

- Developing country
- Population of 67.4 Million
- GDP of US \$67.8 Billion
- Growth projection 6% 2025



Goals

- Address some important UN sustainable dev goals in TZ
 - Water access
 - Water sanitation
 - Poverty reduction
- Mission improving methods
 - Identification
 - Action

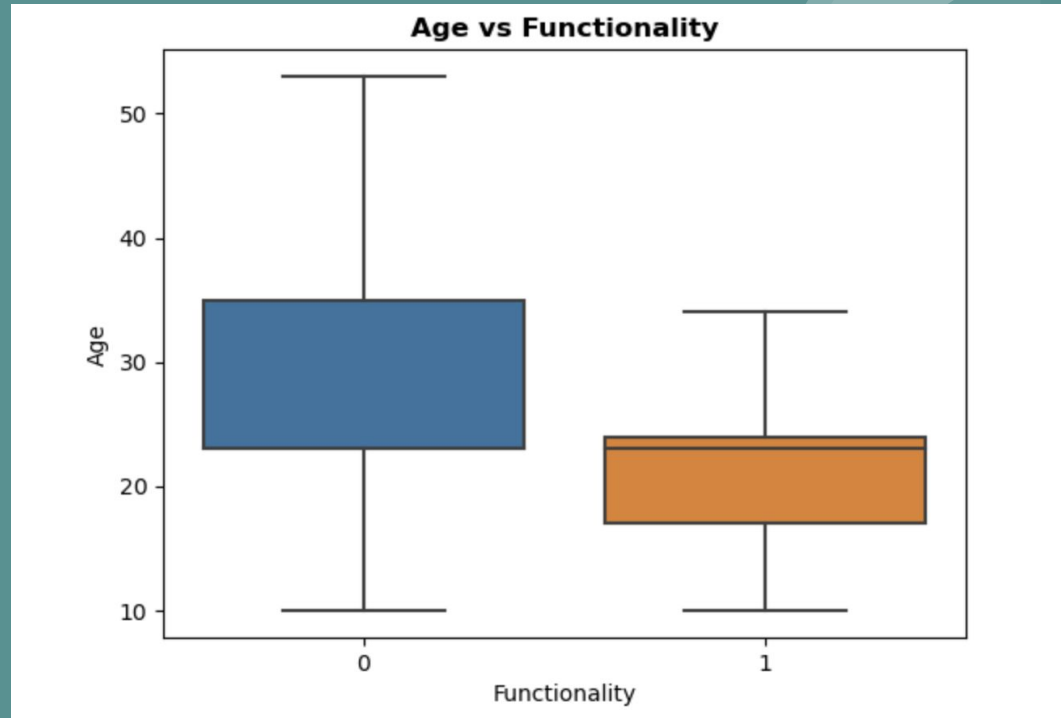


Water scarcity

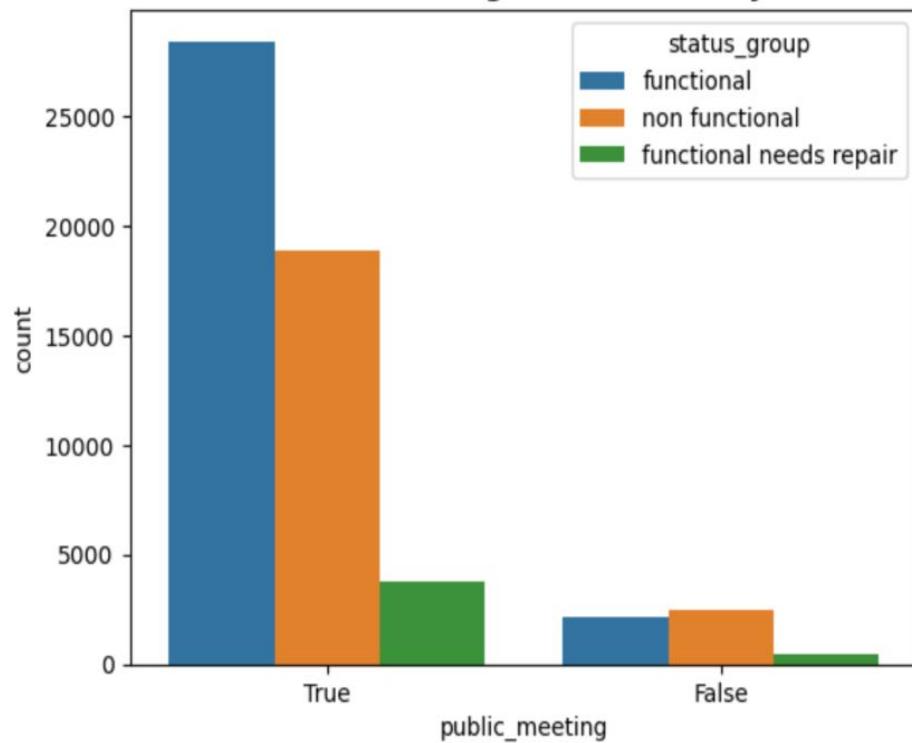
“...(28% of the population) lack access to safe water.. (73%) lack access to safely managed household sanitation facilities” (water.org).

From our water scheme data:

- 61% functional
- 37% non-functional



Public meeting and functionality



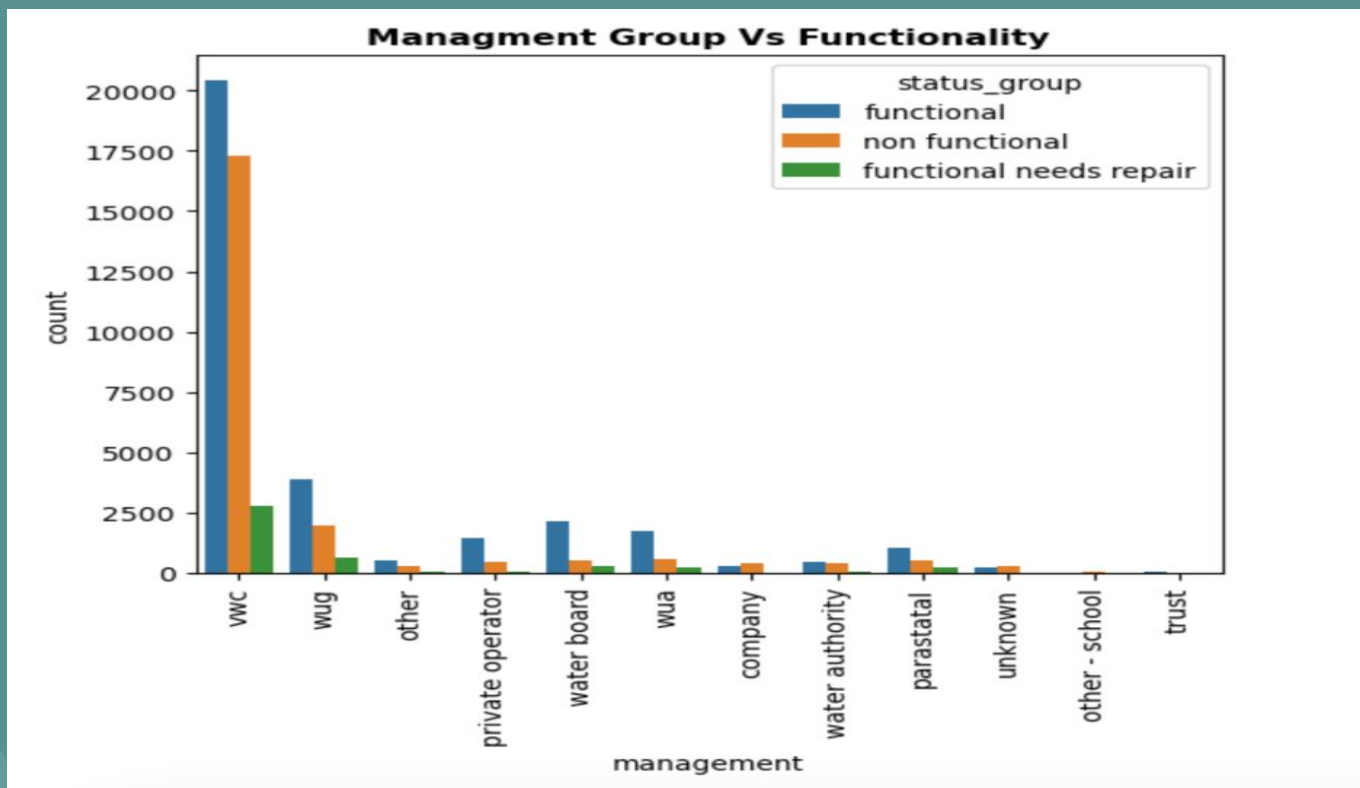
74%

Balanced Accuracy

Predictive Model Given a schemes Features

Top 10 features affecting Functionality

Quantity_group
Water point
Source
Installer
Gps height
Payment
Construction year
Public meeting
Extraction type
Scheme management

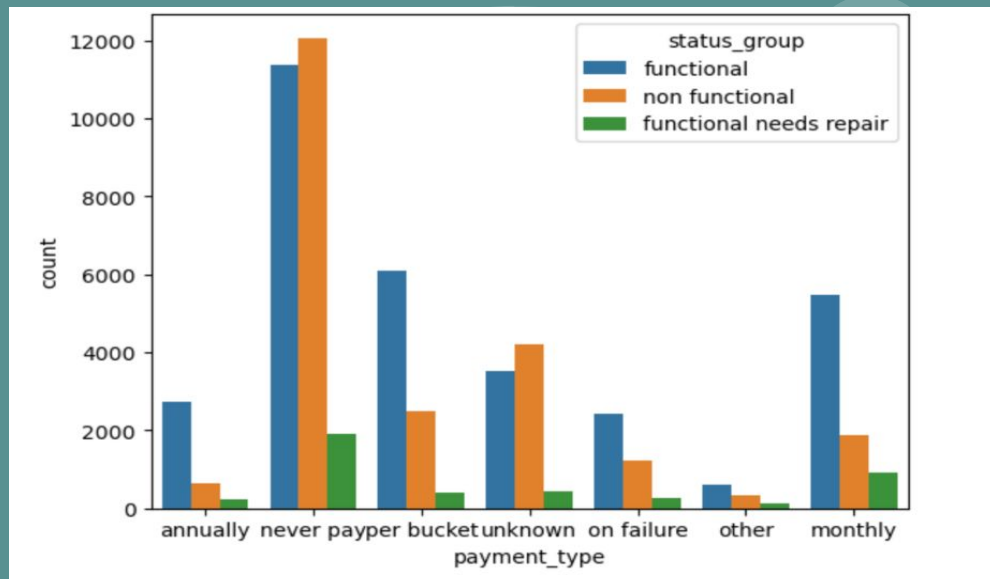


Recommendations

- Community engagement
- Proactive Maintenance
- Adopting This Model



Next steps



- Improve model with better data
- Identify micro lending possibilities

Thank you!

