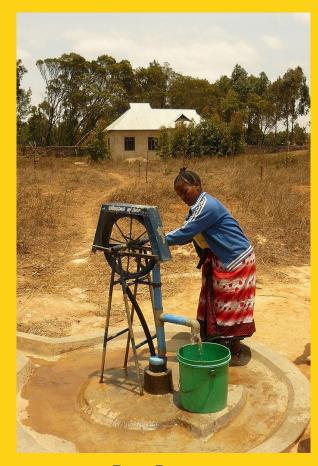


Predicting Water Pump Functionality in Tanzania

Data Analysis by Emily J. Cain Universal Health Organization

Access to Water in Tanzania

- About 50% of the country's population (~30 million people)
 lack access to an improved water source
- Access to water not only has an effect on health and disease, but also affects food production, economic growth, and education.
- Less access in rural areas

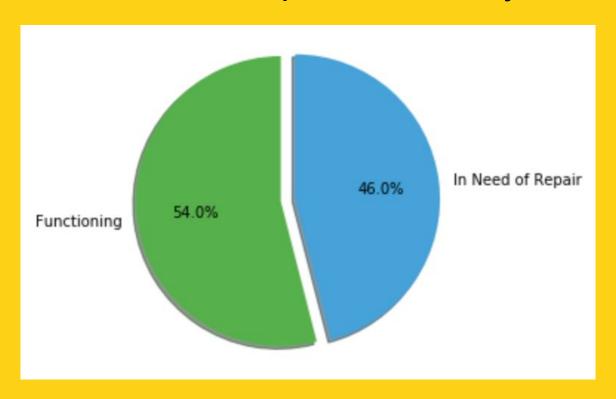


Rope Pump

Water Pump Installation & Repair

- 59,400 water pumps
- Functioning?
- Need repair?
- Which factors are most important?

Water Pump Functionality



Using Data for Real-World Application

80% Accuracy = 47,520 water pumps

Important Characteristics

- Location (Latitude & Longitude)
- Population
- Water Pressure



Kigogo Village, Tanzania

More Data = Better Predictions

- As more pumps are installed, inspected, and repaired, we can add to the data we have
- The math used for the predictions becomes more accurate with more samples
- Better predictions allow for more efficient use of resources

Thank you for your Time



Questions?