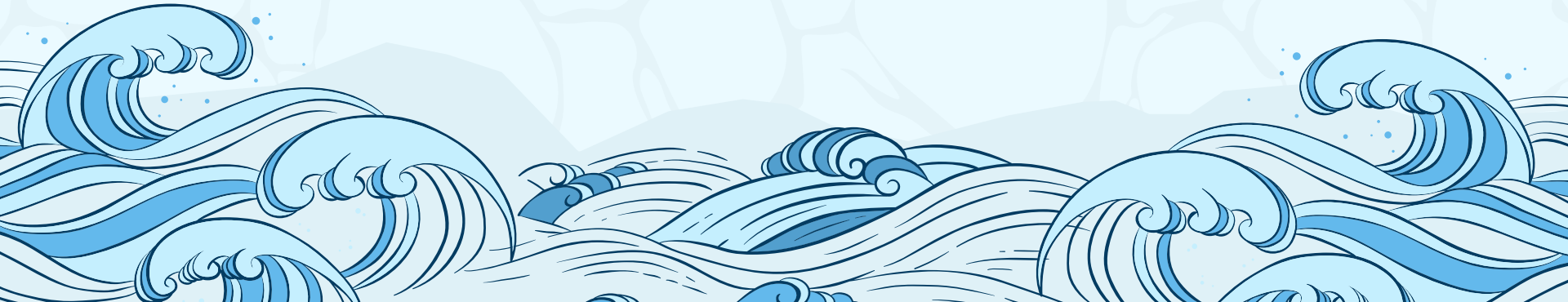
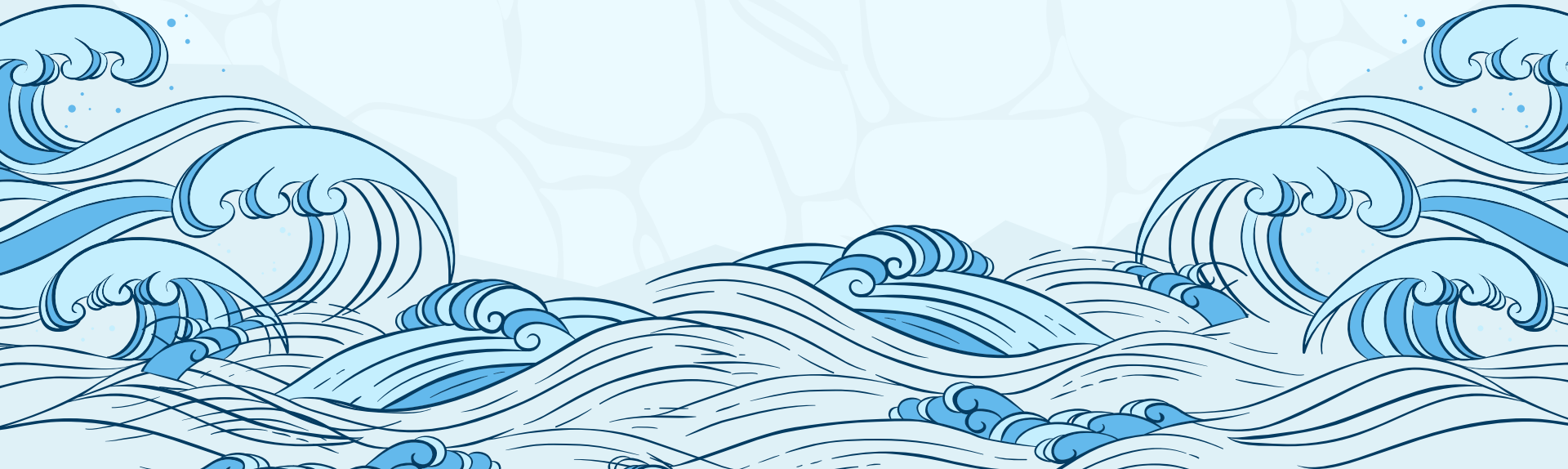
Tanzanian Water Well Functionality

For the head of the Tanzanian Ministry of Water



Presented By:

Alex Karadjov



What Are We Trying To Accomplish?

Predict the **functionality** of water wells

Which **features affect** the **status** of water wells

Why Is This Important?

4 million people do **not** have access to **safe water**

30 million people **lack** access to improved **sanitation**

Help **ensure** that **safe, clean** water becomes **more accessible** across Tanzania

About our Data

- **DrivenData.org**
- **Taarifa** and **Tanzanian Ministry** of **Water**
- **Over 59, 000 Data Points**

Final Model

Final Model

Accuracy : 72%

(overall correctness of predictions)

Precision : 61 %

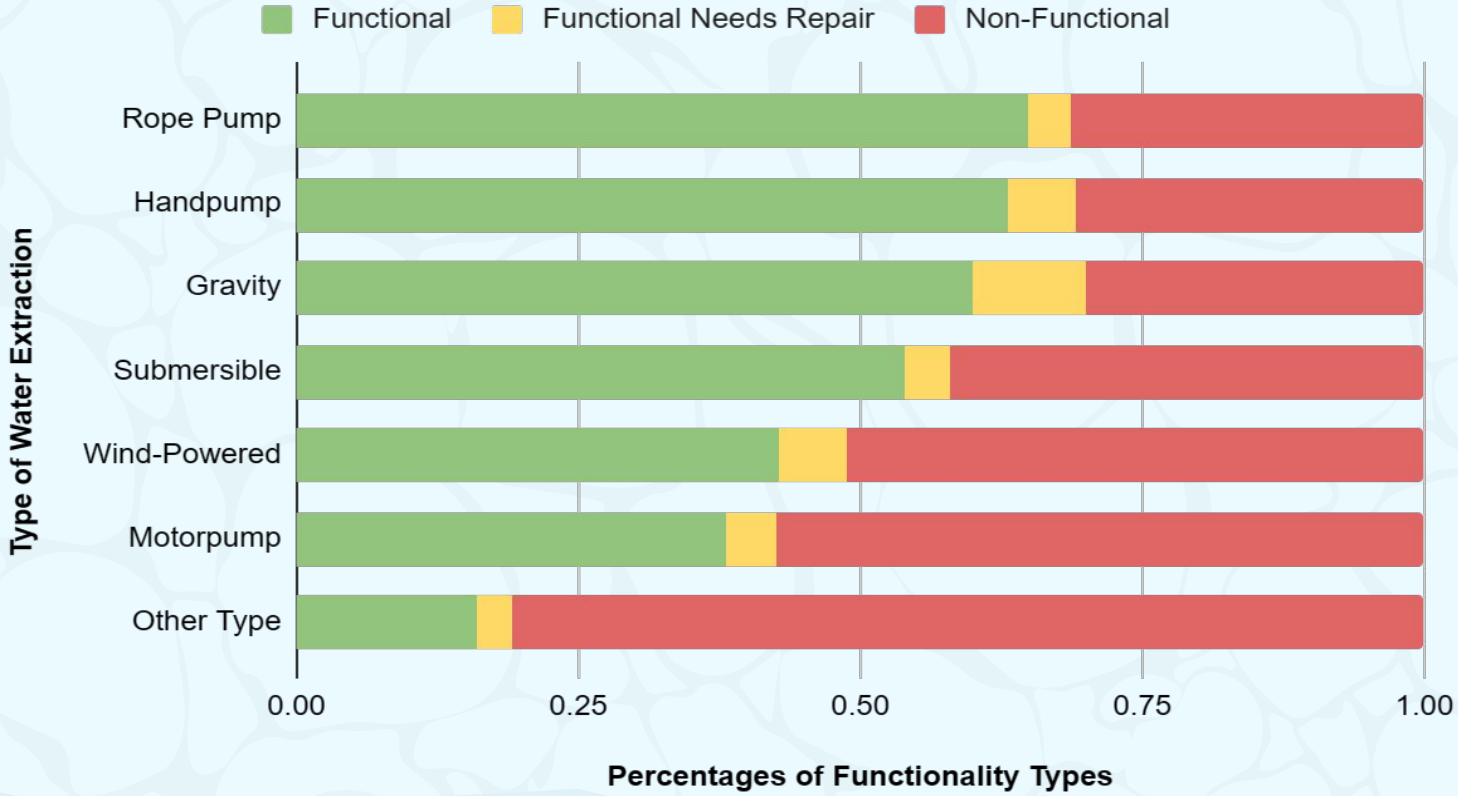
(the accuracy of positive predictions)

Final Model

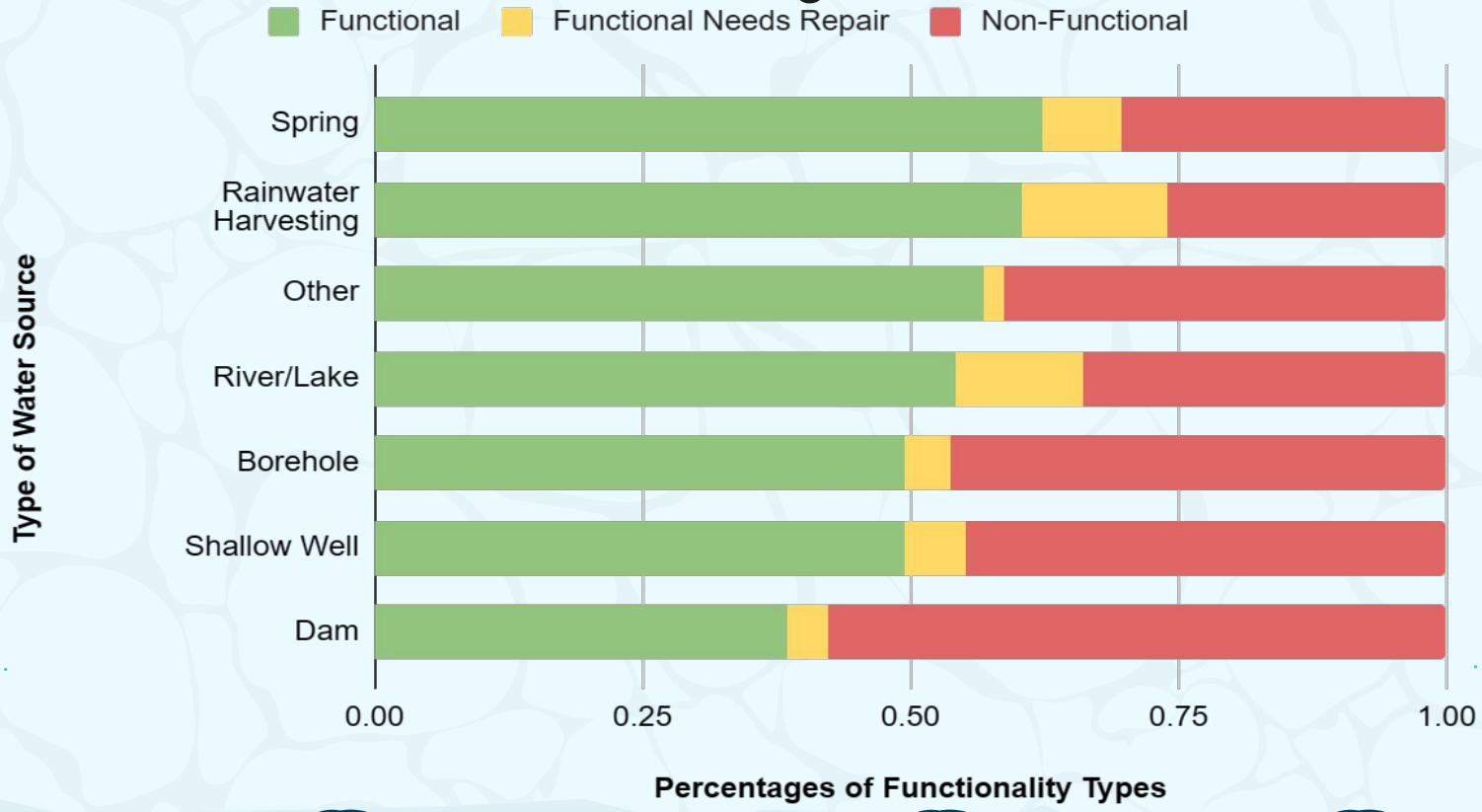
Top 3 Most Important Features:

1. Water **Point**
2. **Source** of Water
3. Type of Water **Extraction**

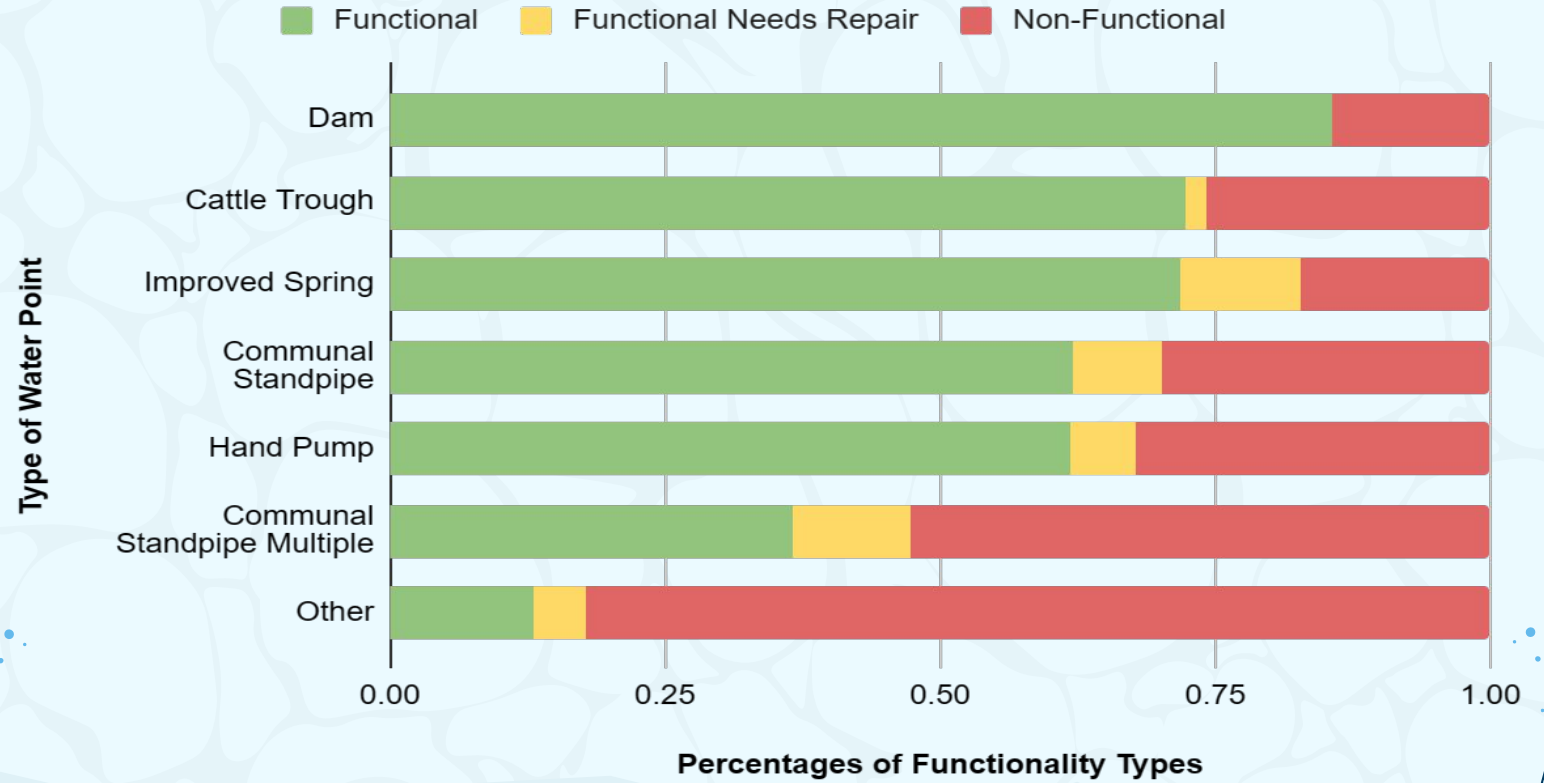
Water Extraction by Functionality



Water Source by Functionality



Water Point by Functionality



Future Recommendations

Three

Avoid

Two

Maintenance

One

Building

Next Steps

- Focus on **regions** in Tanzania
- **Geographical** information about the **water sources**
- Types of **water pumps** and **water quality** in specific **regions**

Thank you
Questions?

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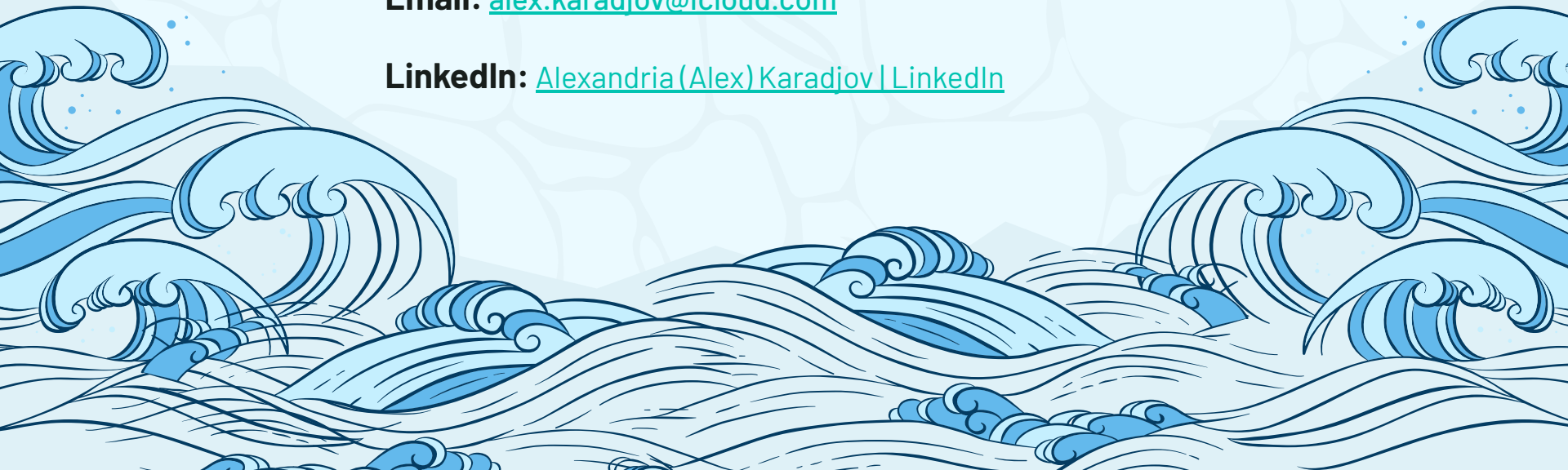

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