# **SDG PROBLEM DEFINITION**

The Sustainable Development Goal (SDG) that has been chosen to be defined is SDG 6 ; **Clean Water & Sanitation**. The problem in this SDG that is to be solved is **access to clean drinking water**.

## PROBLEM TO ADDRESS

**Inadequate Access to clean drinking water in rural areas**

Lack of access to clean drinking water leads to contraction of water-bone diseases like Cholera, Typhoid etc. In addition to this, it also leads to poor quality of life & poor health outcomes. This is a challenge that many rural communities in the world face even in today’s technologically advanced world.

## Data Solution

A Water Access Monitoring System for tracking quality & availability of clean drinking water in rural areas was used to develop & monitor data. The data that was developed included:

* Water source types e.g rainwater, rivers.
* Daily water availability in Liters.
* Water quality measured in combination levels such as chemicals.
* Population size.
* Distance to nearest water source in Kilometres.
* Maintenance frequency of water infrastructure.

The generated data is shown below:

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Name  Of  Tribe | Water Source | Water Quality Rating | Water Availa-bility  (Litres) | Popu-lation size | Distance to Water Source (km) | Last  Maintenance  Date | Waterborne Disease Incidents per 1000 people |
| Luhya | Well | 6 | 800 | 2000 | 2 | 2024-01-15 | 50 |
| Kikuyu | River | 4 | 500 | 1500 | 4 | 2023-12-10 | 120 |
| Luo | Rainwater | 8 | 900 | 800 | 1 | 2024-01-05 | 20 |
| Kalenjin | Well | 7 | 700 | 1200 | 3 | 2023-11-25 | 40 |
| Kisii | River | 5 | 600 | 1700 | 5 | 2023-12-20 | 90 |
| Giriama | Rainwater | 9 | 1000 | 500 | 0.5 | 2024-01-18 | 15 |
| Turkana | Well | 3 | 300 | 2500 | 6 | 2023-10-15 | 150 |
| Meru | Well | 5 | 650 | 1600 | 2 | 2023-11-10 | 85 |
| Indian | River | 6 | 850 | 2100 | 4.5 | 2024-01-02 | 55 |
| Arab | Rainwater | 7 | 950 | 700 | 1 | 2023-12-25 | 30 |
| Koisan | Well | 4 | 550 | 1300 | 3.5 | 2023-11-30 | 100 |
| Zulu | River | 8 | 1100 | 1800 | 5.5 | 2024-01-10 | 25 |
| Wolves | Well | 9 | 900 | 900 | 1.5 | 2024-01-12 | 10 |
| Silver Lake | Rainwater | 5 | 700 | 600 | 2 | 2023-12-15 | 70 |
| Spring Valley | River | 3 | 400 | 1400 | 3 | 2023-11-05 | 130 |
| Elmwood | Well | 7 | 800 | 1500 | 4 | 2023-12-28 | 45 |
| Birchwood | River | 6 | 600 | 1200 | 5 | 2023-10-22 | 75 |
| Redwood | Rainwater | 8 | 1200 | 850 | 1.2 | 2024-01-15 | 20 |
| Willow Creek | Rainwater | 4 | 500 | 1300 | 3 | 2023-11-10 | 110 |
| Eastfield | Well | 9 | 1000 | 950 | 0.8 | 2024-01-05 | 15 |
| Clearview | River | 5 | 700 | 1100 | 2 | 2023-12-18 | 90 |
| Highland | Well | 3 | 450 | 1700 | 4 | 2023-11-30 | 140 |
| Meadow | Rainwater | 6 | 850 | 1200 | 2.5 | 2023-12-05 | 65 |
| Foxes | River | 7 | 950 | 650 | 1.5 | 2023-12-20 | 25 |
| Greenfield | Well | 8 | 1050 | 1900 | 5 | 2023-01-10 | 30 |

The link to the pitch deck is shown below:

https://www.canva.com/design/DAGR8bx-Qd4/qOGJq4ggFs9Jk6sbMlJURA/edit?utm\_content=DAGR8bx-Qd4&utm\_campaign=designshare&utm\_medium=link2&utm\_source=sharebutton