Summary of

Maji Ndongo Water Project Dataset:

- The data that we have

Data has every need for water source improvement projects in logic:

- Project details: location, project start date, Project End Date (Date of Completion).

Costs: the difference between the actual cost and the cost that we have included in the budget (Budgeted Cost) for each project.

Project status: is the project completed (Completed) and not based (In Progress).

Suppliers: information about the companies working on the projects, such as the name of the company (Vendor), and the type of service they provide, such as drilling wells or installing water purification systems.

Data cleaning and analysis: -

First, we analyzed the data to see if there were problems with missing data or errors. We received incomplete data on dates and costs, reviewed and adjusted them from reliable sources.

We made sure that the relationships between the tables are working correctly, such as the project schedule and the supplier schedule.

Cost analysis and project performance: -

- We analyzed the costs in order to compare the actual costs with what we expected. We found that the prefectures of Zee Sokoto exceeded the budget by a lot due to the difficult conditions there and the bad roads.

We also calculated the average costs of projects in rural and urban areas, and found that improvements in rural areas cost almost twice as much as in urban areas.

Comparison of supplier performance:

- We analyzed the performance of the companies working on the projects, and we found that the mbs605 companies, which are operating in rural areas in Sokoto, their costs are very high, but because they are operating in difficult conditions.

On the other hand, the companies operating in the cities were cheaper because the conditions there are easier.

Water access ratio:

The data shows that the percentage of water access increased from 34% at the beginning of the project to 48% after a year of operation.

About 22% of the projects have been completed so far, and forecasts say that the project will be completed after 5 years.

The most important challenges: -

- High costs, especially in rural provinces such as Sokoto, where the budget exceeded by 40%.

Also, in some projects, it takes longer because the teams are moving from one place to another, which increases costs

Future recommendations: -

We suggested that teams focus on choosing projects that are close to them in order to reduce travel costs and get rid of projects faster.

We have prepared reports and dashboards to monitor the performance of projects at the state and governorate levels.