

Sudan Schools - Exploratory data analysis/ classification

1. Project Idea:

This project aims to analyze Sudanese schools' dataset and classify it according to the facilities to enhance the understanding of the current state of Sudanese schools. As known, Sudan one of the least development countries which still need many steps of development in many aspects but the most important is to provide well based education environment.

2. Relevance to Sustainable Development Goals (SDGs):

The project aims to contribute valuable insights and recommendations for advancing education in Sudan, aligning with broader sustainable development goals focusing on SDG 4 (Quality Education), 5(Gender Equality) and SDG 9 (Industry, Innovation, and Infrastructure).

3. Literature:

- [Analysis of the Availability of School Facilities and Infrastructure as an Effort to Accelerate School Quality Improvement](#)
- [Impact of School Facilities on the Academic Performance of Secondary School Students In Kaduna State, Nigeria](#)
- [The Impact of School Infrastructure on Learning](#)
- [Data-Driven Decision-Making Process In School Management](#)

4. Describe Your Data:

[Sudan-schools](#) dataset collected by Ministry of Education in cooperation with UNICEF and OCHA Sudan as contributor. The last update of the dataset was in June 2021. The dataset type is .xlsx, containing 38 columns with more than 19000 rows for different schools in Sudan. The dataset contains the number of students in each class from class 1 to class 8 in addition to total number of students, total number of females, total number of males, and teachers as well.

Moreover, the dataset contains facilities information. Including, electricity, water, bathrooms, fence and number of classes that need restructure.

5. Approach:

- Exploratory data analysis
- Classification