SASSCAL
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INTEGRATED WATER
RESOURCES MANAGEMENT

The Drop

2023.10.26

Data Collection Quest In Progress: Mr Maurício Clemente is a Ph.D. student whose research is making a significant impact in the field of Engineering focusing on modeling nitrogen and phosphorus concentration levels in the Cubango-Kavango river of Angola and Namibia. In the photograph above, he is captured in action performing field analyses, collecting samples of water and sediments to analyse biological, physical and chemical water quality parameters.

POSTCARD

Empirical and Data Driven Discoveries

After months of meticulous planning, Mr Clemente collected data representing the raw material of his research. He collected about sixty two samples of water and sediments in the Cubango-Okavango river specifically in localities such as, Cuangar and Calai (Angola), Mahongo, Kamutjonga, Divundu, Congoro, Linus Shashipapo, Ndonga Linena, Rundu, Nkurenkuru, Mussesse, and Katwitwi, (Namibia). These samples of water and sediments will be analysed in the field and in the laboratory using an Aqua Fluorometer and Spectrophotometer.

The aim of his study is to assess and model the increase of nutrients along the river due to excessive use of fertilisers, effluents discharges, domestic sewage and pesticides in the agricultural and livestock production.

The significance of his study is to ensure continuity in the distribution of ecosystem services, while preventing diseases, and focusing on the improvement of socio-economic conditions and the maintenance of ecosystems aimed at improving the river management of Angola and Namibia. The expected outcome of his research will be based on the concentration of nutrients and their environmental impact along the rivers which can be used by the Namibian and Angolan government in any future decision-making pertaining to the management of these rivers.

CUBANGO-OKAVANGO RIVER

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