

## **Assessment of the Contribution of Geographic Information System Technology in Non Revenue Water: Case Study Dar Es Salaam Water and Sewerage Authority Kawe - Mzimuni Street**

**Authors :** Victor Pesco Kassa

**Abstract :** This research deals with the assessment of the contribution of GIS Technology in NRW. This research was conducted at Dar, Kawe Mzimuni Street. The data collection was obtained from existing source which is DAWASA HQ. The interpretation of the data was processed by using ArcGIS software. The data collected from the existing source reveals a good coverage of DAWASA's water network at Mzimuni Street. Most of residents are connected to the DAWASA's customer service. Also the collected data revealed that by using GIS DAWASA's customer Geodatabase has been improved. Through GIS we can prepare customer location map purposely for site surveying also this map will be able to show different type of customer that are connected to DAWASA's water service. This is a perfect contribution of the GIS Technology to address and manage the problem of NRW in DAWASA. Finally, the study recommends that the same study should be conducted in other DAWASA's zones such as Temeke, Boko and Bagamoyo not only at Kawe Mzimuni Street. Through this study it is observed that ArcGIS software can offer powerful tools for managing and processing information geographically and in water and sanitation authorities such as DAWASA.

**Keywords :** DAWASA, NRW, Esri, EURA, ArcGIS

**Conference Title :** ICWEEM 2023 : International Conference on Water, Energy and Environmental Management

**Conference Location :** New York, United States

**Conference Dates :** September 11-12, 2023