

Chapter 5 - A comparative analysis of changes in surface water resources in dry and wet areas of Zimbabwe between 1990 and 2020: the case of Mazowe and Mberengwa Districts

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Abstract

This chapter assesses the changes in surface water resources in Mberengwa and Mazowe Districts of Zimbabwe between 1990 and 2020. An empirical research design was adopted in this study. Geographic information system and remote sensing techniques were adopted to collect and analyze data. Findings showed that Mazowe District had more surface water resources than Mberengwa District in 1990. The changes in surface water coverage in Mberengwa and Mazowe Districts were of different trajectories between 1990 and 2020 except for the last decade when both districts experienced a decline. The amount of precipitation received during these study decades influenced the quantity of surface water resources in both districts. Surface water resources are declining; hence the Zimbabwe National Water Authority is recommended to improve surface water resources especially, in dry regions of the country, by developing artificial water reservoirs in strategic sites to ensure constant supply of water for various uses.

Keywords

Arid region, Climate change, Developing countries, GIS, Remote sensing, Surface water resources, Wet regions