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THE SEDIMENTATION EFFECT OF BOSSO DAM ON BOSSO WATER WORKS IN BOSSO LOCAL GOVERNMENT AREA

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Abstract

This studies the effect of sedimentation in Bosso dam. The study reveals as a result of sedimentation the storage capacity of the reservoir reduce to below the theoretical estimated life span of 60 to 70 years. Reconnaissance survey was undertaken to the study area where it was observed that the dam has lost over 70% of its storage capacity only 30 to 45% for use. The source of sediment identified during the research includes: the farming activities both around and at upstream of the dam, erosion, animal grazing and sediments transported in form of sediments load as the river flows. Due to the seasonal nature of the tributaries that feed the dam it was also discovered that the volume of water in the dam fluctuate between seasons. The research concludes based on the findings that the water volume of the reservoir has reduced which lead to the inability of the dam to meet up with the need of Bosso community