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An Analysis of the Flood Management and Mitigation Measures in Zimbabwe for a Sustainable Future

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Abstract

Floods have prevailed in the recent years, hampering not only social but also the economic development as well. This global pandemic has caused loss of lives, property and economic damages in many countries, including Zimbabwe. Rainfall intensity in the country's seven main river catchments namely; Mzingwane, Gwayi, Save (or Sabi), Mazowe (or Mazoe), Sanyati, Manyame and Runde triggers flash floods due to high peak discharges. It is therefore of paramount importance to try and reduce or rather prevent these losses due to flood events. The main objective of this study is to ascertain flood events in Zimbabwe and discuss how best they can be managed for a sustainable future. The assessment is carried out using AQUEDUCT Global Flood Analyzer in which all the analysis is based on the Gross Domestic Product (GDP), population and the present and future (2030) urban damage. To estimate future changes and effectively suggest flood disaster management and mitigation strategies, three scenarios obtained from the Intergovernmental Panel on Climate Change 5th Assessment Report were utilized. A 5-

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