

CLIMATE CHANGE ADAPTATION AS GOVERNMENTALITY: THE CASE OF SEA DEFENSE SYSTEMS IN THE VOLTA RIVER DELTA OF GHANA

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ABSTRACT

River deltas are complex natural environments that represent a confluence of many physical, biological and human processes vulnerable to the impacts of climate change. The likely biophysical impacts of climate change on deltas have received substantial attention. However, relatively little attention has been paid to the ways in which the different stakeholders of deltaic environments frame the vulnerability of residents of deltas to climate change. The Volta River Delta (VRD) of Ghana is a compelling site in which to conduct such an examination because of the clear climate-related changes taking place in the Delta, and the fact that like many major delta areas in the world, the VRD is at the end of a managed river system heavily influenced by an upstream dam.

This study aims to further our understanding of how the identification of climate-related vulnerabilities, and the selection of interventions to address those vulnerabilities, can result in unintended outcomes that enhance, instead of ameliorate, vulnerabilities related to climate change, but also proceeding from other sources. It does so by examining the different positions of various actors relative to the sea defense systems in the Keta municipality and Ada East district of the VRD in order to understand how the perceptions of these groups construct the vulnerability of a particular place and its population to the impacts of climate change, identify sea defense systems as an adaptation to climate change, and understand and experience the outcomes of that sea defense system. By conducting a comparative study of sea defense systems

in two ethnically distinct districts through the lens of governmentality, this study identifies the specific perceptions and actions in each area that influence climate change vulnerability and adaptation.

This exploration of vulnerability and adaptation to coastal erosion in the VRD demonstrates that the complex environments of river deltas require multidimensional approaches through which to attempt to trace observed processes of (mal)adaptation and give reason for the outcomes, good and bad, that result. Such understandings can enable future adaptation decisions that promote the sustainability and well-being of coastal populations in Ghana and beyond.