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Public Health Infrastructure Resilience in the Face of Natural Disasters in Rwanda

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Abstract: This research delves into the resilience of Rwanda's public health infrastructure amidst natural disasters, a critical issue given that the Northern Province alone has witnessed no fewer than 1500 cases of disaster ranging from floods and landslides in the last five years, with more than 200 people killed and thousands of homes destroyed, according to MINEMA. In an era where climate change escalates the frequency and intensity of such disasters, fortifying the resilience of public health systems is paramount. This study offers a comprehensive analysis of the existing state of Rwanda's public health infrastructure and its ability to manage such crises. Employing a mix of literature review, case studies, and policy analysis, the study discerns key vulnerabilities and brings to light the intricacies of disaster management in Rwanda. Case studies centered around past natural disasters in Rwanda provide critical insights into the strengths and weaknesses of the existing disaster response mechanisms. A thorough critique of related disaster management and public health infrastructure policies reveals areas of commendable practice, along with gaps calling for policy enhancements. Findings guide the proposition of targeted strategies to bolster the resilience of Rwanda's public health infrastructure. This research serves as a significant contribution to the domains of disaster studies and public health, offering valuable insights for policymakers, public health and disaster management professionals in Rwanda and similar contexts. It presents actionable recommendations for improvement, underscoring the potential for enhancing Rwanda's disaster management capacity. By advocating for the strengthening of public health infrastructure resilience, the research highlights the potential for improved public health outcomes following natural disasters, thereby showcasing significant implications for public health and disaster management in the country, particularly in the face of a changing climate.

Keywords: public health infrastructure, disaster resilience, natural disaster, disaster management, emergency preparedness, health policy

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