

Investigating the Effectiveness of the National Flood Protection Plan (NFPP) in Mitigating the Inundation Events in Morocco

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Abstract

Despite its semi-arid to arid climate, Moroccan territory, like all Mediterranean countries, is susceptible to significant flooding. Such events have repeatedly occurred, often causing major damage to both public and private infrastructure as well as agriculture and resulting in numerous casualties. In response to the severity of these damages, the Moroccan government initiated a comprehensive study in 1999. This study culminated in the creation of the National Flood Protection Plan (NFPP), which aims to establish a comprehensive and detailed understanding of the actual and potential flooding risks throughout the entire country. This initiative seeks to identify and plan the various measures necessary to address these menaces. In the present study, we discuss the key stages and procedures followed to develop the NFPP, explore the reliability of the approaches used to create flood hazards maps, and examine the efficacy of the protection measures and the flood prevention options. The study further emphasizes the legal frameworks and regulations that bolster flood protection, alongside the institutional structures tasked with implementing action plans. Our examination indicates that while the National Flood Protection Plan (NFPP) has played a crucial role in alleviating flood impacts, current land use regulations are unclear and still insufficient. There is a pressing need for more comprehensive and explicit legislation to effectively govern urban development in flood-prone regions. Additionally, enhanced collaboration and information sharing among the responsible administrative bodies are necessary for improving flood management strategies.

Keywords

Moroccan Territory, National Flood Protection Plan (NFPP), Flood Hazards Maps, Legal Framework, Institutional Structures