

Impact of River Flooding on Learners' Academic Performance in Chilonga, Chiredzi South, Zimbabwe

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ABSTRACT: This qualitative study examines the impact of river flooding on learners' academic performance, particularly due to increased absenteeism in the Chilonga rural area. The primary aim is to explore how flooding affects learners' access to education and to address the gap in the literature regarding the specific implications of river flooding on academic outcomes in this region. Fifteen participants were purposively selected based on gender, experience, and knowledge relevant to the issue. Data were collected through open-ended interviews and were analysed thematically. The findings indicate that flooding, especially of the Chilonga River, severely restricts access to schools, which significantly contributes to poor academic performance and low pass rates. To address these challenges, local authorities are recommended to invest in flood-resistant infrastructure and community support initiatives to ensure reliable access to educational facilities during flood events.

KEYWORDS: absenteeism, academic performance, Chilonga, flooding.

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Introduction

The phenomenon of river flooding exerts a profound impact on educational accessibility in rural enclaves, a reality acutely manifested in the case of Chilonga in Chiredzi South, Zimbabwe. The calamitous destruction of the Chilonga Bridge over the Runde River on 12th March, 2025, has irrevocably severed a crucial conduit linking Chiredzi South to the Central Business District, thereby exacerbating the myriad challenges confronting learners from diverse villages (TellZim, 2025). These learners now grapple with the formidable task of traversing flooded rivers, often resulting in their unanticipated entrapment or coercion into precarious living arrangements characterised by insecurity and vulnerability. Certain schools in the vicinity of the Chilonga River, as well as other areas, have reported alarmingly low pass rates—some reaching as low as zero—in crucial national examinations, including Grade 7, Ordinary Level (O-Level), and Advanced Level (A-Level) assessments (Mhlanga & Chidarikire, 2025). This disconcerting trend can be attributed to several compounding factors, foremost among them being the incessant flooding of rivers that severely restricts learners' access to educational opportunities (Asare et al, 2024).

Additionally, the chronic shortage of qualified teachers and inadequate educational resources, such as textbooks and other essential materials, further exacerbates this precarious situation (Bombardelli, 2020; Ihemeso, 2024). Consequently, these interrelated challenges culminate in diminished academic performance, hindering the educational advancement of learners in these communities (Gandidzamwa & Togo, 2021). This tragic predicament not only jeopardises the physical safety of learners but also precipitates a marked increase in absenteeism, consequently undermining academic performance (Chiponda, 2022). Historically, the bridge functioned as a pivotal artery, fostering not only educational engagement but also facilitating access to essential services such as healthcare and financial institutions. With the dismantling of this vital infrastructure, countless residents of the Xhangani community find themselves ensnared, subjected to heightened risks, including tragic fatalities during flooding events. Despite a body of literature acknowledging the ramifications of natural disasters for educational paradigms, a palpable gap persists regarding the nuanced implications of flooding for academic outcomes in rural domains akin to Chilonga. This study seeks to illuminate this gap by meticulously examining the interrelationships among river flooding, student absenteeism, and academic achievement. Through this exploration, the research endeavours to yield insights that will fuel the development of effective policy interventions and bolster community support initiatives to mitigate the adverse effects of such environmental challenges.

Literature Review

In the United States, particularly in flood-prone regions, learners frequently experience school closures, resulting in lost instructional time and disrupted academic progress (Hanna & Oliva, 2016). The displacement of families often leads to instability, further complicating learners' ability to focus on their education. Similarly, in South Africa, flooding isolates rural communities, making it difficult for

learners to reach their schools (Macheka, 2024). The limited transport infrastructure exacerbates this issue, leaving many learners unable to attend classes during critical periods. In Zimbabwe, infrastructure inadequacies are glaring, as evidenced by the collapse of bridges such as the Chilonga Bridge (Muzingili et al., 2025). This collapse not only isolates villages from educational institutions but also exposes learners to hazardous conditions when attempting to traverse flooded areas. Despite existing studies on the general impacts of flooding on education, there remains a significant gap in understanding the specific educational outcomes associated with river flooding in these regions, particularly regarding attendance rates and performance metrics.

In response to these challenges, various strategies have been developed to mitigate the effects of river flooding on learners. In the United States, schools are increasingly adopting comprehensive emergency preparedness plans, incorporating alternative educational methods, such as online learning, to ensure continuity during flooding events (McKenzie et al., 2024). However, there is limited research exploring the effectiveness of these plans in enhancing student outcomes amidst varying flood scenarios. In South Africa, government initiatives focus on improving flood-resilient infrastructure, including the construction of robust school buildings and the enhancement of transportation networks to secure safe access for learners during adverse weather conditions (Jashari & Rao, 2024). However, the impact of such infrastructure improvements on actual student attendance and performance has not been extensively studied. In Zimbabwe, community-based strategies, such as establishing temporary learning centres during flood events, have shown promise; however, systematic evaluations of their effectiveness in sustaining educational engagement and minimising disruptions are lacking (Dzvimbo et al., 2020). This study seeks to address these research gaps by examining the specific impacts of river flooding on educational outcomes and assessing the effectiveness of mitigation strategies across three distinct contexts.

Findings

Firstly, the destruction of essential infrastructure, especially the Chilonga Bridge, has severely restricted learners' access to educational facilities, resulting in increased absenteeism and heightened vulnerability for learners attempting to cross flooded areas. Moreover, schools in Chilonga have experienced alarmingly low pass rates in national examinations (some as low as zero), attributed to persistent flooding, a shortage of qualified teachers, and inadequate educational resources. Lastly, current strategies, such as community-based temporary learning centres and improved infrastructure, have not been systematically evaluated, highlighting a critical gap in understanding their effectiveness in sustaining educational engagement during flood events.

Conclusion

In Chilonga, Chiredzi South, river flooding poses a significant barrier to learners' academic

performance, primarily by limiting their access to educational facilities and leading to higher absenteeism rates. The destruction of essential infrastructure, such as bridges, further exacerbates these challenges, isolating communities and increasing learners' vulnerability. Consequently, learners encounter not only logistical barriers but also safety concerns, which collectively undermine their educational achievements.

Recommendations

To effectively address the challenges posed by river flooding, it is recommended that parents engage in school-community dialogues to facilitate their children's consistent attendance and stay informed about educational initiatives. More so, the Ministry of Roads, Infrastructure, and Development should invest in flood-resistant infrastructure, including the repair and upgrading of roads and bridges, to ensure reliable access to schools. Additionally, school authorities and teachers are encouraged to adopt flexible learning strategies, such as blended education models and temporary learning sites during floods, to maintain instructional continuity and support displaced learners. Furthermore, village heads should promote local preparedness initiatives to educate residents on flood navigation and establish community networks for affected families. Lastly, parliamentarians must champion policies that allocate the necessary resources to improve educational infrastructure and enhance disaster-preparedness programs.

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