State Demolition and Forced Eviction as Flood Vulnerability Management in Accra, Ghana

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Abstract

Accra, Ghana, has experienced devastating floods over the last two decades. Between 2001 and 2015, floods resulted in the deaths of over 250 people, displaced 178 750 individuals, and destroyed more than $50 million worth of informal livelihoods. The most affected residents are those who live in slums and informal communities. The urban authorities have restricted their approach to demolishing affected buildings, evicting flood victims, and distributing relief items. This study explores the rather hostile strategies adopted by city authorities in addressing flood vulnerability among residents of informal communities. Using qualitative methods, including community focus group discussions and interviews with flood victims, key informants, community leaders, and officials from relevant metropolitan institutions, the study reveals the diverse socio-economic implications of demolition and forced eviction as the state's flood management strategy. Humanitarian and socio-culturally acceptable flood management approaches are proposed.

Keywords: Urban informality, flood vulnerabilities, urban governance, flood management approaches, forced eviction, demolition.

Introduction

Urban flooding is a major challenge in growing cities in the developing world (Jha et al., 2012). Its devastation, in terms of the displacement of households and destruction of livelihoods, infrastructure, and human life, has been extensively studied (Lamond et al., 2011). In African cities, flood events are often associated with informal communities (Douglas et al., 2008; Amoako, 2016; Amoako & Inkoom, 2017; Amoako & Frimpong Boamah, 2020). Low-income areas significantly impact their residents, who typically live in precarious conditions without tenure security, lack access to flood insurance schemes, and have inadequate basic household facilities. Consequently, scholarship on urban informality and flood vulnerability in African cities has treated the two themes as directly related. In Ghana, there is a relationship between flooding vulnerability and urban informality. Urban flooding and informality appear to have led city authorities to resort to hostilities and the brutal forced eviction of residents from flood-affected informal communities, premised on the belief that they are occupying waterways (Poku-Boansi et al., 2020).

Using selected cases of flood events in Accra's informal communities, the main objective of this study was to explore the state's adoption of forced removals and the demolition of houses and structures in informal settlements and slums as the primary flood management approach. This study is situated upon three main conceptual pillars: informality, flood vulnerability, and urban governance. The interactions of these conceptual pillars produce various outcomes that can explain flood management in informal communities in Africa, particularly in Ghana.

The paper is structured into four sections. The first section sets the context for the study, followed by a framework that describes informality, flood vulnerability, and urban governance. This section also outlines the methodology adopted

for the study. The third section presents the findings and discussion of the study. The final section concludes the paper and proposes recommendations based on the study.

Informality, Flood Vulnerability, and Urban Governance

City authorities and the urban land use planning process in the Global South view urban informality as a nuisance (Watson, 2009; Roy, 2011). In African cities, urban informality was first explored by Keith Hart in the early 1970s when he distinguished between the informal and formal sectors, along with their "legitimacies" and "illegitimacies" in the postcolonial emergent urban economy of Accra, Ghana (Hart, 1973). Since then, urban research across cities in the Global South has employed the concept of informality and its associated terminologies. For instance, Porter (2011) and Roy (2011) view informality as a manifestation of "illegal" and "unrecognised" urban spaces where residents live and work outside urban laws, with no or ambiguous property rights and no tenure security. Consequently, most of their daily transactions are unregulated, expensive, and perceived as corrupt.

Due to its negative connotation, informality has been described using derogatory terms such as "subaltern urbanism", "peripheries", "unplannable", "zones of exception", and "grey spaces" (Alsayyad & Roy, 2004; Roy, 2005; 2011). These terms are employed to denote urban poverty, inequality, lack of infrastructure, and legality of tenure in urban spaces (De Soto, 1989; 2000). For instance, Dovey and King (2011, p. 11) refer to terms such as "squatter", "slum", or "informal" housing or settlements to illustrate the problematic and negative connotations associated with urban informality in developing countries. Although these terminologies may not represent the same manifestations, they all carry negative implications for urban life. For example, while "squatter" settlements lack security of tenure, "slums" imply a lack of space, household utilities, and services, and "informal" refers to settlements and activities outside the urban planning and regulatory framework

(Dovey & King, 2011, p. 11). By their definitions, informality and informal settlements in developing countries are linked to physical and socio-economic vulnerabilities (Satterthwaite et al., 2007; Gencer, 2013).

The apparent relationship between the occurrence of flood hazards and their impacts on poor urban households in slums was investigated by Amoako and Inkoom (2017). Much earlier, the Intergovernmental Panel on Climate Change (2001, p. 13) stated that "squatter and other informal settlements with high population densities, poor shelter, little or no access to safe water, sanitation and public health services, and low adaptive capacity are highly vulnerable" to environmental hazards, including flooding.

According to Few (2003) and Jha et al. (2013), there are three levels of connection between urban informality and flood vulnerability hazards in cities of developing countries. Firstly, urban poor slum dwellers tend to occupy more flood-prone environments with unclear tenure systems. Sites such as low-lying marginal lands and riverbanks, which are avoided by high- and middle-class urban dwellers, are settled by rural-urban migrants due to the availability and proximity to their sources of livelihood. Secondly, because of city authorities' disapproval of their locations, such informal settlements are rarely provided with the necessary infrastructure and services. Coupled with their poor housing conditions and environments, these settlements are vulnerable to flood hazards. The first two points expose and increase the vulnerability of residents in urban informal settlements to flood hazards, which makes them more susceptible than wealthy urban residents. Urban floods affect cities in both developed and developing countries; however, their impacts are disproportionately greater on the urban poor, the marginalised, and socially disadvantaged communities (Action Aid, 2006). Poor housing structures and a lack of municipal infrastructure and urban services create new hazards for residents of informal settlements, while also reducing their capacity to respond during flood disasters (Gencer, 2013, pp. 17-18). For example, where there are inadequate waste disposal facilities, residents dispose of their solid waste in riverbeds

and other wetlands, which leads to the outbreak of waterborne diseases after flood events.

Ironically, current urban governance practices in cities of the developing world often treat urban residents in informal communities with hostility, neglect, or patronage (Amoako, 2016; Poku-Boansi et al., 2020). These residents are subject to forced evictions, involuntary relocation, and the demolition of their properties (Mohindra & Schrecker, 2012; Poku-Boansi et al., 2020). Amoako (2016) argues that these brutal approaches to urban governance arise from the perception that informal settlements and communities are generally illegal and should therefore be removed from the urban fabric to ensure order, beauty, and proper functionality (Poku-Boansi et al., 2020). This harsh stance of city authorities in the developing world shapes emerging urban governance and the management of floods and other hazards in low-income and informal communities (Amoako, 2016).

The framework of urban governance presented above highlights two key points of connection with informality and vulnerability. Firstly, the urban state's neglect of informal communities, without the provision of necessary infrastructure, proper land use plans, and zoning guidelines, gradually deepens informality and makes it a central part of the city (Amoako & Inkoom, 2017). Many proposed state lands, such as open spaces, Ramsar sites, and wetlands, remain undeveloped and unmanaged, allowing for the gradual occupation by residents and the eventual development of informal and flood-vulnerable communities (Douglas et al., 2008; Gencer, 2013). Secondly, the state's hostile treatment of residents in informal communities through forced eviction and involuntary relocation makes them more vulnerable to illegal land occupation. Typically, three main reasons are cited for the state's forced evictions: city beautification programmes; the perception of slums as centres of crime, hazards, and health problems; and redevelopment for public projects. In most cases, these projects are either not initiated after the evictions or, if started, are abandoned along the way. Such failures in forced eviction and redevelopment programmes often lead to increased deprivation

or marginalisation, and transfer the problems of poverty and informality to other locations without the provision of municipal infrastructure and disrupting kinship ties.

From the conceptual inter-relationships among informality, flood vulnerability, and urban governance presented in the foregoing review, this study employed a conceptual framework that connects the three pillars to explain flood management in Accra, Ghana (see Figure 1). In Figure 1, we argue that urban land use planning is driven by urban governance, and that both must address informality and flooding issues (Amoako, 2016; Amoako & Inkoom, 2017; Poku-Boansi et al., 2020). This study adopted Figure 1 as its conceptual framework. In doing so, it posits that the processes of informal urbanisation in flood-prone communities in Accra give rise to various forms of vulnerability. Over the last four decades, residents have engaged with state and urban governments in three main ways: through attempts at forced evictions, a lack of infrastructure provision, and the politics of convenience during electoral campaigns. These residents have responded according to the approach adopted by the state. For instance, when faced with forced evictions, they resist by leveraging experiences, socio-political alliances (both internal and external), and various forms of confrontation (Cobbinah & Darkwah, 2017).

If neglected, they rely on cheap infrastructure and household facilities suitable for their conditions. The preceding framework explains the political economy of flood vulnerability. Accra's informal communities have faced state demolition and forced eviction, which have shaped their circumstances over the past four decades. In this context, Figure 1 illustrates the dynamics of these informal communities in terms of building their resilience against forced evictions and flooding within a broader framework of informal urbanisation.

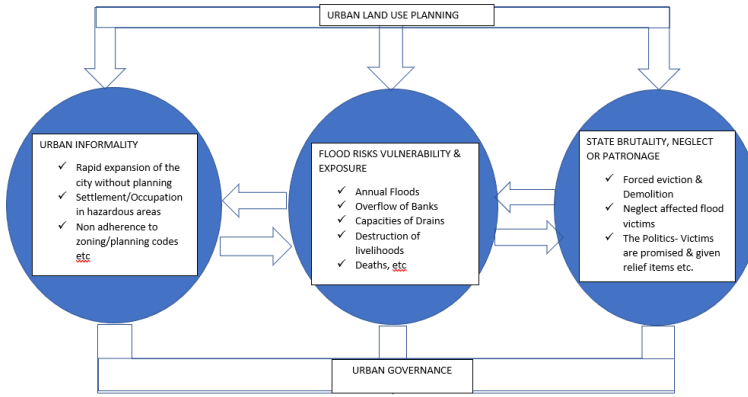

Figure 1: Production of Informality, Flood Vulnerability, and Urban State Interventions. Source: Authors' own construct (2022)

Study Context, Approach, and Methods

The study adopted a case study design, with the Greater Accra Metropolitan Area (GAMA) as the primary case (see Figure 2). Figure 2 illustrates the GAMA and the study communities. To gain an in-depth understanding of the state's flood interventions in the city, seven informal communities and slums were purposively selected, namely Ashaiman, Sakumono, Kpeshie, Mensah Guinea, Old Fadama, Agbogbloshie, and Weija. Figure 2 indicates that the GAMA is larger than Accra, which is Ghana's capital. The area encompasses adjoining municipalities around Tema to the east and Kasoa to the west (see Figure 2). It is low-lying along the coastline of Ghana and is described by Dasgupta et al. (2021) as vulnerable to local and flash floods, coastal inundation, and storm surges due to sea level rise. The metropolis is also noted for the displacement of families, neighbourhoods, and communities resulting from flood events. For example, the displacement of 43 000 persons on 26 October 2011 was unprecedented in the history of Ghana at that time (United Nations Environment Programme & Office for the Coordination of Humanitarian Affairs, 2011).

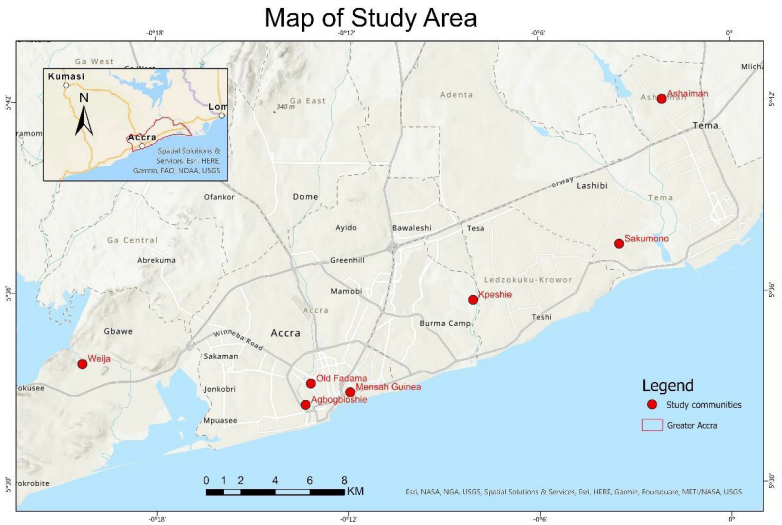

Figure 2: Greater Accra Metropolitan Area (GAMA) With Study Communities. Source: Authors (2022)

The Accra plains and its surrounding communities have been experiencing flooding since 1939 (Karley, 2009). The most recent flood devastation occurred in June 2015, which resulted in the deaths of over 150 people and injuring 60 (United Nations Country Team Ghana, 2015). Over the last 15 years, the metropolis has faced some of the worst flood events. For instance, between 2001 and 2015, flood hazards killed over 250 individuals and displaced approximately 178 750 people. During the same period, more than 75 000 informal livelihoods were destroyed, amounting to approximately US$50 million (Amoako & Frimpong Boamah, 2015). Karley (2009) estimates that the annual value of assets destroyed in Accra due to flood events exceeds US$6 million. For a city in a developing country, these figures are alarming.

In line with exploratory research, a case study design was adopted for the study, and multiple qualitative methods were used to gather and analyse evidence from different sources (Yin, 2018). These methods included the review of relevant documents, institutional consultations, interviews with

officials, interviews with key informants, informal interactions with purposively selected households affected by floods and forced eviction, focus group discussions, and physical field observations. Ten documents on urban flooding were reviewed to identify and understand the concepts, contexts, and existing works on urban flooding and state intervention options. A total of 251 respondents were engaged using various data-collection methods, as shown in Table 1.

Table 1: Data-Collection Methods and Selected Respondents

Institutional consultation	Twenty-five officials from 10 institutions: Land Use and Spatial Planning Authority; Meteorological Authority; Environmental Protection Agency; Hydrological Services Department; Metropolitan Spatial Planning Offices; National Disaster Management Organisation (NADMO), etc.
Key informants	Sixteen households: landowners, community leaders, and leaders of local churches and community groups.
Households	Seventy households affected by floods; 10 households each from the seven communities.
Focus group discussions	Fourteen focus groups: two in each community, with an average of five participants per section. Total of 140 people.

The multiple data collected through the methods presented above were analysed using a network of analytical frameworks, including content analysis, thematic discussions, and narrative presentation.

Evolution, Context of Vulnerability, and Posture of the State

In setting the context for the discussion, this section first describes the evolution of selected slum communities. The intricate interactions that establish the settings of vulnerability in these study communities, due to their unchecked growth in flood-prone zones, have substantially impacted and influenced their emergence and development. Three distinct scenarios regarding informality and flood susceptibility can be offered based on their historical developments, politics of space, settings of informal urbanisation, and locations in hazardous

zones. The first section outlines the contextual profile of the selected communities. Thereafter, the contribution and ongoing role of the state in creating and sustaining these communities are presented.

Mensah Guinea: Mensah Guinea, an indigenous Ga town from the late 18th century, is located between the old township of Ga Mashie and the beach area, as well as the township of Osu. This in-between location was undeveloped but attractive due to its good fishing waters. The area is unplanned, with haphazard buildings and poor drains, and is described as a slummy place (Fält, 2016). It is often associated with various vulnerabilities; ranging from poor sanitation conditions to high crime rates and social vices such as stealing, rape, and prostitution. The close proximity to the sea also exposes the community to frequent flooding. Since independence, the local government of Accra has issued building permits for several houses used for residential and fishing activities in the area. Despite being granted building permits, residents face the constant threat of eviction by the Accra Municipal Assembly (AMA). There is also an assemblyman who represents the community at the local government level. In September 2014, the Mensah Guinea slum was demolished on the pretext of being a hub for cholera outbreaks, after residents were given three days' notice of eviction. The availability of a Guinea permit provided by the AMA could not prevent the demolition of the slum.

Sakumono: The Sakumono Ramsar site is a wetland acquired by the government in 1991 to protect neighbouring towns, such as Tema and its environs, from pollution and flooding. It covers an area of approximately 3 500 acres along the coastal road between Accra and Tema. The land was acquired by the government, and following its failure to use it for the intended purpose, it has experienced encroachment. The traditional leaders' quest to have the land handed over to them has not been successful, although people who have no rights to these areas are using it for recreational and residential purposes. The area consists of wooden shacks with few concrete houses, and there are no drainage or sanitation facilities for residents. Since the encroachment of the site, neither the

Municipal Assembly, the Council for Scientific and Industrial Research, nor the Wildlife/Forestry Commission has made any effort to stop it. Some residents claim to have purchased the land and have documents to that effect, while the municipal chief executive of Tema West also claims that over 4 000 houses do not have permits. The area was inspected on 7 July 2022, and on 8 July 2022, the mayor of Accra announced that houses along the stretch would be demolished.

Kpeshie: La, a peri-urban township in Accra, Ghana, is where Kpeshie is located. It contains sand hills, open lagoons, marshy lands, and scrublands, with a catchment area of around 110 km's that periodically flows into the Atlantic Ocean. The lagoon is situated on a low-lying plain, which creates a marshy zone between the Teshie Rasta Road corridor to the east and the Ghana International Trade Fair corridor to the west. The lagoon has four wetlands with different inlets; three of these inlets have been encroached upon and polluted. Residents have filled the area with concrete and constructed their houses there. There are no proper drains in the catchment area. Like other encroached areas, it is denied basic facilities, which results in an unhygienic environment. The pollution of the inlets has created breeding grounds for mosquitoes, which led to malaria and other illnesses among residents. At the local government level, there is an elected Assembly member for the area, and building permits have been issued by the Assembly. The Assembly published a notice requesting permission from a developer to develop the already encroached area instead of maintaining it as an ecologically sensitive zone.

Ashaiman: The development of Ghana's port and industrial metropolis in the 1950s served as the catalyst for the expansion of Ashaiman, which is approximately 5 km away from Tema. Old residents of Tema were relocated to Ashaiman as part of a compensation package from the government. However, non-natives (migrants) who were already residing on the property were not included in this resettlement. Instead, in Ashaiman (then a tiny fishing community), they were given small plots of land to construct their own homes. As Tema grew and attracted many urban migrants, it suffered from a housing

shortage. As a result, many recent immigrants decided to settle in Ashaiman. The availability of more affordable rental housing, the lack of building regulations that eased construction, and proximity to Tema made Ashaiman an attractive alternative. Parts of the community experience annual floods, which renders residents vulnerable. Flood-prone areas have faced a constant threat of eviction and demolition.

Weija: A dam constructed 40 years ago supplies water to many parts of the GAMA. To mitigate the impacts of potential dam failure due to seismic activities, as well as accidental and planned water spillages, approximately 100 m of land around the dam and 30 m of riparian land along the River Densu were reserved. Despite these planning prohibitions, these reservations have largely been encroached upon by homebuilders and business operators. The 30-m riparian lands have been heavily encroached upon by concrete buildings. This area is ecologically sensitive, which means that it is illegal for residents to occupy. The annual opening of the dam exposes residents to flood hazards, causing them to lose millions of cedis each year due to property destruction. The management of the dam announces annually that residents must vacate before the opening. Flood victims are typically supported by NADMO with relief items to alleviate their vulnerability.

Old Fadama: Old Fadama, a site of 31.3 hectares located near Agbogbloshie, was a refuge during the 1983 famine in Ethiopia and the Konkomba-Nanumba conflict in 1994. The government allocated the land due to the pressing need for housing. With the intention of it being temporary, no facilities or amenities were provided for the residents; however, they constructed wooden structures with zinc roofing sheets. Disrespectfully nicknamed "Sodom and Gomorrah", the area is often associated with negative activities such as rape, theft, teenage pregnancy, murder, and drug use. Since 2002, the community has also received threats and warnings of eviction. Residents have frequently refused to move, arguing that the government has not yet provided them with alternative land for housing (Afenah, 2009). Furthermore, the AMA has been

pressing for their eviction since the early 2010s, targeting an estimated population of over 80 000 residents.

Agbogbloshie: The Agbogbloshie community is situated along the Korle Lagoon in the Greater Accra Region. Before its conversion into a slum, Agbogbloshie was a wetland with a wildlife population. The first settlers were returnees from Nigeria in 1983. Based on the situation of these returnees, the government at the time designated Agbogbloshie as the first point of arrival to allow for medical screening. Those who needed assistance to start life anew were to stay there while government markets were prepared for them. Some were relocated, which resulted in many people living in the area.

During the Non-Alliance Conference in 1991, the government again relocated hawkers, beggars, and all individuals considered socially unfit to Agbogbloshie. The idea was for them to remain out of the city until the conference was over, at which point they could return to their daily activities. During the Konkonba-Nanumba War, popularly known as the Guinea Fowl War, in 1994, internal refugees from the north settled in Agbogbloshie, again with the intention of returning when the war was over. Each of the three groups erected temporary structures as they waited for the government to resettle them, which never happened. Several generations from these groups have come to see this place as their only home.

Case Study 1: Production of Informality

The cases above draw attention to the formation of slums or informal settlements and the role the state has played in their existence. These cases highlight the state's contributions in three forms. Firstly, the state is a major contributor to the formation of slums and vulnerability, as discussed in the context of urban governance. The state's acquisition of land and the management of these lands have always been questioned. For instance, in 1961, the then government of Ghana acquired over 360 acres of Agbogbloshie land along the Odaw River and Korle Lagoon for what it claimed was the "Korle Lagoon Development" project. In 1991, the Sakumono Ramsar site was

acquired by the government of Ghana from the Nungua Stool lands, and the Weija Dam, constructed over 40 years ago, supplies water to many parts of the GAMA. Around the dam, approximately 100 m of land and 30 m of riparian land along the Densu River were reserved to mitigate the impacts of potential dam failure. These and other areas have been demarcated as reserved zones not intended for human habitation. The state's failure to use the lands for their intended purpose has resulted in encroachment. These communities became home to the less privileged, as city authorities pretended not to be aware of their existence. Consequently, these areas developed into squatter settlements with no planning or infrastructure, such as drains and electricity, and no security of tenure. During an interview, an opinion leader in his 70s at Agbogbloshie lamented:

> "We were asked to stay here when we return from Agege, the government will give us another place so we move. It was a planned land, we built it up. Because we can't sleep outside, we need a roof over our heads. That has not been done and we also don't have anywhere to call home apart from here. They should give us a place and we will move."

During a focus group discussion at Old Fadama, a resident also indicated that it was his hometown:

> "I have never seen my parents travel anywhere like home. This is where I was born, and I grew up here. This place is just not planned but is just like any other place. It is just the presence of the river that makes us vulnerable, but we live just like all the others in the other towns. If something needs to be done, they should work on the river, not us."

Secondly, following the acquisition of land that was not used for its intended purposes, the state created suitable areas for the development of informal settlements. The cases of Old Fadama and the Sakumono Ramsar sites, which were acquired primarily for ecological development, have not been utilised for that purpose. Old Fadama became a site for temporary settlement for returnees from Nigeria. Most of the returnees were weak and sick; the government therefore settled them

there to provide treatment and a location for resettlement afterward. Furthermore, during the Non-Aligned Movement Summit held in Accra, the state decided to relocate all informal activities (hawkers and beggars) to Old Fadama. This decision further increased the resident population in Old Fadama, and brought them closer to the lagoon. The situation escalated when migrants fleeing the Nanumba-Konkomba War were also housed as refugees on the same piece of land. The people who were relocated began constructing wooden structures for trade and housing, treating it as a temporary arrangement. The state's failure to protect the riparian lands has also exposed the community to flood vulnerability – a situation created by the state. The acquisition and non-use of sensitive ecological zones, such as the Sakumono Ramsar site and the Odaw, Korle, and Kpeshie lagoons, along with the inadequate protection of riparian lands, have not only resulted in the establishment of unapproved settlement areas but also increased the residents' vulnerability to flooding hazards in that area.

The state's position on the development of slums in urban areas can be described as one of neglect. This negligence can be understood as a lack of awareness regarding the growth of settlements and a pretence of their non-existence. There is a persistent belief that these structures are temporary and will be removed at the appropriate time. This mindset emboldens certain private individuals and traditional authorities to sell state lands to developers. For instance, the Sakumono Ramsar site was developed impulsively as a recreational area and later evolved into settlements. The Traditional Authority has, on several occasions, requested that the state hand over the land to them, as private individuals are selling it to developers.

An opinion leader from the Stool lands remarked:

> "We were warned by the CEO [chief executive officer] of the forestry commission in 2018 not to sell any part of these places to anyone. He asked anyone who bought from us to come for their money when we knew nothing about it. Where were they when strangers started selling our lands? Did they see them build?"

Beyond the emergence and growth of these communities, the state neglects these communities through the non-provision of infrastructure and utility services. The officials interviewed from the various Metropolitan, Municipal, and District Assemblies concurrently reiterated that those areas are not under their jurisdiction; hence they are not responsible for them. The place they occupy is illegal, and they cannot provide utility at an illegal residence. However, some of these people claim to have legal documents from the Assembly approving their site. For instance, a woman at Kpeshie indicated:

> "I bought this land with my husband, and we have documents from the Assembly. I am sure about this because I went to do it myself and sent the documents to him. I would have shown it to you."

A member of the Mensah Guinea also stated:

> "We have documents for our lands, we didn't just register, our ancestors were here long before, and we registered the lands when we were asked to. We still have our documents."

The non-provision of infrastructure presents residents with vulnerability.

Case 2: Flood Vulnerability

The study areas are primarily located near water bodies, which makes them vulnerable to flood hazards from perennial heavy rainfall, lagoon overflows, and high tides. The Weija community is particularly at risk due to spillage from the dam, as well as overflow from the Kpeshie, Old Fadama, and Agbogbloshie lagoons. Flooding has affected most of these communities

annually since the 19th century, with devastating impacts. In Ashaiman, floods in 2010 destroyed residents' properties, caused 17 deaths, and displaced approximately 9 000 people (NADMO, 2011). A NADMO official stated:

> "Some of the residents who drowned were due to rising water in their home too, they didn't even go out. There were children as young as three years."

In the case of Old Fadama and Agbogbloshie, the area is relatively low-lying, which makes it highly vulnerable to flood hazards. The land has been reclaimed using sawdust and materials such as plastic bags and other waste, which increases the communities' risk of flooding. Following continuous rains in 1997, around 200 houses were partially submerged, which forced residents to abandon their homes. In 2017, an overflow of the lagoon bank resulted in the entire area being flooded, including the main road. Workers and students were unable to reach their workplaces or take their Basic Education Certificate examinations. The presence of the dam in Weija makes its catchment area even more vulnerable, as it experiences flooding beyond the normal rainfall levels. Vulnerability in these communities extends from physical to socio-economic factors, described as human vulnerability by Cannon (2002). The context of vulnerability in Accra, as explained in the framework, can be understood as a production process that goes beyond physical damage and is shaped by complex interactions in the urban environment.

Situated in this socio-political framework of flood vulnerability, this study reveals that while flood events are linked to biophysical occurrences such as rainfall, river basin overflow, and high tides, flood vulnerability in informal communities in Accra is produced and shaped by complex socio-cultural and political processes and alliances that interact constantly in the urban environment. The study also demonstrates that these socio-political forces, factors, and actors, through their interactions and alliances, shape community responses and coping strategies to flood hazards.

Case 3: State Approach and Management of Informal Settlements

The state's approach to flood management in informal settlements has been characterised as either a brutal presence or a convenient absence (Amoako, 2016). As discussed above, the state has consistently played a role in the formation of informal settlements. In its efforts to address flood hazards in these communities, the state has adopted a hostile approach, often evicting flood victims in slum areas. Furthermore, the literature has frequently highlighted the plight of flood victims without acknowledging the state's role. The state has consistently employed a "Rambo" style of threat-warn-evict/demolish, which is a strategy that has been in use for more than two decades. For instance, residents of Agbogbloshie have reported that the AMA has threatened them since 2002:

> "They started coming way before 2002, they come and disturb us, threaten to evict us then they go and don't come back again. This is a normal thing we have been going through."

Agbogbloshie and Old Fadama's history of previous evictions include the following:

- 31 July 1993: People from 400 houses on public land are evicted.
- 28 May 2002: Eviction notices are served to the "entire population of Old Fadama" (Grant, 2006) by the AMA. Residents of Old Fadama respond with a court challenge but lose. Following the court ruling against the residents on 24 July 2002, they organise a grassroots effort to resist eviction. They eventually federate with the Shack/Slum Dwellers International network and begin working on resettlement plans. Threats of eviction continued until 2015, which culminated in the final demolition on 1 July 2021. The Mensah Guinea area was demolished in 2015 by the AMA, which cited the location as a hub for crime and, most critically, a cholera outbreak. The Sakumono Ramsar site has also faced various threats of eviction since 2021.

After the president's directive to Metropolitan, Municipal, and District Assemblies to demolish all structures in waterways, various municipalities within the GAMA have embarked on demolition exercises using security personnel. The La-Dade-Kotopon Municipal Assembly, Ayawaso North Municipal Assembly, and Ledzokuku Municipal Assembly issued an eviction warning to encroachers on the Kpeshie Lagoon catchment on 18 September 2021. The eviction was carried out on 30 September 2021. On 22 February 2022, the Traditional Authority encouraged the government to demolish illegal structures on the Ramsar site. The Security Council also issued a threat of eviction in July 2022. These structures were demolished two weeks after the eviction notice.

The use of forceful eviction also contributes to the vulnerability of the urban poor and the destruction of economic activities, which in turn affects national development. For instance, a food vendor at Kpeshie collapsed at the site of the destruction of their workplace. Residents of Agbogbloshie and Old Fadama also recount the significant amount of money they lost due to the demolitions, as they were unable to pack their items in time. One of the residents said:

> "I have stock I just bought which I had started sorting out, all that is gone. We tried to see if we could identify some of them and pick them out, but we ended up fighting among ourselves because everyone is worried about the money they are losing. These things we pick help keep the main city clean, now you will find them everywhere and the floods will happen there, not here. Imagine a spoiled fridge and TV in one car… you just imagine."

Another worker added:

> "Don't worry, the truth is most of us have places in town, but we do this here because this is commonplace, we will do it in our houses now. There is no alternative job, and we have to feed our families."

This means that the activities of the scrapyard are being transferred into communities very close to other settlements.

The rate of pollution will be more widespread, which will result in higher levels of contamination.

The cases presented above clearly demonstrate the connection between the conceptual framework in which informality is produced through governance and how state responses create informality and vulnerability.

Reflections on Demolishing and Forced Eviction as Flood Management Approaches

Drawing from various approaches to flood management, states have adapted demolishing and forced eviction as the main strategy for managing floods. In the case of Ghana, specifically Accra, this approach is employed for the "city beautification agenda", rather than for flood management. The use of this strategy seems harsh to an extent, as the question "Where should they go?" arises. This paper does not seek to endorse illegality but recommends that the state must find an alternative approach that is more sustainable. These encroachers often return to the same locations after the demolitions, which renders the approach unsuccessful. For instance, after the demolition of Mensah Guinea, some individuals simply moved closer to the sea (to the beach area) and constructed houses using cardboard and wood. This new settlement has been named Downtown. Old Fadama and Agbogbloshie are no exceptions, as the community always re-emerges after demolitions. There is therefore a need for the state to consider an alternative, sustainable way of managing the situation. Sustainable actions to ensure effective flood management are costly and more complex for these communities to handle. These actions include redesigning the entire area, constructing drains, and evacuating or relocating people. The concept of insurance could be adopted for flood-prone areas to ensure that residents have some form of coverage to cushion them during floods and minimise their impact.

Conclusion

This paper connects the state's role in the creation of urban informality and flood vulnerability in urban areas of developing

countries, using Accra as a case study. The state creates urban informality by acquiring land in state accounts and not using it for the intended purpose. These lands are left unused for long periods, and are then encroached upon by the urban poor. In other instances, the state changes the use of these lands, which may not be compatible with land use planning. The use of ecologically sensitive areas as temporary settlements for people places both the environment and the residents at risk of several hazards. These settlements hardly have legitimate tenancy agreements and the people there are often considered illegal occupants or encroachers. The nature of these places is mostly unplanned and lack infrastructure and amenities. The state's posture creates a situation of neglect towards these settlements. The refusal of the state or authorities to plan or provide infrastructure for these areas also exposes them to vulnerability. Sadly, the lack of access to roads, hospitals, fire or police stations, and disaster management institutions translates into reduced response capacities and difficulties in post-disaster evacuation and rehabilitation for these poor urban residents. Consequently, city authorities have adopted a method of not providing for these areas, hoping that the absence of facilities will deter residents from staying there. Additionally, the location of these slums makes them vulnerable to flooding, as they are often situated in reclaimed waterlogged areas and ecologically sensitive zones. The occupation of these lands exposes residents to flood hazards, including drowning, destruction of homes and properties, and outbreaks of disease that can result in death. Finally, the state's posture of demolishing and forcibly evicting residents worsens the situation. These individuals are temporarily displaced, as they often find their way back to the same location or a nearby area. The study proposes the use of alternative sustainable approaches to flood management, such as flood resilience structures and the introduction of flood insurance for those who intend to build or reside in flood-prone areas.

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