Working Paper

The Role of Local Governments in Reducing Disaster Losses and Vulnerabilities in Ibadan City, Nigeria

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June 2020

Abstract

There have been formal commitments by national governments to empower Local Governments (LGs) to undertake practical DRR actions as part of the Sendai Framework for Disaster Risk (SFDDR) (2015-2030) and UNISDR's Making Cities Resilient Campaign. Literature indicates a few attempts to assess the extent to which these commitments are followed up with practical action. Using the widely-acknowledged four key roles that LGs are expected to play as reference and the Pressure and Release Model (PAR) as exploratory framework; the paper examines the role of LGs in reducing disaster losses and vulnerability in Ibadan, Nigeria. Findings reveal that despite avowed policy commitments to empower LGs in line with international conventions, LGs in Ibadan still lack the capacity to implement practical DRR actions. There is growing disenchantment among local communities with the LG system. Given these circumstances, LGs in Ibadan face formidable challenges to coordinate and mobilize stakeholders across local communities for DRR activities. The political dynamics related to the 1976 LG reform is the overarching factor of Ibadan LGs capacity gaps. The implication is that unless determined efforts are made to restructure the LG systems, Nigeria would not likely meet the top four DRR priorities of the Sendai Framework by 2030. This study aims to draw the attention of relevant stakeholders to the need for concerted effort to address the myriads of local governance issues that plague less developed countries in order to attain the priority targets of the Sendai Framework by 2030.

Key words

Local government; Disaster reduction; Vulnerability; Policy commitments: Ibadan

1. Introduction

There is increasing incidence of everyday hazards and large scale disasters, resulting in huge losses of lives and properties in urban centres [18, 72, 43, 23, 112]. The situation is more challenging in less developed countries and particularly in sub-Saharan Africa where endemic poverty underpins vulnerability to disasters [43]. Ibadan is a case in point where city dwellers are exposed to a host of extensive and intensive risks like contagious diseases, flooding, building collapse, electrocution, fire outbreaks, and road accidents, among others [6]. The scale, frequency and intensity of disasters and everyday hazards mean that addressing risks commands huge resources and expertise that no single actor could hope to possess [92]. Thus, a number of actors and organizations (internal and external) inclusive of LGs, national governments, private sectors, local groups across communities are required to build and support urban resilience [65]. However, the responsibility to mitigate disaster impacts falls largely upon governments. In particular, LGs have the responsibility to protect people and infrastructure within their jurisdiction [50].

There is a growing consensus in the literature that LGs are the key stakeholder in building resilient cities [8, 104, 112, 44, 56, 84, 85]. Given the nature, scale and peculiar spatial and social context of disasters and every day hazards in cities, LGs are well positioned to understand the trajectories of disaster losses and vulnerabilities and develop context-specific measures to prevent underlying risks from occurring. The activities of LGs are reputed for facilitating "context-specific risk management solutions" ([31]:43) that address the needs and challenges of local communities. In light of this, UN-ISDR ([104]:9-10) has highlighted four key roles LGs are expected to play in achieving local DRR (see Table 1).

Table 1: Key Roles LGs are expected to Play in Achieving Local DRR

1)	*To play a central role in coordinating and sustaining a multi-level, multi-stakeholder platform to promote disaster risk reduction in the region or for a specific hazard*
2)	*To effectively engage local communities and citizens with disaster risk reduction activities and link their concerns with government priorities*
3)	*To strengthen their own institutional capacities and implement practical disaster risk reduction actions by themselves*
4)	*To devise and implement innovative tools and techniques for disaster risk reduction, which can be replicated elsewhere or scaled up nationwide*

Source: Culled from UN-ISDR ([104]:9-10)

The SFDRR underscores the need for governments to empower local authorities to effectively carry out the highlighted roles and there have been formal commitments by national and local governments to prioritize these roles, as part of the UNISDR's Making Cities Resilient Campaign. Nigeria was one of the first countries in Africa to adopt DRR, and in fact a signatory to the SFDRR. Literature shows that there have been very few attempts to assess whether these

commitments are followed up with practical actions. Therefore, this paper explores the role of LGs in reducing disaster losses and vulnerability in Ibadan city, Nigeria, using the four key roles highlighted by UN-ISDR [104] as points of reference and the Pressure and Release Model (PAR) as exploratory framework.

With the exception of a country like Chile, where LGs have the administrative and fiscal autonomy to initiate and implement DRR actions [115], LGs' in less developed countries generally lack the capacity to effectively implement practical DRR actions. They are hamstrung by human resources constraints, administrative weaknesses, lack of financial capability, among others, which are symptomatic of incomplete decentralization [see 23, 56, 82, 85,112]. Nonetheless, the situation and the scale of the challenges across and even within countries diverge somewhat as a number of empirical studies on individual countries reveal. In Cameroon, Bang [15] reveals that Local governance of DRR is undermined by partisan politics and corruption. Manda [57] found that a major constraint to DRR efforts in Malawi is that there are no elected LG officials. Local disaster governance in Ayutthaya, Thailand is largely reactive and as a consequence local communities have evolved a local flood governance model for effective flood preparedness without recourse to the LGs [87]. Besides lack of capacity, a key challenge in mainstreaming DRR into local governance in Indonesia is that LGs do not believe DRR is their responsibility [34].

The over-riding picture of local disaster governance in Nepal [51], Turkey [38] and Ghana [62] reinforces the argument that although there are commonalities in terms of challenges LGs in less developed countries face, the contexts and scales vary. The present study looks carefully at the specificity and peculiarity of Ibadan case, where LGs' inability to carry out their responsibility has been adjudged the greatest driver of risks and vulnerabilities. It differs from previous studies in two key innovative ways. First, through the lens of PAR we explore how LGs' lack of capacity creates service and infrastructure gaps, and how these bolster risks and vulnerability. "The quality and capacity of LG in a city have an enormous influence on the level of risk its population faces from disasters and… on whether risk-reducing infrastructure serves everyone" ([43]:139). Second, our study explores how "political dynamics related to policy reforms" ([47]:1477) configures the structure and process of local governance and especially of LG local governance of DRR in Ibadan.

Previous studies have identified the broader institutional and capacity challenges LGs in less developed countries face and suggested ways they could be empowered and reformed [56, 32, 15, 57, 62]. In particular, decentralization in relation to DRR in less developed countries has attracted

a lot of scholarly attention. Findings have consistently identified poor decentralization as a key challenge to effectiveness of LGs to initiate and carry out practical DRR actions [8, 34, 11 38]. While, decentralization is key to local governance of DRR, it just one of the governance aspects and its success is largely a function of the "political dynamics related to policy reforms, which play a crucial debilitating role in the divergence between the rhetorical claims for decentralization and the institutional changes that actually take place" ([47]:1877). The PAR provides a holistic approach through which we capture the ramifications of a past LG policy reform in the context of local governance related to DRR in Ibadan, Nigeria, including the decentralization process.

Nigerian experiences and practices in local governance of DRR are not adequately represented in the wider (international) DRR literature. Studies on Nigeria and Ibadan by extension have traditionally focused on the hazard and one or two components of vulnerability progression. Adelekan [2, 3, 6]. Von *et al*. [117] have analyzed vulnerability to flood and wind hazards in Nigerian cities. A relatively recent study examined the capacity of selected Nigerian communities to cope and adapt to natural disasters [20]. Some studies have recently appraised the activities of National Emergency Management Agency (NEMA) in disaster management [68, 77, 1, 61]. Our study provides the first empirical evidence on the nexus between local and wider governance process and the growth of vulnerability in Nigeria. The best strategy "to deal with future complexities and uncertainties in DRR is to reduce the underlying vulnerability as the root cause of disasters" ([22]:1). The remainder of the paper is structured as follows. After this background, the next section provides narratives about the study area. Data and methods are detailed in the third section, the component and variables of the PAR model used for analysis are highlighted. The fouth section provides historical insight into the evolution and structure of disaster governance in Nigeria. In the fifth section we discuss results and situate disaster risks and vulnerabilities in the context of PAR model; the role of local communities in DRR is highlighted and the conclusion follows.

2. Study Area

Ibadan has emerged as one of the ten most populous cities in Nigeria, and the most expansive in terms of area coverage, partly because of the influence of Lagos, Nigeria's economic capital [19] and partly because of its emergence as the capital of the western region and Oyo State in Nigeria's post-independence era. The built up area of Ibadan, which was just one sq. km in the 1830s had stretched to 401 sq.km in 2012 [4]. Ibadan was transformed to a multicultural and multi-ethnic city in the 1970s during the oil boom era, when many migrants arrived the city [27].

With a population of 1,141,677 in 1963 at a growth rate of 3.95% per annum, the population of Ibadan city rose to 1,829,300 in 1991 and then to 2,550,593 million in 2006 [64]. According to World Population Review [122] estimates, Ibadan is home to 3, 565,108 people and its population is increasing by over 100,000 people per annual [97].

Ibadan lacks city-level governance. The city is spread out over five Local Government Areas (LGAs) and the surrounding region comprises 6 LGAs (Figure 1). Further partitioning of the existing 11 LGAs however took place in 2016 following the creation of 14 council areas, but with the nomenclature of Local Council Development Areas (LCDAs) to avoid constitutional crisis. Although, state governments in Nigeria have the constitutional power to create new LGAs through the State House of Assembly, the federal government through the national assembly must be involved in the process. The federal government was not involved in the process of creating the LCDAs in Oyo State; they are therefore not recognized and are not eligible to receive federal funding allocation.

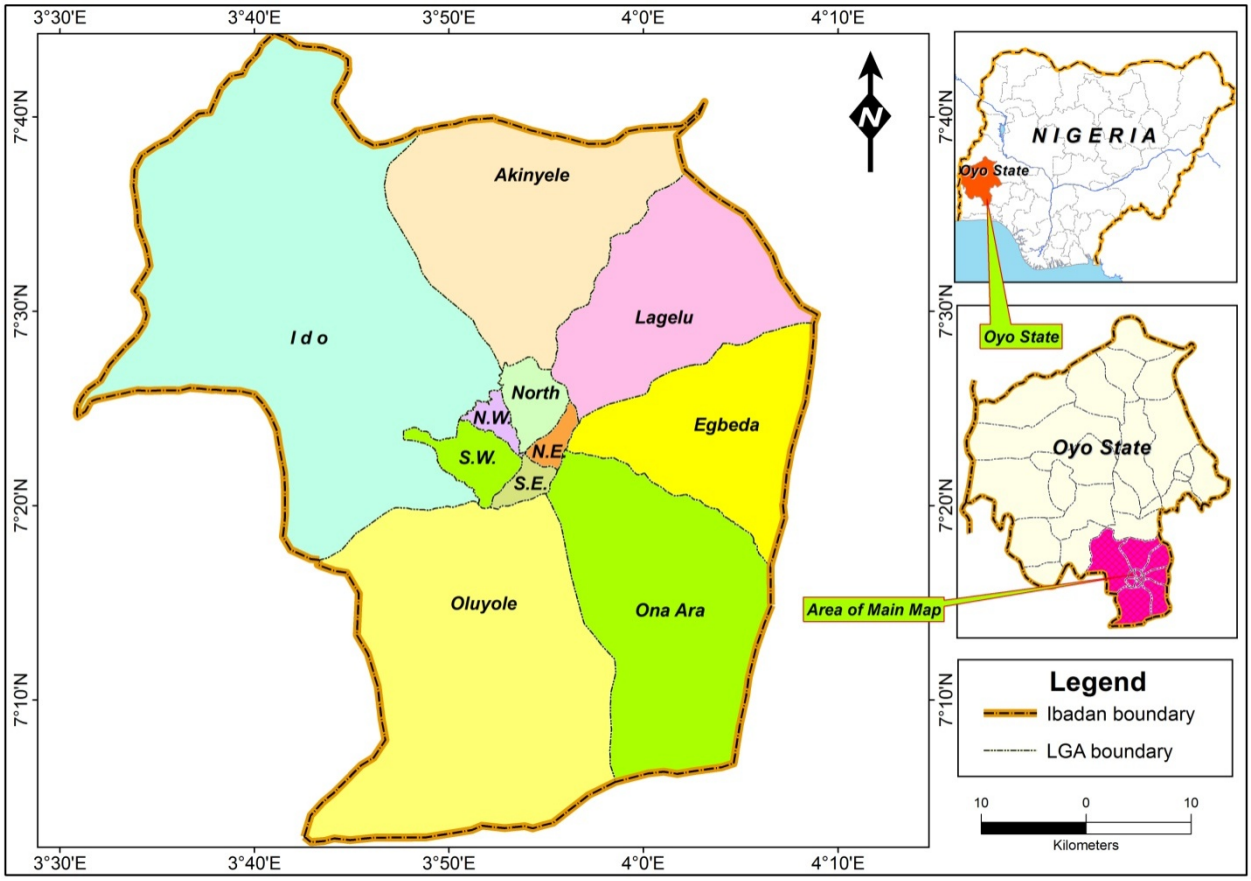

Figure 1: Local Government Areas in Ibadan

3. Methodology

This study is a component of a larger research network- Urban Africa Risk Knowledge (Urban ARK), which has the reduction of disaster risks in urban sub-Saharan Africa through research and capacity building as its core goal [114]. The present study falls within this wider programme, for which Ibadan is a core study city. A key aspect of the broader study examined the nature and distribution of disasters and every day losses (including environmental hazards, natural hazards and public health risks) in Ibadan using the DesInventer methodology. The output (see Table 1 and Figure 2) of the DesInventer provided the needed guide for the identification of key disasters risks, hazards, associated deaths and the most vulnerable communities across LGAs in Ibadan.

Table 1: Losses by disaster and everyday hazard type in Ibadan, 1991 – 2016 (DesInventar) [113]

Event	Data* Cards	Deaths	Injured	Missing	Houses Destroyed	Houses Damaged	Directly Affected	Indirectly Affected
Fire	103	198	87		371	1598	517	3528
Flood	60	120	100	53	3102	9112	624	101
Rain Storm	30	13	8	1	16026	52	3010	5
Armed Robbery	25	3	53	0	0	0	50	0
Crime	456	324	161	10	0	2	1360	605
Urban Violence	409	63	966	59	226	15	1314	3595
Drowning	11	12	0	0	0	0	0	0
Electrocution	11	18	1	0	0	0	1	0
Building Collapse	27	32	73	0	6	6	0	0
Vehicle Accident	805	1080	2593	0	40	4	0	0
Tuberculosis	133	133	0	0	0	0	0	0
Typhoid Fever	33	33	0	0	0	0	0	0
Diarrhoea	124	124	0	0	0	0	0	0
Meningitis	57	57	0	0	0	0	0	0

Data cards mean number of reports in the database*

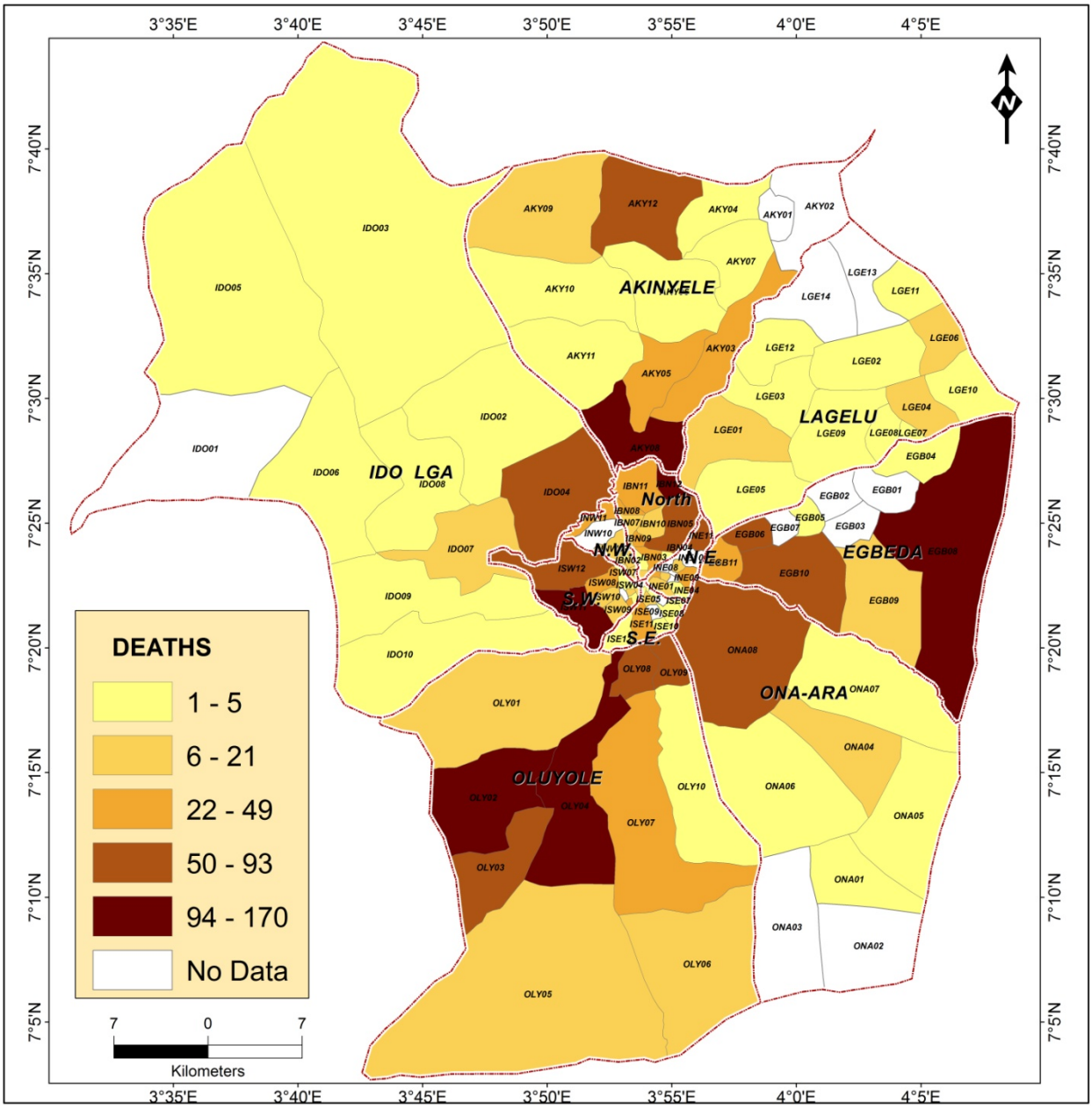

Figure 2: Spatial distribution of deaths associated with disasters and every day hazards in Ibadan, 1991-2016 [113]

To complement DesInventer findings, the present study adopts the PAR model credited to Wisner *et al*. (2004) to situate the production and growth of vulnerability in the context of local and wider governance processes in Ibadan. The PAR has wide currency not only in the science community but also among practitioners. The PAR is an all encompassing framework for analyzing vulnerabilities, providing deep insights into how governance processes at all spatial scales could be built-in into the analysis [90]. It addresses the structural vulnerability which underlies disasters and shows that they emanate from the interplay of socio-economic and political processes in the

human environment [48]. Simply put, it illustrates that disaster is the outcome of hazards impact on vulnerable people (Wisner et al., 2004). The model identified three successions along vulnerability continuum namely, root causes, dynamic pressure and unsafe condition [20, 75, 120]**.** Root causes are the economic, demographic and political dynamics, which influence decision making processes across all spatial scales [120]. "Dynamic pressures translate the root causes into unsafe conditions, the third part of the model in which a disaster is waiting to happen to the population at risk" ([75]:316**).** Unsafe conditions are the "specific forms in which vulnerability is expressed in time and space, such as those induced by the physical environment, local economy or social relations" ([20]:135**).**

Recent empirical studies have illustrated the contemporary relevance of PAR model in the analysis of progression of vulnerability in varied contexts [75, 79, 88]. These studies show that the key concepts in the model can be operationalized using both the quantitative and qualitative methods or either of the two. We employ the qualitative method to demonstrate the analytical utility of the PAR model in the Ibadan local context. Capacity gaps of LGs have been identified as the greatest driver of risks and vulnerability in Ibadan. The scale of the challenge is huge, and it is deeply rooted in past political processes particularly related to policy reforms. The PAR provides helpful lens through which we explore diverse ways that these processes interact to produce vulnerability over time in Ibadan.

Specifically, through the lens of PAR, the study explore how unsafe conditions such as building construction on hazard prone locations, indiscriminate dumping of waste, lack of access roads, among others are inextricably connected to LGs' lack of capacity to monitor development and provide basic services (dynamic pressures), which in turn are rooted in the 1976 LG reforms and its corollaries. By this we demonstrate that past policy reforms in Nigeria play a fundamental role in the current governance process and structure of LGs, which create disincentives for DRR.

Such a holistic approach enabled a systematic investigation of the nexus between local governance processes and the production and growth of vulnerability in Ibadan. The PAR framework enabled the identification of the key aspect of Ibadan LG systems that require targeted policy response for sustainable solution.

Qualitative data for the study included 16 In-depth interviews (IDIs) conducted with administrators in the LGAs that comprise Ibadan and one with an assistance director in the Bureau of Physical Planning and Development Control (BPPDC), Oyo State Secretariat. The interviewees were selected across four departments that were expected to be directly involved in DRR activities namely, health, environment, head of LG administration and physical planning. In addition, the research team conducted Focus Group Discussions (FGDs) in eight communities. The FGDs comprised men, women, and youth (male), Youth (female) and mixed (men and women) groups. Each FGD group was made up of between six and ten participants. In all, 15 FGDs sessions held. Discussions focused on community disaster experiences, preparedness and recovery strategies and especially on how local communities undertake the responsibility of mitigating and/or reducing disaster losses and vulnerabilities at the local level.

The FGDs and IDIs were designed and undertaken to ensure integrity and transparency of the research in keeping with principle of research ethics. The anonymity of study participants was respected, and their recruitment was on the basis of voluntary and informed consent. Before the interviews and FGDs, respondents and participants respectively were informed through letters and verbal communication. They were also informed that they were not obligated to continue with the interview in case they want to withdraw at any time. Some of the participants wrote formally to indicate consent and availability for the interview, while others gave verbal consent. The type of qualitative data that were gathered through FGDs and IDIs were mostly in audio format. The first step in the processing of the data involved translating and transcribing of the interview verbatim and checking the transcript for accuracy; the transcript was then coded using open coding. Information relevant to the main theme of the study were extracted and used to substantiate discussion of findings.

4. Disaster Governance in Nigeria

It is increasingly acknowledged that "disaster governance has an important influence on the production and prevention of the growth of vulnerability, and ultimately for the reduction of disaster risks" ([79]:108). As with other governance models, many stakeholders with diverse interests are involved in disaster governance and it is an integral component of the broader governance systems [52, 14, 92, 78, 92]. Thus, any analysis of disaster governance as in the

current paper must be situated within the wider governance context. Of all LG reforms Nigeria has carried out since 1900, the 1976 LG reform is adjudged the most comprehensive [37]. The 1976 LG reform recognized LG as the third tier of governmental activity and divided the country into 299 LGAs; each of these was to serve a total population of between 150, 000 and 100,000 [55]. On the basis of this population criterion, there has been further partitioning of Nigeria, leading to the present situation in which there are now 36 states and 774 LGAs [40]. The Nigerian decentralization model vest the responsibility for local services provision on LGs and provides the required funds for the assigned functions [33].

A national framework and legislation that establishes DRR mechanisms and defines responsibilities at various levels of government can help to strengthen institutional capacities for DRR, particularly at the LG level [100]. Although organized disaster management has a fairly long history in Nigeria, the country did not have a national framework and legislation that established/guided DRR mechanism until relatively recently. The Fire Brigade, which was established in 1906, and the defunct National Emergency Relief Agency (NERA) established in the early 1970s were mainly responsible for providing humanitarian services in emergency situations[1]. The need to develop disaster management strategies and plans that are in sync with global best practices necessitated an expanded mandate for NERA and its eventual transformation to National Emergency Management Agency (NEMA) [1].

The National Disaster Management Framework (NDMF) is one of the documents that guide NEMA's operations. The NDMF provides the basis for the overall disaster management activities in Nigeria [63, 61]. It stipulates that NEMA, State Emergency Management Agency (SEMA) and Local Emergency Management Authority (LEMA) should be established at the national, state and LG levels respectively (Figure 3) [77]. It detailed how stakeholders would share responsibilities, while NEMA "ensures proper integration and collaboration among stakeholders" [77:2]. LEMA is expected to coordinate disaster management activities in LGAs, and build capacity for managing disasters across local communities, among other functions [1].

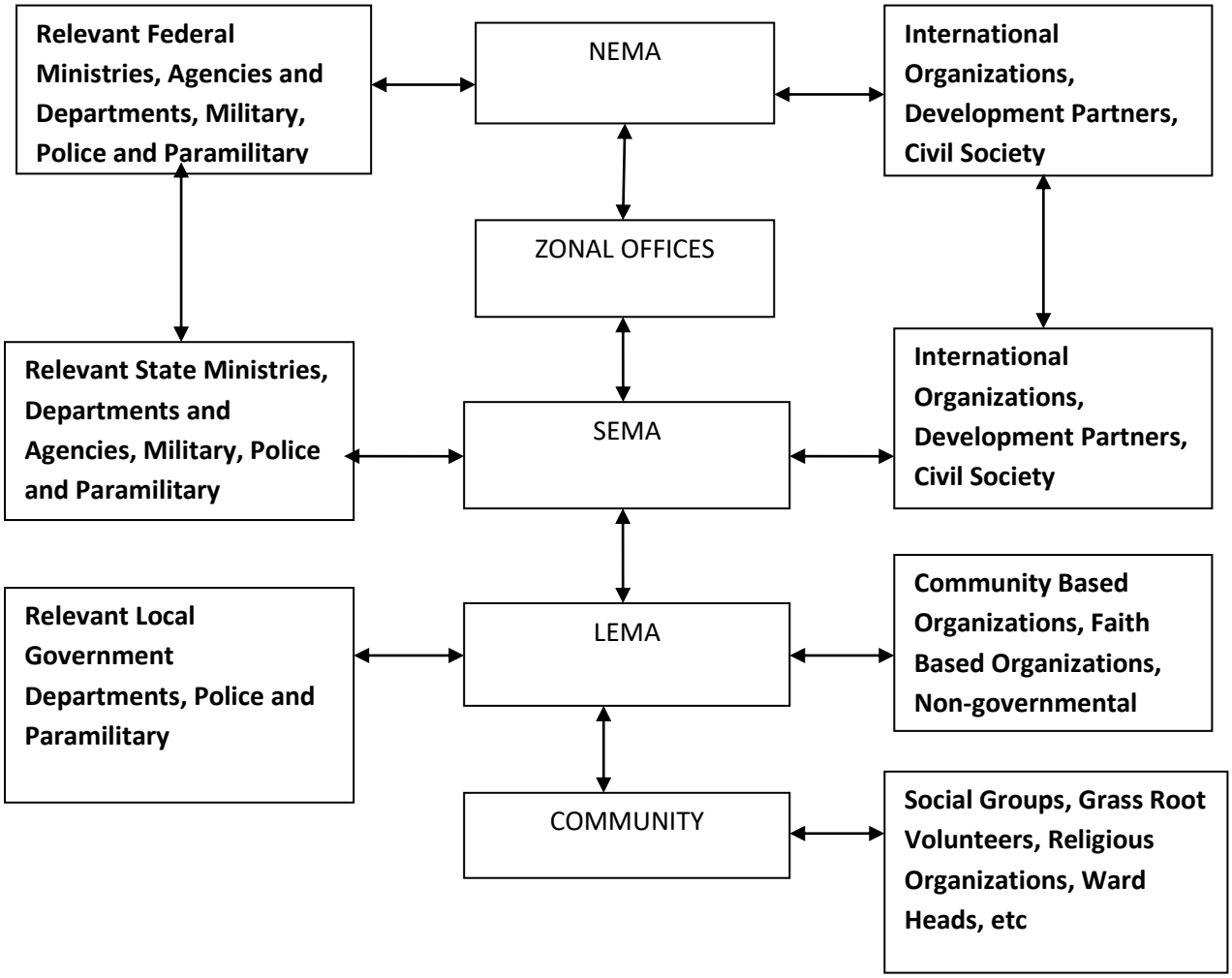

Figure 3: Coordination of Emergency Management in Nigeria

The NDMF recognizes the need for a multi-stakeholder platform to facilitate DRR activities at the local level with LEMA playing a central role in coordinating and sustaining the platform [1]. In line with the guidelines for the implementation of the Sendai Framework, a National Platform for DRR was inaugurated in Nigeria on July 13th, 2010. The implementation of National Plan of Action for Sendai Framework for DRR (2015-2030) formally commenced following a validation workshop organised by NEMA with the support of United Nations Development Programme (UNDP-Nigeria) in February, 2017.

5. Results and Discussion

5.1. LEMA as Coordinator and Sustainer of Multi-stakeholder Platform for DRR

The active commitment and leadership of a LG is important for the implementation of any local DRR measures to deal with different stakeholders [106]. A multi-stakeholder platform offers valuable opportunities for mobilizing capacities around DRR for effective engagement and participation [106]. The NDMF recognizes the need for a multi-stakeholder platform to facilitate DRR activities at the local level with LEMA playing a central role in coordinating and sustaining

the platform. However, in practice, multi-stakeholder platforms for DRR do not exist across all the LGAs in Ibadan neither does LEMA, which is expected to coordinate such platforms exist. Insights from IDIs reveal that ad hoc Local Emergency Management Committee (LEMC) comprising the department of environment, urban planning and health exists in some LGAs instead of LEMA, although they lack effective coordination and have not had any appreciable impact on disaster reduction in Ibadan.

All the LG administrators interviewed except an officer in the BPPDC attributed the non-existence of LEMA to paucity of funds. As the officer remarked, "State Emergency Management Agency (SEMA) is in the best position to know why there is no LEMA in the LGs, but I think it is because there are no elected LG chairmen and there is a limit to what caretaker committee can do". For over a decade, precisely from 2007 up till May, 2018 when council polls eventually held '*handpicked'* caretaker committees by the state government administered all LGs in Ibadan. Council polls were not held because of a restraining order to the State Independent Electoral Commission, which stopped it from conducting LG elections, pending the determination of a case over the delineation of LCDAs. Even when council elections eventually held in 2019, they were characterized by large-scale irregularities. Elections in Nigeria, especially LG elections can hardly pass the most basic credibility test [66]. On assumption of office in May 2019, the incumbent governor of the state declared the results of 2018 local elections null and void, thereby leaving all LGs without elected chairmen till date. LG electoral system in Ibadan "does not secure real competition among local politicians" ([123]:8), as such elected LG administrators and selected caretaker committee chairmen are compelled to be accountable to the state government and local political strongmen (*godfathers* in the Nigerian parlance) and not to the people. Free, competitive and regular local elections will ensure that local politicians are sensitive and responsive to the needs of the populace [39]. "An appropriate political setting requires a suitable environment for local elected leaders to act independently ... and responsively in line with the demands of the local population" ([123]:10).

5.2. Capacities of LGs in Ibadan to implement practical DRR and devise innovative tools and techniques

Capacity development for DRR is increasingly seen as a crucial factor for reducing disaster losses [35] The literature has shown that the ability of LGs to reduce risk in low- and middle-income countries is widely lacking due to their limited power and resources [82, 84]. The case of LGs in Ibadan gives credence to such powerlessness and indeed reflects what obtains in most sub-

Saharan Africa cities. Despite avowed policy commitments to empower LGs in line with international conventions, LGs in Ibadan still lack the capacity to implement practical DRR action. Interviews with LG administrators reveal that LGs in Ibadan lack the authority, responsibility and resources to make decisions and implement practical DRR actions. One of the respondents stated that, "we only have the responsibility of notifying the state about disaster events. Our roles are limited to sensitization of the communities in our locality on the dangers of fire and flooding during the dry and raining seasons respectively".

What is more, respondents noted that most LGs in Ibadan no longer perform statutory functions like waste collection and disposal, because the state government has appropriated some of these responsibilities. The capacity of LGs in Ibadan to provide basic health services is undermined by human resource constraints, inadequate and obsolete facilities as confirmed by an officer in the health department by stating "the number of bed spaces that we have presently is not enough. The same thing goes for human resources. We have acute shortage of health workers. The last time health workers were recruited in this LG was 1991 or 1992". Due largely to limited capacity of health facilities at the LG level most emergency cases resulting from disasters are referred to the state General Hospital (Adeoyo), which is more than 20km away from most communities. Community members confirmed during FGDs that "most of our health centres nearby do not have drugs, except paracetamol. Disaster victims are usually referred to Adeoyo hospital, but that is quite a distance from here".

Land use planning and legislation are essential to attaining positive DRR outcomes [30]. Substandard building and uncontrolled development are major risk drivers. Development planning and land use control are supposed to be institutionalized into day-to-day operations of LGs. LGs in Ibadan are not adequately equipped to monitor development and enforce compliance with existing land use regulations and building codes and standards. This has contributed to widespread illegal housing construction. A respondent in the BPPDC noted that state policies are strong enough to support DRR, but the challenge is compliance given that the political will to enforce compliance is lacking. He further hinted that human resources constraints, funding cuts, lack of tools and police protection hinder effective monitoring and supervision of development activities in Ibadan. Refusal of all zonal representatives of the (BPPDC) stationed at LG secretariats to grant interviews necessitated the interview with the state administrator. The zonal representatives claimed they are not LG staff and except they receive directives from the state

office, they could not grant interviews. This suggests that the authority of the bureau is yet to be effectively decentralized to the LG level.

Findings from IDIs also indicate that no LG in Ibadan has developed new tools and techniques aimed at DRR, neither are there plans to develop such tools. The reasons include that LG personnel in Ibadan lack requisite skills and expertise to develop DRR tools. Indeed, most of the personnel lack in-depth knowledge of current global trends in DRR practices. For instance, most of the personnel were not aware that the SFDRR (2015-2030) had replaced the Hyogo Framework for Action (HFA) (2005–2015). This again underscores the point that DRR is yet to be mainstreamed into local governance in Ibadan. Second and most fundamental, the capacity of LG in Ibadan to develop new tools aimed at DRR is constrained by lack of discretionary space. LG administrators and personnel in Ibadan are not encouraged to use their initiative as the state government controls the political and administrative machinery of LGs. A respondent observed thus, "we do not have such innovative tools. We have ideas, but constrained by policies and lack of buy-in by relevant authorities". **"**As part of administrative autonomy, LGs need a minimum set of powers and capacities to initiate regulatory legislation on issues affecting their jurisdiction" **(**[123]:20).

5.3. Local Governments and Community Engagement with DRR Activities

Community engagement is very central to any DRR initiative "necessary to reverse the worldwide trend of exponential increase in disaster occurrence and … build a culture of safety, and ensure sustainable development for all" ([54]:1). For DRR to be effective and sustainably address local problems, concerned communities have to drive the process [36]. That DRR be community driven does not imply that communities are the sole initiator and executor of local DRR strategies and plans; rather in partnership with other stakeholders especially LGs communities play active role to ensure positive DRR outcomes [36]. Opinions converge across interviewees and focus groups that there is poor community engagement in DRR activities in Ibadan. This is expected as the preceding findings have shown that Ibadan LGs lacks capacity to initiate and carry out practical DRR activities. It is unimaginable that there will be a platform for meaningful community engagement in DRR. One of the interviewees hinted that her LG established LEMA, but it is defunct. She explains: "our LG interacted well with local communities when we had LEMA. Today, communities in our local authority are vulnerable, because we no longer have budget for DRR. Affected local communities no longer come directly to us for assistance". Community members corroborated during FGDs, "the councilors were closer to the community before, but it

is not so again and even the caretakers are quite far from us. We do not have access to political leaders, they are far from us and we cannot even get to talk to them".

Wisner et al. [120] aptly observe that limited access to power is an underlying cause of social vulnerability. As the closest tier of government to the people, LGs ought to encourage active participation of constituent communities in local governance [39]. There is apparent disconnect between the LGs and members of local communities in Ibadan and Nigeria by extension. As Mabogunje ([55]:351) affirms, "there is growing disenchantment with the present structure of LGs largely because of the prevailing realization that the LG system in the country has not served the purpose for which it was established". Given this circumstance, it will be hard to mobilize social capital and mutually initiate, and implement DRR actions at the local level in Ibadan. The formation and nurturing of social capita are regarded as critical part of disaster governance [59].

5.4.Situating Vulnerability in Context: The Pressure and Release Model

When viewed through the lens of PAR, unstable political system, poor community engagement, the non-existence of critical institutions such as LEMA and poor coordination of LEMC are some of the elements of dynamic pressure, which undermine the capacity of LGs in Ibadan to implement practical DRR actions to reduce disaster losses and vulnerabilities. An underlying root cause of vulnerability and its reproduction , over time in the context of the study area, is the 1976 LG reform (see Figure 4). "Root causes tend to be embedded in historical development" ([75]:316) and political process, developing over time. An upshot of the 1976 LG reform is the diminished influence of traditional rulers in local governance, which is partly responsible for poor community engagement by LGs in the study area. The federal government of Nigeria instituted a "uniform role for traditional rulers throughout the country through the *1976 Local Government Reform"* ([94]:133), thereby changing their role in LG administration from being chief executives to advisers in the contemporary LG system.

As a corollary of the 1976 LG reforms, fiscal transfers from the federation account to LGs, which was introduced supposedly to enhance the capacity of LGs to deliver on their mandates, also constitute a root cause. Fiscal transfer has come to make Ibadan LGs dependent wholly on higher levels of government for its revenue [55]. Although statutory transfers enhance the capacity of LGs for effective service delivery, "they can also obviate the need for local revenue generation", thereby undermining the autonomy of LGs ([60]:173). Historically, internally generated revenue constitute a significant proportion of Ibadan LGs funds, but the reverse is the case today [33, 37]. The increases in revenue from the export of petroleum products in the 1970s facilitated fiscal

transfer from federation account to the three-tiers of government. Prior to this period, all the "regions tended to be more innovative … and each of the regions took advantage of its own endowments and peculiar circumstances" ([96]:20) in the drive for revenue. Today, states and LGs are less innovative and the drive for internally generated revenues is at low ebb, because federal funding allocation is guaranteed at the end of each month. Over the years, the revenue sharing formula has undergone several retrogressive alterations, leading to the emergence of a pattern that has concentrated revenues with the federal government. Currently the federal government receives a disproportionate share - 52.68%, while the 36 states and 774 LGs share 26.72% and 20.60% respectively [96].

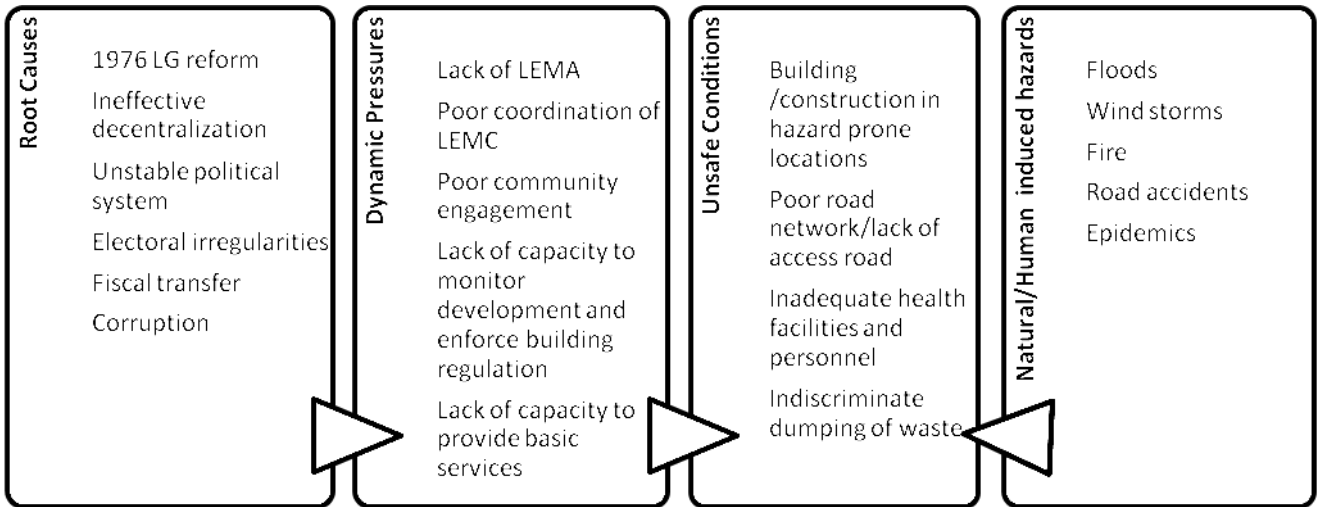

Figure 4: Progression of vulnerability in Ibadan City local context.

Within the PAR framework, LGs' inability to perform statutory functions like waste collection and disposal, provide basic health services, control development and enforce compliance of building codes and devise innovative tools, among others constitute dynamic pressure creating unsafe conditions in Ibadan. "Dynamic pressures are normally decadal-scale trends involving … land use, and governance. They translate or transmit root causes to local scale and present moment, where they produce unsafe conditions…" ([121]:12). A few Illustrative examples of this progression of vulnerabilities from Ibadan city context are apposite. Indiscriminate dumping of refuse is common in Ibadan, because LGs cannot effectively manage waste collection. As a consequence, drains, gutters and river channels are clogged with solid waste, which induce flooding; the impacts are often catastrophic [10, 7].

Further, uncontrolled development and lack of enforcement of building codes generate unsafe conditions like living in hazardous locations and poor road network. Building construction on river floodplains is very common in Ibadan "There were 26,553 buildings within the approved statutory setbacks of rivers/streams in the eleven LGAs of the metropolitan area of Ibadan in

2011" (Oyo State Government 2011, cited in ([7]:212). Most parts of the city are characterized by no identifiable sanitation facilities, physical deterioration, improper waste disposal, non-availability of gutters, and limited number of roads [27]. Wisner [121] aptly observes that an institution that is under-resourced and unable to deliver a service may make people more vulnerable to disaster.

Road networks in most of the poor areas of the city are characteristically narrow and winding, and are seldom accessible to vehicles. Lack of physical planning is the underlying cause of the myriads of transportation problems in Ibadan [5]. A case in point is the motor-cycle, commonly called''*okada*'' in Ibadan. Most Ibadan residents utilize motor-cycles for daily transportation, because they provide the only means of transport to most parts of the city that are virtually inaccessible to vehicles. Motor cycle accidents have emerged as the most significant cause of death and injury in Ibadan. *Okada* is used in most parts of Ibadan as the law restricting their operations to designated areas has not been effective. The affluent segment of the Ibadan population that can afford private cars rarely patronize motor-cycles. It is however the choice transport mode among the poor in Ibadan. Motor-cycle operators, women and children in poor households are particularly vulnerable to the risks associated with the use of motor-cycle. Solagberu, *et al*., [89] and Eze, *et al.,* [24] have reported that victims of motor-cycle accident suffer severe limb, head and neck injuries if they survive. The implications of lack of access road and ill-equipped health facilities (unsafe conditions) for emergency operations are apparent.

Gross inadequacy of basic urban physical and social infrastructure in Ibadan is partly attributable to lack of city-level governance. The lack of city-level governance makes coordination and resource mobilization for provision of urban infrastructure and public goods difficult [21]. The lack of unified governance in Ibadan makes city-wide planning difficult. The LGs in the city "have limited power and report directly to state governors without an intermediary authority at city level" ([76]:200). It is instructive to note that historically Ibadan had a metropolitan government. Ibadan had 12 LGs in the 1960s up till late 1980s, comprising Ibadan City Council for Ibadan city and six District Councils for the sub-urban areas [93]. Ibadan city Council coordinated the affairs of the LGs within the city. But with the creation of LGs in in1989 line with the provision of the 1976 LG reform, Ibadan municipality was split into five autonomous LGs thereby altering the metropolitan governance structure [93].

5.5. Where there are no Local Governments

Risk cannot be reduced where people's knowledge of risk is not matched with response capacity [85]. In settings "where conventional responses are too expensive or beyond LG capacities or LGs are not efficient, communities are important" ([85]:2). The question that is apposite at this juncture is, in the face of inefficient LG system, how do informal networks and local groups across communities in Ibadan undertake the responsibility of reducing losses and vulnerabilities? Extracts from FGDs provide useful insights:

> *We do support ourselves, and accept our fate since there is nothing we can do about it, since we do not have any body at the helm of affairs. For instance, we counsel ourselves. We contribute money to do all the projects. The gutter (drainage) you can see here was done from our donations with the help of World Bank that gave us #10 million and we added money to it and do a lot of things (Ologuneru FGD, December, 2017).*

> *In Oke-Ayo, we put concerted efforts into ensuring that our community is safe. For instance, although we are supposed to receive assistance from government in terms of dredging of the rivers around us, we don't wait for them because they won't come. We do quite a number of many things to help ourselves as a community: we mend our bad roads by filling the potholes with broken blocks; we make sure our drainages are clear for free flow of water; we hold meeting with the DPO of Oluyole [emphasising mutual relationship between the community and the law enforcement agencies]; and we hold regular meetings that involved people of all ages and categories (Oke-Ayo FGD, December, 2017).*

> *Another vivid example of how we have been helping ourselves as a community was when a pipe, run by the Water Cooperation, got damaged and water was gushing out profusely, we did not wait for the government officials to come and fix the problem for us: we contributed money and repaired it but later reported what happened to the appropriate authority (Oke-Ayo FGD, December, 2017).*

Across the communities studied, Self-Help projects, development efforts and security are driven by Community Development Associations (CDAs), and amazing mutual relationship exists between the communities and law enforcement agents. CDAs are made up of landlords and tenants in a particular community who meet regularly to identify the need of the community and discuss how to harness and mobilize resource to meet these needs. Membership is often mixed (male and female). The CDAs have rules and regulations guiding their operations with minimal

interference from the government [9]. Projects are funded through members' contributions in form of security, development and electricity levies etc, and donation from non-members.

There is evidence of civic engagement and collaborative achievement within the communities in the study area. An enabling environment for social capital mobilization and accumulation for DRR activities is also palpable. Communities in Nigeria have had long histories of operating effectively as provider and financier of risk reduction infrastructure and services for their communities [55, 42, 118, 58]. The negative tendencies that are pervasive of the LG system in Nigeria are not true at the level of the constituent communities that make up each LG [54]. CDAs especially have enviable records of collaborative achievements and real participatory democracy.

The findings highlighted in the foregoing discussion serve to highlight that, although there have been formal commitments and intention at all levels of governance in Nigeria to give priority attention to the roles of LGs there is a palpable disconnect between policy and action. This evident lack of attention to the roles of local institutions in DRR is not unrelated with the fact that the need to mainstream DRR into local governance in Ibadan city context is yet to receive priority attention. One of the major constraints to effective functioning of the LG system in Nigeria is lack of autonomy. For instance, LGs "receive a federal funding allocation, but the state government often exercises power over the management of these finances, effectively capturing this allocation and resulting in a relationship of patronage" ([76]:199). This is symptomatic of incomplete decentralization.

The basis of the Nigeria decentralization model is problematic. It provides for the creation of large LGAs, with little or no consideration for economic viability, political sustainability and cultural affinity. Within such LGAs, there is little sense of togetherness. Mabogunje ([55]:352) encapsulates:

> *What is wrong fundamentally, with the present local government system is the fact that it invariably merge together real communities which have had long histories of operating effectively as real LGs for their people. Given this circumstances, there is limited opportunity for civic engagement in a LGA and very limited collaborative activities. Real participatory democracy is hardly encouraged and social capital accumulation is fragile in the extreme. No wonder councilors feel disoriented and responsible to nobody in particular. The lack of transparency and accountability, the corruption and venality of the councilors, are all inherent in a system founded on such a non-social variable as population size.*

More than two decades after Mabogunje's observation, the LG system in Nigeria is still bedeviled with inefficiency and corruption. Since 1979 when statutory transfer from federation account became operational, huge sums have been allocated to LG, yet there are no positive welfare

outcomes across constituent communities [13]. At the LGs level in Nigeria "the responsibility, resources and accountability of governance are organized … in such a way that corruption is accommodated within the system … LG reforms have actually preserved the space for corruption and undermined accountability" ([37]: 24). The ways corruption thrives at the LG level in Nigeria are well documented [13, 37, 76]. At an event in 2016 the vice president of Nigeria affirms that LG administration in Nigeria is a weak model for good governance, because of the problems of inefficiency and corruption.

An effectively decentralized local governance structure is indispensable for DRR. Decentralization enhances "good disaster governance by increasing local capacity and by bringing in local perspectives and knowledge"([38]:417). LGs discretionary power and the capacity to undertake DRR actions are largely influenced by the form and extent of decentralization [103]. In a nutshell, the form and extent of decentralization determine to a considerable extent, whether or not DRR objectives are realizable. Decentralization reforms should confer new political, administrative and fiscal authority on LGs; these give LGs discretionary space [123]. "Within their discretionary space, LGs would be accountable to higher levels of government as well as to citizens" ([123]:2). Nigeria and by extension, Oyo State may have successfully carried out territorial decentralization, but the political, fiscal and administrative decentralization is incomplete. The 1976 LG reforms can be implicated for incomplete decentralization in Nigeria. Previous attempts at restructuring the LG systems in Nigeria were vehemently restricted by politicians and LG administrators with vested interest. In a setting like Ibadan and by extension Nigeria, where the political will to restructure the LG system is lacking, it will be difficult to effectively mainstream DRR into local governance.

6. Conclusion

There is a growing consensus among stakeholders that LGs should play a central role in DRR. This paper reveals that LGs in Ibadan are not prepared for this role. The capacity of the LGs in Ibadan to initiate and implement practical DRR action is severely constrained. There is growing disenchantment among local communities with the LG system. Given these circumstances, LGs in Ibadan face formidable challenges to coordinate and mobilize stakeholders across local communities for DRR activities. This portends increased losses and vulnerabilities to disasters among Ibadan city dwellers. Through the lens of the PAR model the paper demonstrates how unsafe conditions such as building construction on hazard prone locations are inextricably connected with LGs capacity gaps (dynamic pressures), which in turn are rooted in the 1976 LG reforms and its corollaries. No pro-active measures are in place currently to redress this situation.

The Ibadan experience is a microcosm of what currently obtains across all the 774 LGs in the country. Yet, Nigeria was one of the first countries in Africa to adopt DRR, and in fact signatory to the SFDRR (2015-2030). The findings reported in this study reveal that formal commitments to the Sendai Framework by the Nigerian government are not followed up with practical actions. Sendai Framework (Target E) requires governments to demonstrate commitments by developing national and local DRR strategies and plans by 2020 [73]. By the 2020 Target E deadline, Nigeria still has no strategy for local DRR and the existing NEMA Act has a lot of legislative inadequacies and operational gaps which cannot guarantee effective DRR implementation [61]. It could be inferred that lack of enabling national DRR legislative framework and strategies inhibits the development of a local level DRR strategy in Nigeria. An amendment of NEMA Act has thus become imperative. Albeit, if a comprehensive local DRR strategy is in place, implementation will still be stymied by a problematic LG system and a host of institutional blockages, including corruption.

Unarguably, the implementation of the Sendai Framework in Ibadan and by extension Nigeria faces formidable challenges. The implication is that Nigeria may not meet the top four DRR priorities of the Sendai Framework by 2030 if determined efforts are not made to restructure the LG systems. A valuable lesson for research and global practice of DRR is that more local level analyses are required to unmask some of the underlying barriers, which exacerbate the broader challenges LGs in less developed countries face. This study is aimed at drawing the attention of stakeholders at the local, national and global levels to the need for concerted effort to address the myriads of local governance issues that plague less developed countries, especially sub-Saharan Africa in order to harness the dividends of global efforts towards attaining the priority targets of the Sendai Framework by 2030.

A key finding is that Community Development Associations (CDAs) present an important fulcrum for DRR efforts at the local level in Ibadan. In the face of inefficient LG systems, informal networks and local groups across communities in Ibadan undertake the responsibility of reducing losses and vulnerabilities through informal CDAs. It is therefore important to support the work of CDAs at the local level, as this presents one of the important ways to realizing positive DRR outcomes in Ibadan [12]. It must be admitted however that CDAs have limited capacity and sphere of influence to undertake large scale DRR activities; hence the need for LGs have to play complementary roles. "This is the case even when LGs lack the capacity to act, since it can still

encourage and legitimate (or constrain and repress) community-based action" (Satterthwaite [86]:1).

As a final point, corruption has been identified as an overarching factor that can undermine any DRR strategy and plan in Ibadan. The scale of the challenge is huge and must be squarely addressed if Nigeria will make any meaningful progress in meeting the global DRR targets by 2030. Open data is increasingly advocated as a key requirement for achieving progress in the fight against corruption [95]. Although, Nigeria has adopted the open-data initiative, it is yet to be effectively implemented and down-scaled to the LG level. More needs be done to ensure that appropriate policies and infrastructures are in place to maximize the use of open data to fight corruption at the LG level in Nigeria.

Acknowledgements

This paper was supported by the Urban Africa: Risk Knowledge program, funded by the UK Economic and Social Research Council (ESRC) and Department for International Development Humanitarian Innovation and Evidence Program under Grant No ES/L008777/1. The authors thank the three anonymous reviewers for their helpful comments. We are grateful to Prof. Mark Pelling for his guidance, as well as Drs. Cassidy Johnson, Leck Healey, David Dodman, Prof. Jennifer Robinson for the very useful review suggestions they provided.

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