

CHAPTER 1

INTRODUCTION

1.1 Background

Security and safety are two non-negotiable prerequisites for the prosperity and sustainable development of any nation (PwC, 2019). A resilient society is one whereby people and businesses feel secure and safe from threats, risks, dangers, and are able to recover better after unexpected shocks. It becomes important for all levels of government, non-governmental organizations, businesses and citizens to collaborate in addressing security issues in order to foster a thriving and enabling environment.

The Nigeria National Security Strategy (NSS) and National Development Plan 2021-2025 (NDP) clearly articulate Nigeria's national security vision as ensuring a secure, safe and peaceful nation for socioeconomic growth and national development (Nigeria FMFBNP, 2021; Nigerian Government, 2019). Nigeria's NSS and NDP 2021-2015 identify disasters as national security threat posing danger to lives, livelihoods, properties and infrastructure.

A wide range of natural and man-made disasters are included in Nigeria's disaster profile (Nwakwuo, 2019; The National Platform for DRR, 2006). Based on the global index for risk management (INFORM), the risk level of crisis and disaster in Nigeria is very high (European Commission, 2022). Nigerian communities are exposed and vulnerable to the hazards causing these disasters due to the high rate of urban migration causing intense competition for limited resources, increased poverty, underperforming disaster management institutions, lack of coping capacities, and other crises affecting the general populace.

Fire disaster has been identified as a man-made occurrence posing a threat to the security and safety of lives and properties in Nigeria (NEMA, 2002). Between 1965-2021, the EM-DAT international disaster database

recorded 9 fire emergencies in Nigeria which caused at least 10 deaths or affected a minimum of 100 people. These 9 emergencies collective resulted in the death of 214 people, injuring 205, affecting 5000, and rendering 17200 homeless (CRED, 2022). In 2021, 2845 fire outbreaks in Nigeria caused an economic loss of ~~N~~3 trillion (three trillion naira) (Ali, 2022). When compared with the 2021 national budget (~~N~~13.6 trillion), the economic loss due to fire disasters in 2021 is around 22% of the national budget.

Fire disasters in Lagos State have a long history. This man-man disaster had caused a devastating loss of lives and properties in several communities of the city. In 2020, the city government reported a tragic loss of 113 lives and properties worth ~~N~~29.69 billion (USD78.13 million; USD1=~~N~~380) as a result of fire disasters (James, 2021). In 1989, a neighbourhood in Ilaje, Lagos Mainland experienced a devastating fire outbreak which razed 286 houses and destroyed properties worth millions of naira. In 2005, another inferno caused havoc to 200 houses in a low-income residential area in Ebute Metta, Lagos Mainland (Olukoju, 2012). In 2006, a fire outbreak due to a kerosene explosion occurred at Ilaje Community in Ajah caused the destruction of 22 houses and injuring several persons. The fire burnt for hours until it was eventually extinguished by responders from the fire brigade assisted by individuals in the neighbourhood (Olukoju, 2012; Usman & Adisa, 2006). Another deadly conflagration was reported at Iwaya in Lagos in July 2006. This fire outbreak was a result of an electrical generator explosion which occurred at one of the residents' house and later caused the destruction of properties and other valuables in the community (Olukoju, 2012).

Deadly conflagrations as a result of pipeline vandalism causing explosions and widespread fire were recorded in the Abule-Egba community of Lagos in 2006 and 2020. The Nigerian Red Cross (NRC) reported that the 2006 Abule-Egba fire resulted in at least 200 death, scores of people with varying degrees of burns and the destruction of residents' houses (Sadiq, 2012; Wikipedia, 2021). The 2020 fire incident in the same

community affected 300 residents, destroying properties and rendering a number of them in need of shelter (TVC News Nigeria, 2020). In April 2022, a fuel tanker explosion was recorded in the Ajegunle area of Lagos State. The inferno caused by the explosion razed houses, shops, and cars in the area, also resulting in the death of at least one person. It was reported that the human casualty was mainly due to the situation whereby some residents were trying to scoop the oil spilt from the tanker (Bankole, 2022).

In 2019, a gas explosion caused a tragic fire outbreak in the Ajegunle area, Lagos State. The gas explosion which originated from a shop caused the death of 2 persons with 23 others sustaining multiple burns. Based on the Lagos State Emergency Management Agency (LASEMA) responders' investigation at the scene of the outbreak, it was discovered that the explosion which destroyed several other buildings was due to a gas leakage (Agency Report, 2019). In January 2020, LASEMA, Lagos State Fire and Rescue Service (LFRS), and the Nigerian Police Force responded to a midnight fire in Ajegunle, Lagos Mainland. The inferno affected five houses and claimed the life of an individual. It was reported that the outbreak was a result of a gas explosion from one of the buildings. The fire spread easily because of the highly combustible materials that were used in erecting the building in that community (Cyril, 2020). In 2020, another midnight fire destroyed at least 50 houses in Ajegunle. It was reported that the fire broke out as a result of a candle forgotten by one of the residents. The fire was suppressed at noon around 15:00 (Oyeleke, 2020).

These fire outbreaks highlighted above occurred in low-income residential areas with limited infrastructure and services which can assist in coping with fire hazards. In addition to the minimal coping and response capacities, these highly dense communities are physically vulnerable due to the combustible materials used in building the houses. The low-income status of these communities also sheds light on their economic vulnerabilities. A global report by the World Health Organization (WHO) highlights that 90% of deaths caused by injuries occur in low-and middle-

income countries (LMICs) as poverty and low-income status of households increase the risk of injury and death. This relationship between the low-income status of a household and injury-related deaths also holds true in developed nations as this report from the WHO explains that a child from a wealthy family is 16 times more likely to survive a house fire compared to a child from a low-income family (WHO, 2014).

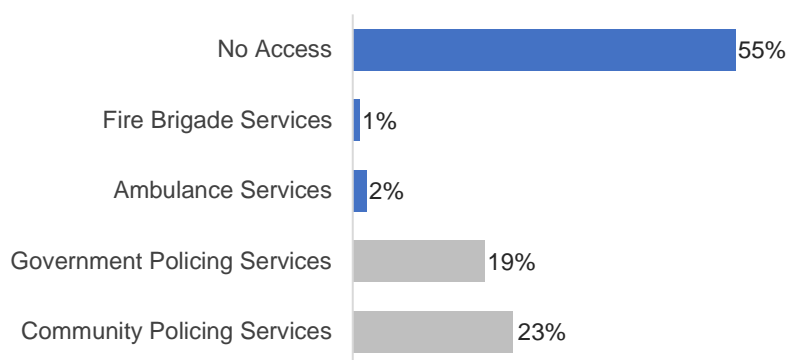


Figure 1.1 Level of Household Accessibility to Resources in Lagos

Data Source: Lagos Bureau of Statistics (LBS, 2020)

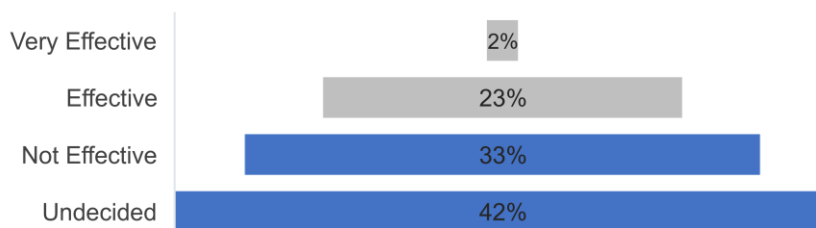


Figure 1.2 Opinion of Lagos State Households Regarding the Effectiveness of the LFRS Based on Response Time

Data Source: Lagos Bureau of Statistics (LBS, 2020)

At the state level, the Lagos State Fire and Rescue Service (LFRS) and Lagos State Emergency Agency (LASEMA) are the two primary agencies responsible for managing fire hazards in the city. LFRS is the statutory fire disaster specialist tasked with responding to fire emergencies

and promoting community safety through training for fire prevention and mitigation, while LASEMA is the leading agency tasked with coordinating disaster preparedness efforts (IFRC & UNDP, 2012; NEMA, 2010). Data from the Lagos State Household Survey Report shows the state of fire disaster preparedness (FDP) in the city. From the data showing the accessibility of services and resources needed for capacity building in communities, just 1% of households in the Lagos had access to fire brigade services while only 2% had access to ambulance services as shown in Figure 1.1 above. 55% of households had no access to these special services mentioned in the report. Based on the response time of the LFRS, Figure 1.2 shows that 33% of the surveyed participants claimed that the LFRS is ineffective while another 42% are undecided (LBS, 2020). The slow response of LASEMA and LFRS and the lack of sufficient coping capacities available to households in handling fire hazards was reported by other researchers (Oladele A.O. & Olabanji J.K., 2010; Olukoju, 2012; Oyeleke, 2020).

Table 1.1 Knowledge of Households on Basic Fire Disaster Education

	Yes	No
Assembly Point Knowledge	12%	88%
Awareness of Assembly Point Location	38%	62%

Data Source: Lagos Bureau of Statistics (LBS, 2020)

Disaster education is necessary to create awareness, knowledge and skills needed to understand disaster risk factors (ADB, 2013; UN, 2015). With fire disaster education, households can assess and understand the hazard, vulnerabilities in their houses and vicinities to prepare the coping strategies and capacities needed for resilience. The state-wide household survey conducted by the Lagos Bureau of Statistics (LBS) indicates that 87% of household participants in Lagos State do not know what an assembly/muster point is (Table 1.1). Furthermore, 62% are

ignorant of where the muster point is located (LBS, 2020). Some scholars identified educational vulnerability as a situation which can increase the vulnerability of communities at risk (Cardona et al., 2003).

The Lagos State Government through its building control agency regulations mandates certain fire safety requirements and equipment needed to prevent and mitigate fire outbreaks in buildings (Lagos State Building Control Agency Regulations, 2019). However, the household report indicates that only 3% of the 10.000 surveyed participants possess fire suppression equipment in their homes (LBS, 2020). The same household report shows that 43% of households in Lagos State live in buildings with only one entrance and exit door (LBS, 2020). This condition is not in line with the requirements of the national building code which recommends a minimum of two doors for entrance and exit in buildings (Nigerian Government, 2006).

Based on the phenomena illustrated above, it can be observed that there are issues pertaining to disaster education and the implementation of building safety policy regarding fire safety in Lagos State, Nigeria. This situation can potentially affect the fire disaster preparedness of households. This study aims to study the Influence of Disaster Education and Building Safety Policy on Fire Disaster Preparedness in Lagos State, Nigeria. Results from this study will provide recommendations which can help Nigerian households become better prepared when dealing with fire hazards which will in time collectively enhance community resilience and national security.

1.2 Problem Identification

The problems regarding disaster education, building safety policy and fire disaster preparedness as identified in the background study are as follows:

- a. Fire disaster is a man-made disaster affecting communities in Lagos State causing tragic death and colossal loss of valuable properties.
- b. There are indoor and outdoor fire hazards which can potentially cause fire disasters in Lagos communities.
- c. Low-income communities in Lagos State are more exposed to fire hazards due to economical, physical, and educational vulnerabilities.
- d. A state-wide survey in Lagos State shows that just 1% of households in the Lagos had access to fire brigade services while only 2% had access to ambulance services, indicating a preparedness deficiency.
- e. Based on the response time of the LFRS, 33% of the Lagos households claimed that the LFRS is ineffective while another 42% are undecided.
- f. Data shows that 88% of Lagos State households do not have the knowledge of what an assembly/muster point is. 62% are ignorant of where the muster point is located.
- g. The Lagos State household report indicates that only 3% of the 10.000 surveyed participants possess fire suppression equipment in their homes.
- h. Data shows that 43% of households in Lagos live in buildings with only one entrance and exit door. This is another case of non-compliance regarding the implementation of building safety policy concerning fire hazards.

There is a need to reduce and specify the scope of this study due to limited time and resources. To focus the wide scope of problems identified based on this study's needs and limited resources, the following conditions serve as limitations of this study.

- a. Disaster education and building safety policy are the two (2) independent variables studied in this research.
- b. The building safety policy refers to certain fire safety concerns stated in the Lagos State Building Control Agency Regulations 2019.
- c. The dependent variable in this research is fire disaster preparedness in the study area. The unit of analysis adopted is household preparedness.
- d. The research will be conducted in Lagos State, Nigeria.
- e. Cross-section data regarding the three variables discussed in this study will be collected from households.

1.3 Problem Formulation

Based on the identified problems and scope of research, the research questions to be discussed are as follows:

- a. How large is the influence of disaster education on fire disaster preparedness in Lagos State, Nigeria?
- b. How large is the influence of building safety policy on fire disaster preparedness in Lagos State, Nigeria?
- c. How large is the simultaneous influence of disaster education and building safety policy on fire disaster preparedness in Lagos State, Nigeria?

1.4 Research Objectives

Based on the above-stated research questions, the research objectives for this study are as follows:

- a. To investigate the influence of disaster education on fire disaster preparedness in Lagos State, Nigeria.
- b. To investigate the influence of building safety policy on fire disaster preparedness in Lagos State, Nigeria.

- c. To investigate the simultaneous influence of disaster education and building safety policy on fire disaster preparedness in Lagos State, Nigeria.

1.5 Research Significance

Based on the research objectives, this study is expected to provide theoretical and practical contributions.

1.5.1 Theoretical Significance

- a. This study is expected to provide inputs for the development and advancement of defense and security studies, specifically in the area of security against fire disasters.
- b. This study will provide recommendations that can be used as a reference for future studies related to fire disaster education, building safety policy and fire disaster preparedness in urban settings.

1.5.2 Practical Significance

This study will provide practical insights and knowledge contribution to the following stakeholders involved in fire disaster prevention and mitigation in the state:

- a. For the Lagos State Emergency Agency (LASEMA), this study will provide recommendations regarding measures to improve fire disaster prevention, mitigation and coordination strategies.
- b. For the Lagos State Fire and Rescue Service (LFRS), this study can serve as a reference for understanding the knowledge gap in households and communities regarding fire safety in order to prepare more specific measures in responding to fire emergencies as well as training households to be better prepared.

- c. For households, this study will provide recommendations on measures which can be taken to be better prepared when co-living with fire hazards.
- d. For non-governmental organizations (NGOs) and other international organizations, this study can serve as a reference for understanding fire risk factors in Lagos State's households. Findings from this study can provide information to these organizations on more specific measures which can be taken when preparing targeted fire safety campaigns.
- e. For the media, this study can shed light on areas that need more attention for awareness creation about fire hazards in Lagos State.
- f. For business enterprises, findings from this study can provide information on opportunities for corporate social responsibility (CSR) activities in Lagos State.