

TREND OF MARKET FIRE DISASTER AND MANAGEMENT IN IBADAN, NIGERIA

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ABSTRACT

The incidents of market fires constitute major disasters in Nigerian urban areas. This is especially worrisome as they are always accompanied a large loss of money, property and livelihoods as well as lives, in most cases. The city of Ibadan is not exempted from the increasing incidents of market fires. Ibadan is a large city with many markets, both traditional and local, scattered all over the city. This study examines the trend of fire incidents in Ibadan over a thirteen year period; the causes of these incidents, perception of market traders on the management of fire incidents and institutional challenges in responding to events of market fires in the city. Primary and secondary data were used for the study. Analysis of market fire related data collected for the selected markets (Ogunpa, Aleshinloye and New Gbagi) for thirteen years formed the bulk of secondary data used. On the other hand, primary data was collected using one hundred and fifty (150) structured questionnaire administered randomly to traders in the three markets. The results showed that there was a significant increase in the trend of market fires within the period under investigation, most of them occurring in the months of December and January. The major factors responsible for this upward trend include overcrowding, unorganised nature of the markets and illegal electricity connections. The consequences of market fire, the predisposing factors and its associated impacts can be addressed, its effects prevented or at worst considerably reduced with an adequate disaster management plan.

Keywords: Market Fire, Disaster, Urban areas, Livelihoods, Impacts, Management

INTRODUCTION

Communities all over the world especially in developing countries are becoming more and more vulnerable to the consequences of disasters, as these disasters pose an increasing threat to poverty reduction and sustainable development. Yearly, more and more people are affected by disasters, as economic costs are escalating more than ever (Munich Re 2012; WDR, 2012). Nigeria is not an exception. The country is a disaster prone (NEMA, 2013; Olorunfemi, 2008, Olorunfemi and Raheem, 2007, Olokesusi 2004). The urban areas are often worse hit by disasters (Olorunfemi, 2008; Olorunfemi and Raheem, 2008; Olorunfemi and Raheem, 2007). Recent occurrences have shown that Nigerian cities are highly susceptible to disasters resulting from floods, fire outbreaks, traffic accidents and building collapse, among others.

Fire outbreaks especially in market places have become a common occurrence with its associated destruction of properties and loss of livelihoods. Ojo (2006) recognizes market fires as a major disaster in Nigeria. A large proportion of Nigerians in the urban centers obtain their livelihood through the sale of goods, distribution of commodities and the rendering of services in market places, which serve as centers of social and economic interaction. Nearly 30 to 40 percent of the population of a typical Yoruba town is engaged in trade and commerce (Filani, 1994). In recent times, incidents of market fires have been on the increase especially the city of Ibadan. For instance, in the 2004 market fire in Aleshiloye market alone, over 2000 shops were burnt and investments worth millions of naira destroyed, eroding livelihoods and dashing the hopes of over

8000 victims (Nigerian Tribune, Tuesday March 9, 2004 p.4).

However, current trend in market fire incidences is alarming, as the occurrence of fires in markets can be a major obstacle to development. Market places in most Nigerian cities are largely unplanned and overcrowded with little or no resource capacities to prevent, mitigate, and respond to fire incidents, as level of awareness and preparedness are usually poor. The response capabilities of fire management agencies are often delayed, resulting in the inability of market shop owners to salvage properties and investments in the event of fire incidences in the market place.

The increasing level of market fires in Nigerian cities questions the effectiveness of fire management agencies in adequately responding to fire emergencies. Also, knowledge of market users in preventing, mitigating and preparing for fire outbreaks; as well as the resource capacities available in these markets to prevent or reduce the effects of fire and the responsiveness of government in ameliorating the plight of victims all affect the impact of market fire disaster in Nigeria. This study, therefore, examines market fires in Ibadan metropolis. This is with the view to assessing the trend of fire occurrences over a twelve years period; the causes of these incidences, perception of market traders on the management of fire incidents and institutional challenges in responding to events of market fires in the city.

Specific focus is on Ogunpa market in Ibadan-West Local Government, Aleshinloye market in Ibadan-West Local Government and Gbagi market in Egbeda Local

Government. These markets were chosen based on the commodities predominately sold and the nature of market shops, as more lock up shops are found in these markets. Furthermore, the items predominately sold in the selected markets are considered more flammable, compared to other markets in Ibadan where the goods mainly sold are less flammable food stuffs (e.g Bodija, Shasha and Oje markets).

CONCEPTUAL ISSUES IN FIRE DISASTER MANAGEMENT

The conceptual framework for this study is gleaned from the works of Marsellis, et al, (1999) titled **"Fire disaster and burn disaster: planning and management"** and Rohrmann (1999) titled "Community-based fire preparedness programmes: an empirical evaluation".

Marsellis, et al, (1999) explained that, although a fire disaster need not necessarily reach catastrophic proportions, it will present some of the characteristic aspects of a disaster because of the highly destructive action of fire and of the considerable number of victims. The surviving casualties will have mainly serious and extensive burns requiring immediate rescue procedures that cannot always be provided by local resources. A fire of vast proportions can moreover cause damage to the surrounding environment by the massive production of heat and the emanation of burn gases and fumes. Smoke and gas, because of their suffocating action and their direct action on the airways, represent other specific danger elements. The danger of smoke and gas is generally underestimated by the population. They further asserted that one factor that makes all fire disasters dramatic is panic. Anybody

close to a sudden fire is affected by panic. This is due to the realization that the fire can kill within a few moments, because injuries and permanent disfigurement, and inexorably destroy everything in the vicinity. When a violent fire breaks out, there is an initial moment of psychological paralysis, generally followed by total incapacity for logical thought, and this leads to instinctive behavioural reactions whose one aim is to save oneself and all that is most dear, and reach safety. This sequence of actions not infrequently serves only to worsen the extent of damage caused and to create an even more dramatic and tragic situation. In animals this may indeed be the only reaction possible, which is purely instinctive, but in man there is another option which at first sight may seem almost paradoxical: to keep calm and take rational decisions. This can be achieved only in one way: through information about the risks involved, through understanding of the dangers, and through instruction about how to behave in case of fire.

On the other hand, Rohrmann (1999) considered approaches to improving fire preparedness and developed the theoretical model of fire risk communication. Preparedness for the hazard of fires - that is, house fires, fires in industrial or transport facilities, market fires and wildfires - is obviously very important, given that not only the belongings but the very lives of humans are at risk. Consequently, hazard management becomes a crucial task. Public authorities are responsible for fire prevention, fire risk information, communication, education and fire emergency management. These tasks need to be addressed not only from a technical but

also organizational and socio-psychological perspective. People who might be exposed to fires need to be optimally informed about the hazard characteristics, preventive measures and appropriate behaviors during the onset of a fire event, and they must understand their own responsibilities. Authorities have to compose pertinent emergency planning, prepare coping strategies, and communicate

the relevant information effectively to residents and communities as a whole.

The risk communication process developed by Rohrmann (1999) for improving fire preparedness and management is presented in Table 1. As seen in the Table, the aims of risk communication are itemised as well as the communication means and channels.

Table 1: Tasks and Means of the Risk Communication Process

<i>Primary types of risk communication aims</i> • Advancing/changing knowledge and attitudes regarding hazards and risk-taking • Modifying risk-related behavior of people exposed to hazards • Promoting community participation in hazard mitigation • Facilitating cooperation & joint conflict resolution regarding controversial risks • Developing disaster preparedness and emergency management
<i>Communication means and channels</i> • Print material (e.g., fliers and brochures), distributed by institutions/agencies • Product information, machine operating instructions, etc • Public information services, 'hot lines', etc • Educational video/film/computer products • Info presented via broadcasting, television, newspapers, journals & the internet • Expert presentations (at meetings, trainings, drills etc) • Warning sirens (or messages through mobile loudspeakers)

Source: Rohmann (1999)

Furthermore, as shown in Figure 1, fifteen constructs (or variable sets) are identified <A to O> as relevant aspects of the fire risk communication process, and the assumed causal links are indicated on a global level.

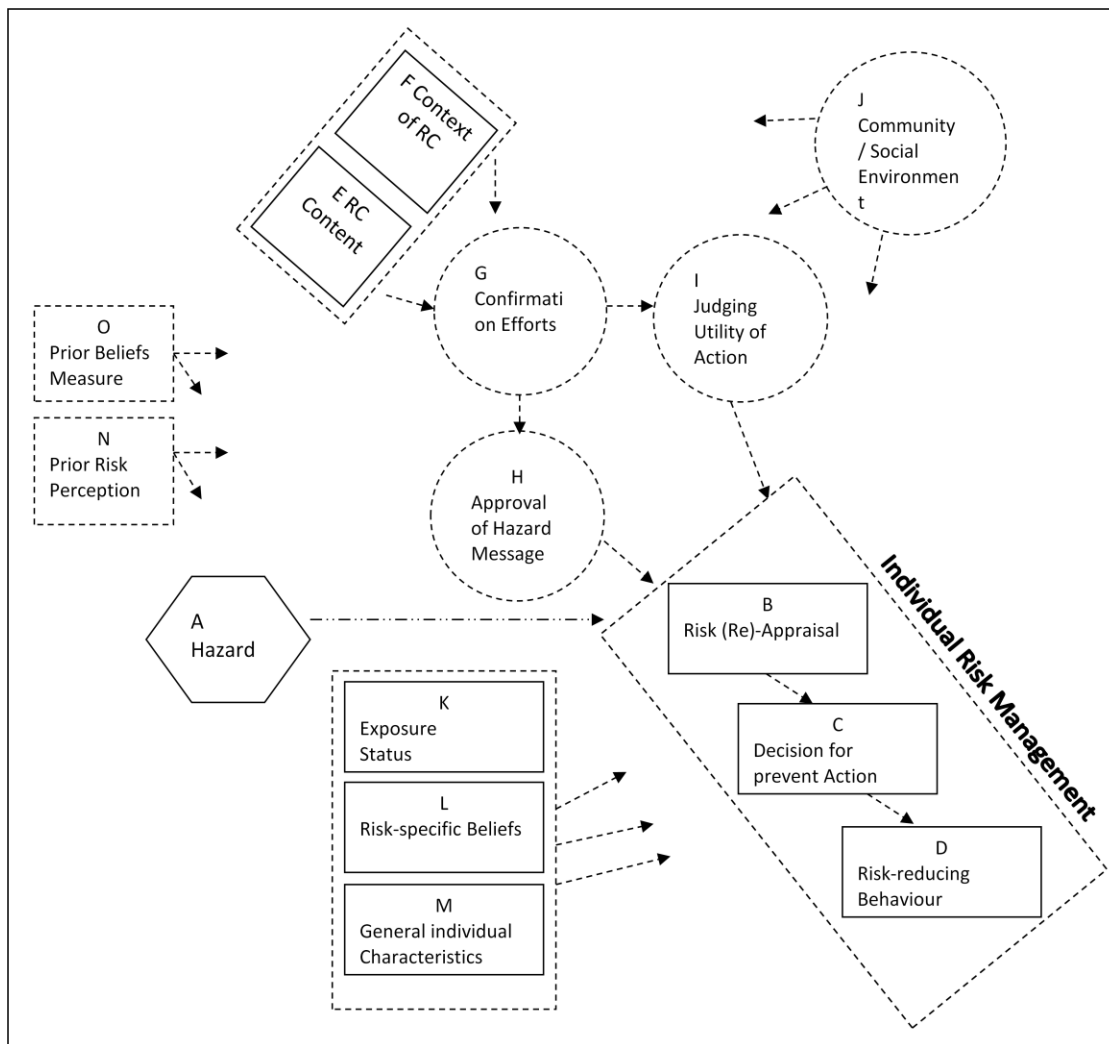


Figure 1: Fire Risk Communication: Process Framework
Source: Rohmann (1999)

The model as developed by Rohrmann (1999) expresses that the final outcome variable, risk-reducing behavior <D> regarding a hazard <A>, is determined not just by the communicated messages of the information/education program <E> but is the result of a complex evaluation process <B, C and G, H, I>, and influenced by personal characteristics <K, L, M> and manifold context factors, e.g., attributes of the information source and 'channel'

features <F> as well as family/friends and the community one belongs to <I>. Also, a longitudinal perspective is implied, as any risk communication has to deal with pre-existing attitudes and behaviors <N, O>.

This model is relevant to this study given the fact that it encapsulates the relevant variables that are addressed in the study and how these are related.

THE STUDY AREA

Ibadan is located in Oyo State in Southwestern Nigeria. It is the capital city of Oyo State and the third largest metropolitan area, by population in Nigeria, after Lagos and Kano, with a population of 1,338,659 according to the 2006 census. The city ranges in elevation from 150 m in the valley area, to 275 m above sea level on the major north-south ridge which crosses the central part of the city. The city's total area is 1,190 sq mi (3,080 km²). There are eleven (11) Local Governments in Ibadan Metropolitan area consisting of five urban local governments and six semi-urban local governments.

According to Filani (1994), although, Ibadan is regarded as one of the largest cities in Black Africa, commercial activities take a low percentage of the land use. This is because much of the commercial activities in the city are done in traditional markets within residential premises, where they play important roles in the commercial and social lives of the inhabitants. Traditional markets are scattered all over Ibadan city, Oja'ba which is in the traditional core area of the city is the oldest market and its recognized as the city's traditional Central Business District (CBD). The Ibadan Municipal council has effected some changes in the marketing procedures and activities within the metropolis. These resulted in the expansion,

closure and modification of some markets within the city. The most remarkable of such undertakings is the movement of some traders to New Gbagi market, the demolition of old Dugbe and the forced movement of traders to Aleshiloye market. In all, 16 of the markets are located in the indigenous section of the city while 21 are found in the modern areas.

Filani (1994) further noted that the unplanned nature of Ibadan city is not only reflected in the residential areas but also in the markets. Most of the traditional markets, in particular those sited in the indigenous section of the city, occupy congested sites. Hawking of wares further complicates the congestion in most of the markets as hawkers often display their articles in the only available open space and streets in and around the markets. In Ibadan, all types of market stalls are available including covered and lockable stalls, open stalls and open trading units. The number of market stalls range from less than a hundred in Ijokodo to well over 5000 stalls in Aleshinloye and New Gbagi markets.

Table 2 shows the location of the selected markets for this study and the predominant items being sold while Figure 2 is a map of Ibadan showing markets and the selected markets for this study.

Table 2: Major items sold in the selected markets

Location		
Gbagi Market (Egbeda)	Aleshinloye Market (Ibadan North-West)	Ogunpa Market (Ibadan South-West)
Textiles	Textiles	Electronics
Jewelries	Jewelries	General household appliances
Food Items	Bags	Agro allied products
Household items	Leather wears	Bedding materials

Authors' survey, 2013

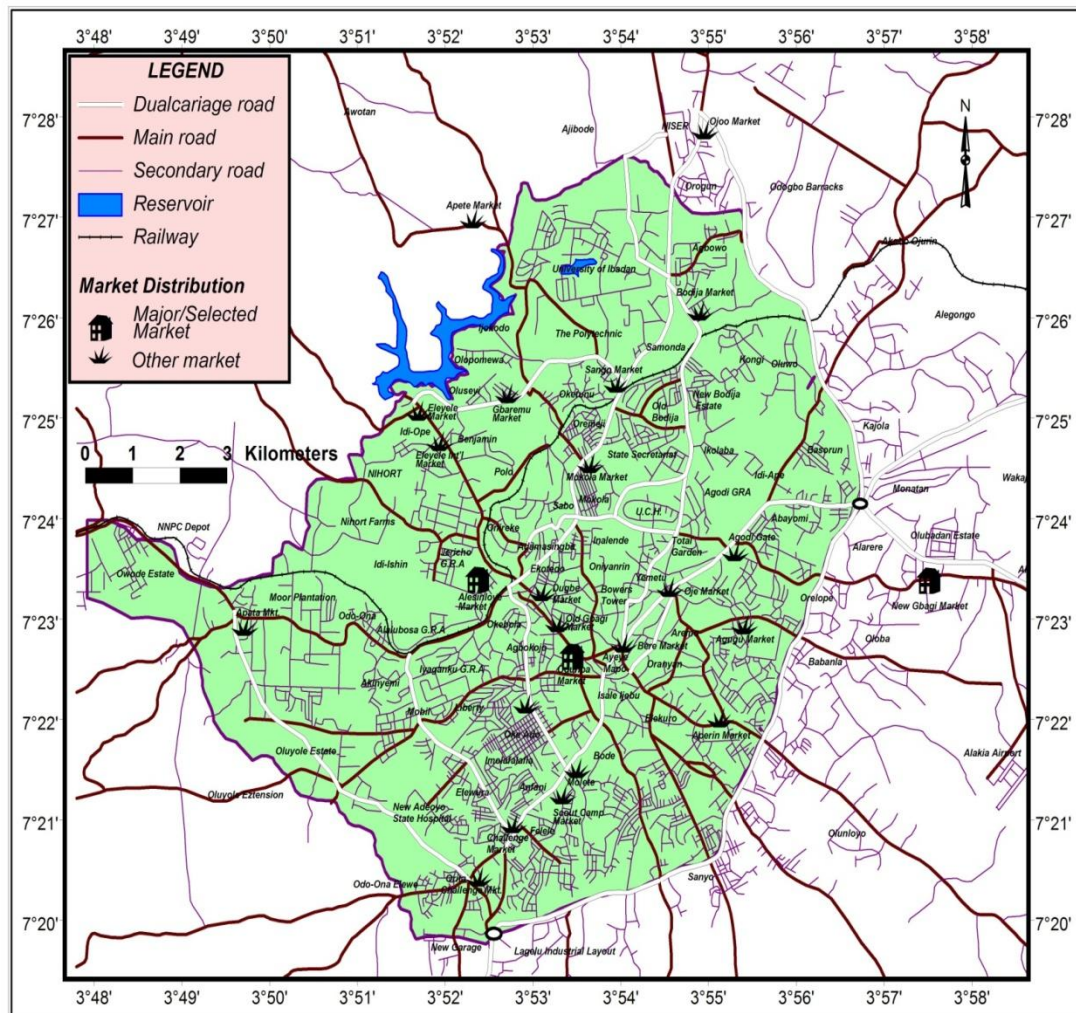


Figure 2: Market distribution in Ibadan Metropolis

Source: Map Composed by Authors, 2013

DATA AND METHODS

Primary and secondary data were used for the study. Analysis of market fire related data collected for Ogunpa, Aleshinloye and New Gbagi markets for thirteen years formed the bulk of secondary data used. These data were sourced from the Oyo State Fire Service, Oyo State Emergency Management Agency (OYOSEMA) and the Nigeria Security and Civil Defence Corps (NSCDC). These records are important as they formed the basis for showing the trend of fire occurrence and their causes over time. Newspaper reports complemented the records collected from emergency management institutions consulted and also provided insights into the causes and responses to some of the reported market fire incidents.

On the other hand, primary data was collected using one hundred and fifty (150) structured questionnaire administered randomly to traders in the three selected markets (50 in each of the three markets) ensuring that all the axis in the markets as well as the different categories of locked up shops and open stores were covered. Key Informants Interview (KII) and Focus Group Discussions (FGD) (see DIMP, 2008) were also used. KII provided greater insights into the causes of market fire, level of preparedness and response of shop owners, traders and

market users. It also provides information on possible fire prevention, mitigation and management strategies as well as opportunity to ascertain and obtain first hand information on challenges faced by fire management agencies in managing market fire incidents. The data were analysed using simple descriptive statistics and the results presented in tables and charts using frequencies and percentages.

RESULTS AND DISCUSSIONS

Trend of Market Fires in Ibadan

Knowledge of the intensity and scale of past hazards is important as it allows an understanding of the type and extent of possible impacts that a hazard will produce. Trends are identified so that changes in the patterns of frequency, seasonality; location and intensity can be identified, thus allowing better-informed decisions about programming to be made (Concern, 2005). Data compiled from various sources including OYOSEMA, the Oyo State Fire Service, and newspaper reports revealed that incidents of market fires increased within the period this study covered. This is as shown in Figure 3. As revealed in Figure 3, the frequency of fire incidents was particularly high between 2011 and 2013.

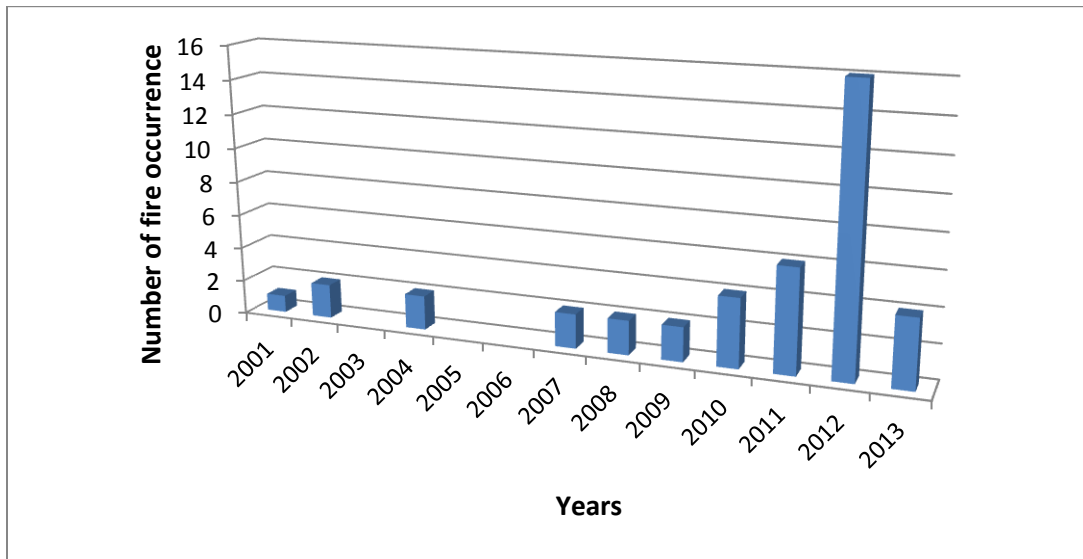


Figure 3: Market fires in Ibadan Metropolis (2001-2013)

Source: Compiled by Authors from Oyo State Fire Service, OYSEMA and Newspaper Reports

The frequency of market fires in Ibadan within this period as shown in Figure 4 revealed an interesting trend as the incidents were more prevalent in the months of December and January. This finding may not be unconnected with the fact that the aforementioned months represent the driest periods in the year. The dry weather provides a favourable condition for fire and facilitates the ease of spread of fire. Furthermore, these months are festive periods marked by increased tempo of socio-economic activities. This implies that markets within Ibadan metropolis are more vulnerable to fire within this period.

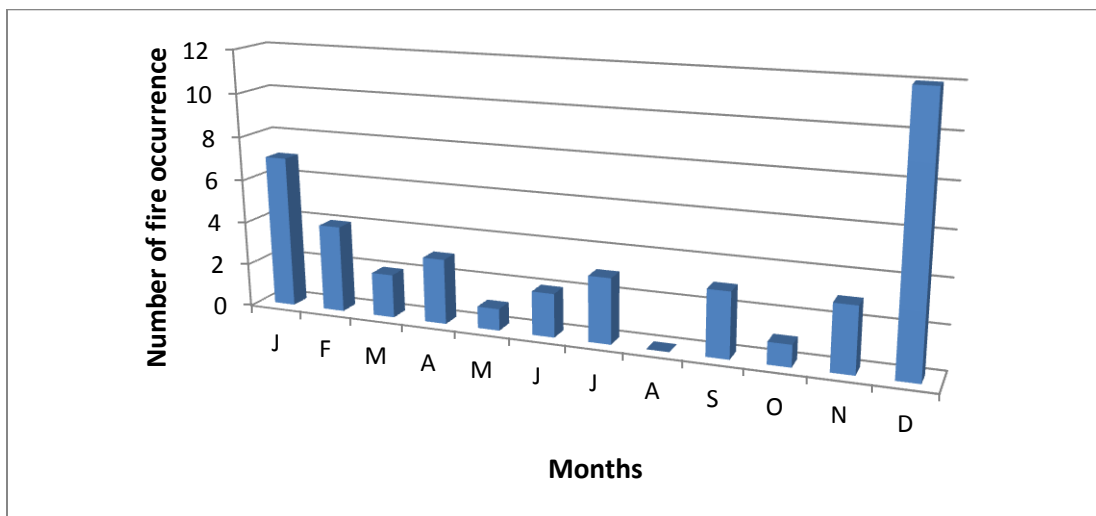


Figure 4: Frequency of seasonal market fire occurrence in Ibadan Metropolis

Source: Compiled by Authors from Oyo State Fire Service, OYSEMA and Newspaper Reports.

Further analysis shown in Figure 5 revealed that incidents of fires were highest in Ogunpa market followed by New Gbagi market. For instance Ogunpa market recorded about four different incidents of fires each severe in 2012

alone. The frequent occurrences of fire in Ogunpa market may not be unconnected with the fact that it is the most unplanned and most congested among the three markets selected for this study.

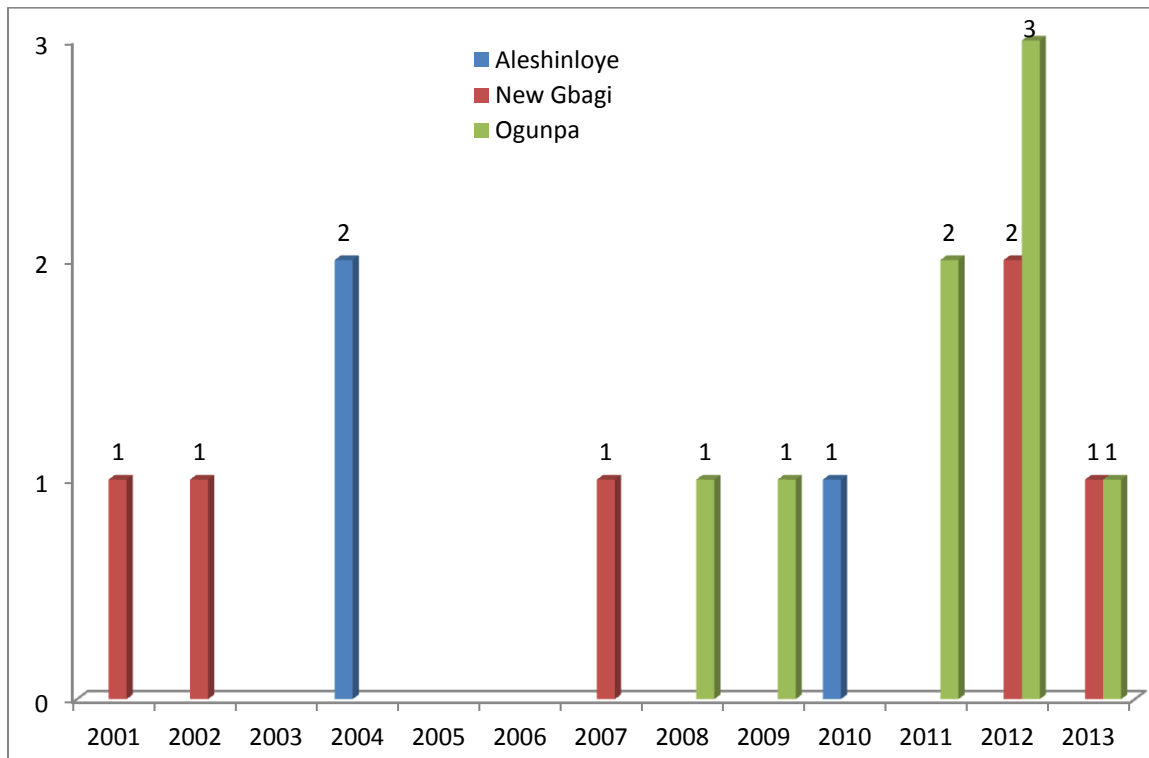


Figure 5: Frequency of fires in the selected markets in Ibadan

Source: Compiled by Authors from Oyo State Fire Service, OYSEMA and Newspaper Reports.

Causes of Market Fires in Ibadan

The general causes of market fires in Ibadan as presented in Figure 6 shows that electricity related factors accounted for close to 60 percent of cause of fires in the selected markets while refuse burning and arson account for about 18.5 percent and 14.8 percent respectively. The high number of fires caused by electricity related factors is due to several reasons.

Most important is the fact that apart from the irregularly power supply with fluctuating voltages, traders regularly engage in illegal connections. This situation makes many of the shops vulnerable to fire in the face of unstable power supply, fluctuating voltages and the congestions in the market. Other reasons given as causes of market fires include cooking and use of candles.

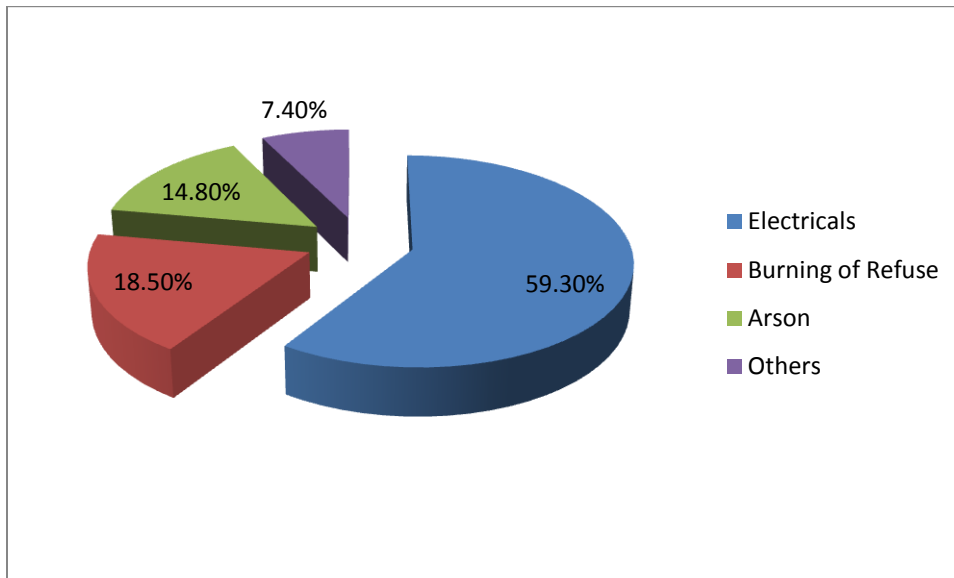


Figure 6: Major causes of market fires in Ibadan

Source: Compiled by Authors from Oyo State Fire Service, OYSEMA and Newspaper Reports.

Furthermore, iron sheets and woods are the major materials used in the construction of shops in all the markets. The nature of commodities sold in a market could also increase its vulnerability to the risk of fire and escalate its scale when not properly handled. The predominant commodity sold in the markets surveyed do not so vary except for Ogunpa market where the major item sold are textiles, provisions and household items.

According to an NSCDC official, “75 percent of the market fires in Ibadan metropolis is caused by electric spark.” This statement is justified as 89.1 percent of the respondents in Aleshiloye market, 66.7 percent in Ogunpa market and 16.7 percent in New Gbagi market attributed the cause of market fires to electric spark. In the words of the fire service, “it cannot be said that market traders are adequately prepared for incidents of market fires, as the causes of this incidents can be traced to some religious and socio cultural

practices of the traders e.g burning of candles for prayers”.

The Civil defence stressed that it is imperative to note that market traders in some of these markets carry out arson, deliberately razing down their shops, seeking government assistance without considering the damaging effects on other traders. This is particularly true in Ogunpa market as 20.8 percent of the respondents confirmed this illicit act. The indiscriminate burning of refuse, the use of firewood for cooking in New Gbagi market and the use of fireworks in during carnivals in Ogunpa market are some other causes of market fire.

Structural arrangements of the markets is also found to be one major contributory factor to fire markets. Proper market planning ensures that shops are well spaced and accessible. Most marketplaces within Ibadan metropolis develop spontaneously. They are usually over crowded, chaotic and

closely packed, promoting road trading. This gives reasons for the high frequency of market fire in Ogunpa market and its ease of spread, considering its clustered nature. Another NSDC official surmised “markets are planned to be accessible but are however distorted by market traders thereby making it increasing difficult to gain access during periods of emergencies. It is essential that the original plans are adhered to. This obstruction hinders the movement of fire fighting vehicles and the fact that shops are closely packed increases the risk of large scale destruction by a single fire incident”.

Perception of Impacts and Management of Market Fires

This section discusses the perception of market fire impacts and management in the

selected markets, based on the information gathered from the structured questionnaires, newspapers interview of victims and responses from KII and FGDs.

Socio-Economic Characteristics of Respondents

Table 3 presents the socio economic characteristics of the respondents as 57.6 percent are males and 42.4 percent are females. About 45.7 percent of the respondents were within the age range of 35 – 49 years. A major proportion of the market traders can be said to be literate and could understand information disseminated as 62.9 percent attended secondary school, 13.2 percent obtained technical education and 12.6 percent attended one form of tertiary institution or the other.

Table 3: Socio Economic Characteristics of Respondents

	LOCATION						Total	
	Aleshinloye		New Gbagi		Ogunpa			
	Sex	Frequency	%	Frequency	%	Frequency	%	Frequency
Male	28	56	26	52	33	64.7	87	57.6
Female	22	44	24	48	18	34.3	64	42.4
Age								
10-34 yrs	14	28	18	36	20	39.2	52	34.3
35-49 yrs	25	50	22	44	22	43.1	69	45.7
50 and above	11	22	10	20	9	17.6	30	19.9
Educational Status								
Primary	5	10	2	4	5	9.8	12	7.9
Secondary	30	60	32	64	33	64.7	95	62.9
Technical	8	16	8	16	4	7.8	20	13.2
Tertiary	6	12	7	14	6	11.8	19	12.6
Others	1	2	1	2	10	19.6	5	3.3
Marital Status								
Single	12	24	12	24	13	25.5	37	24.5
Married	38	76	38	76	37	72.5	113	74.8
Widowed	0	0	0	0	1	2	1	0.7

Monthly Income								
5000-15000	8	16	8	16	11	21.6	27	17.9
15001-25000	8	16	14	28	10	19.6	32	21.2
25001-50000	17	34	10	20	14	27.5	41	27.2
50001-100000	8	16	14	28	6	11.8	28	18.5
100000 and above	9	18	4	8	10	19.6	23	15.2

Source: Authors' Analysis, 2013

27.2 percent earned between ₦25,000 and ₦50,000. 18.5 percent earned between ₦50,000 and ₦100,000, whereas 15.2 percent earn ₦100,000 and above. This provides an idea of the amount of earnings that will be lost and profit that will be foregone when fire razes down a shop in Ibadan metropolis.

Experiences of Market Fire Incidents

The records compiled from various sources on fire occurrences in the markets covered by this study were substantiated

by respondents' experiences of fire incidents in these markets. For instance, about 96 percent of the respondents attested to the fact that they have witnessed a fire disaster in the market just as 94.4 percent recall that it occurs mostly in dry season. The impact of fire disasters in the markets is very severe as 83.1 percent of the respondents attested to this. "Over 100 million naira is lost in each market fire" commented a market leader in Ogunpa Market. The results of this analysis is presented in Table 4.

Table 4: Experiences of market fire incidents by respondents

	LOCATION					
	ALESINLOYE		NEW GBAGI		OGUNPA	
	Frequency	%	Frequency	%	Frequency	%
Severity						
Not severe	2	4.3	1	2.1	0	0
Severe	3	6.5	13	27.1	5	10.4
Very severe	41	89.2	34	70.8	43	89.6
Total	47	100.0	48	100.0	48	100.0
Affected						
Yes	41	89.1	11	22.9	16	33.3
No	5	10.9	37	77.1	32	66.7
Total	46	100.0	48	100.0	48	100.0
Number of times affected						
Once	40	97.6	11	100.0	15	93.8
Twice	1	2.4	0.0	0.0	1	6.3
Total	41	100.0	11	100.0	25	100.0

Source: Authors Analysis, 2013

The impact of market fires is captured in these newspaper excerpts” *Mrs Olowonyo, who sells rubber shoes, said that the goods and property in the shop worth N20 million were completely destroyed....“I’m finished, what would I do now? I just got a loan to buy goods to stock the shop. In fact, I had a credit facility hanging on my neck, so what would I do now,” she asked with tears rolling down her cheeks* (Ganiyu, 2012). This latest incident happened a few weeks after an early morning inferno destroyed property worth millions of Naira at Labaowo Market, just some metres away from Ogunpa Market....“*After I had left the shop on Saturday, I got a call around 11.55pm that my shop was on fire. I quickly rushed there. By the time I got there, fire men were there. They did their best but all my goods worth N25m and 1.8m that I kept in the shop were gone with the fire. The building is there. We are pulling it down perhaps we may still see the remnant of the burnt money*”(Ajayi, 2012). The fire incident that occurred at the South-West section of the market, on Saturday, which reportedly started around

10.00pm and destroyed goods and property, according to traders, re-ignited and burnt more shops before dawn on Tuesday.... *This is about the fifth time we have recorded incidents like this in the last four years.... Billions of naira has been lost*” (Oluwakayode, 2012)

Moreover, of the percentage of respondents that acknowledged that the fire service responded promptly, only 10 percent in Aleshiloye market, 18.8 percent in Ogunpa market and 42.6 percent in New Gbagi market agreed that the fire service responded within minutes of being called (see Table 5). Though, the fire service attributed this delay in response to logistic problems such as the distance of the fire station to the scene of the incident, bad roads, traffic jam and the irregular structural arrangement of the markets, obstructing access to the scene. This has often lead to the attack and destruction of firefighting equipment by angry sympathizers, as such the fire service wait to be escorted to the scene by the police, thereby delaying response.

Table 5: Perceived responses to market fires by Emergency Management Agencies

	LOCATION					
	Aleshinloye		New Gbagi		Ogunpa	
	Frequency	%	Frequency	%	Frequency	%
Promptness of emergency management agencies						
Yes	10	21.7	35	70	16	33.3
No	36	78.3	15	30	32	66.7
Total	46	100.0	50	100.0	48	100.0
Time of response						
Within minutes	15	42.8	1	10	3	18.7
< 30mins	10	28.6	7	70	6	37.5
30 mins- 1 hour	10	28.6	2	20	7	43.8
Total	45	100.0	10	100.0	16	100.0

Source: Authors Analysis, 2013

Respondents' Assessment of Risk Reduction Efforts

Remarkably, there have been considerable efforts to reduce the occurrence of fire outbreak in Aleshiloye and New Gbagi market. In the words of the Aleshiloye market leader, *"since the last major fire incident, we have created and expanded more roads in places that were not accessible before and properly spaced shops. This is to ensure every part of the market is accessible to fire fighting vehicles and to stem down the ease of*

spread of fire. There is also a standing regulation that all appliances be should be put off as soon as electric power supply is interrupted and market activities are closed for the day, this is enforced by a taskforce and defaulters are fined".

It is pertinent to note that the efforts aimed at reducing market fires are essentially initiated by the existing market associations in the various markets, as asserted by 61.8 percent and 65.1 percent of the respondents in Aleshiloye and New Gbagi markets. This is as shown in Figure 7.

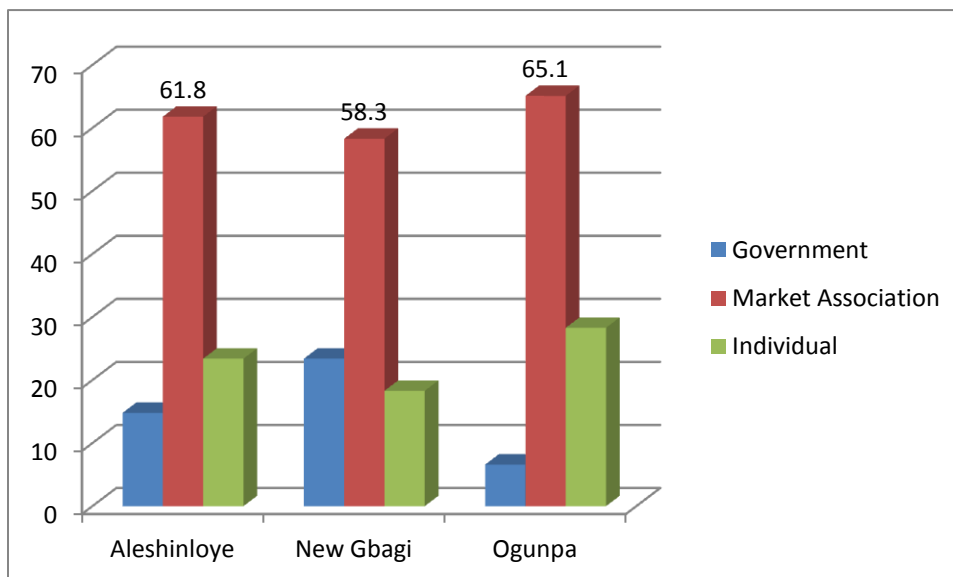


Figure 7: Major actors in efforts aimed at reducing market fires

Source: Authors's Analysis, 2013

Discussions from the FGD session and analysis of questionnaire revealed that conscious efforts have been made by traders in the surveyed markets to individually reduce the occurrence of market fires. For instance, it was revealed

that 75.5 percent of the respondents in Aleshiloye market switch off their appliances after the day's activities while 12.2 percent ensured they had proper electrical connections.

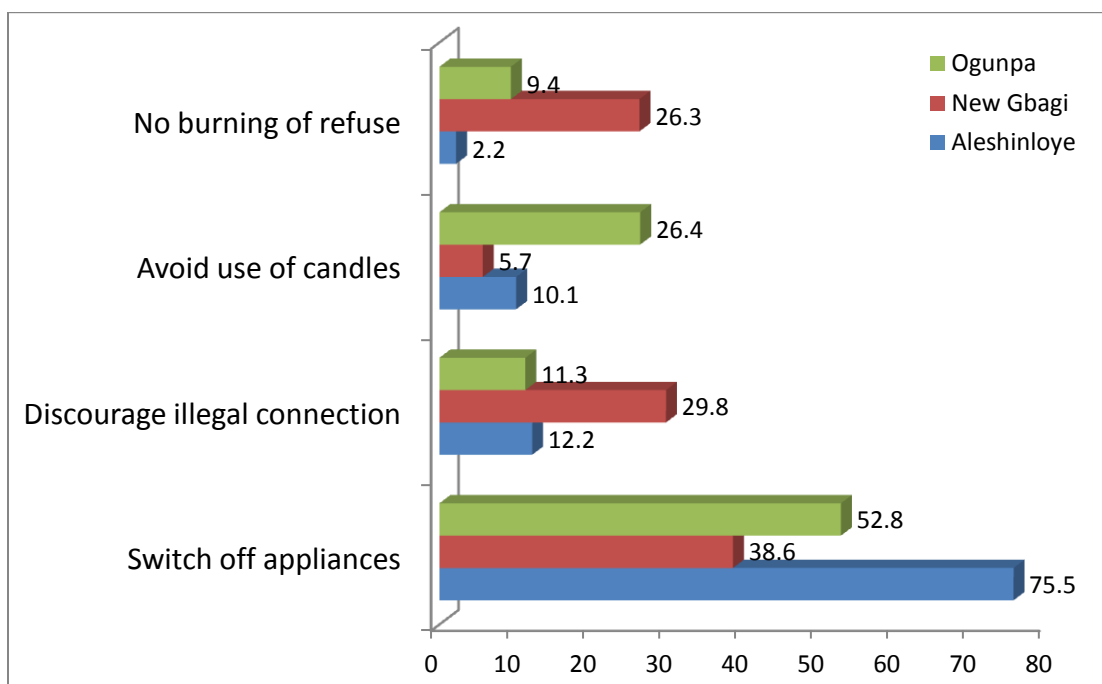


Figure 8: Efforts aimed at reducing the occurrence of market fires

Source: Authors' analysis (2013)

Public awareness campaign is said to have taken place in most of the markets except for Ogunpa market. 70 percent and 88 percent of the respondents in New Gbagi and Aleshiloye markets respectively confirmed that there have been public awareness campaigns in the markets. However, 84.3 percent of the respondents in Ogunpa market claimed no public awareness campaign on fire prevention has taken place. This is also a factor in the high frequency of market fire in Ogunpa market.

The situation is such that no public awareness campaigns on market fire have been embarked on by any of the Emergency Management Agencies as claimed by majority of the respondents. The effect of the public awareness campaign is observed in the reduced frequency of market fires in

Aleshiloye and New Gbagi market where they are created. The high frequency in Ogunpa market can be attributed to the relative absence of public awareness campaigns which may be directed to the inactive state of their market associations. This implies that the dissemination of information at local level through market association leader and meetings still remains the better mode for inculcating the culture of safety among market traders.

According to the Aleshiloye market leader, awareness on market fire is created during market meetings and messages and information disseminated through the use of the public address system present in the market. Information is mostly disseminated verbally and according to the respondents they trust the information disseminator.

Institutional Response to Market Fires in Ibadan

Emergency management institutions by virtue of the law that established them have the requisite mandate of preventing, mitigating and responding to disaster situations, with the goal of safeguarding lives and protecting socio economic investments. The act of any emergency management agency is the tool by which it is established and mandated by law, stating categorically its functions, duties and responsibilities. For instance, the Oyo state Emergency Management Agency law of 2008 in section 8 (o) stipulates *that the Agency shall promote disaster management capacity building, training and education throughout the state.* Furthermore, section 21, subsection 1(d) stated that *the Agency shall act as a repository of, and conduit for information concerning disasters and disaster management and must for this purpose take steps to disseminate such information, especially to communities that are vulnerable to disasters.* According to the fire service chief, this has continually been carried out. He stated that *“apart from responding to fire incidences including markets, we have created a Fire Prevention Unit, whose role is to educate, enlighten and create awareness on the causes of fire and how to reduce and respond to incidents of fire outbreak.”* He further stated that *“the Oyo state fire service has purchased and has in its acquisition large fire tenders, super tankers (25000 liters) and hydraulic platforms. This takes care of the issue of inadequate water in fire scenes; as such we are adequately prepared to manage incidences of market fire. However in most cases we are delayed by sympathizers and logistic issues.”* According to an NSDC official,

“we respond to market fires by informing the fire service and control the scene pending their arrival”. We also support the fire service and other Emergency management agencies during their fire risk reduction programmes.

A major concern among the respondents was the absence of awareness campaign and efforts to reduce the incidents of market fires by the Emergency Management Agencies. This fact was corroborated by OYOSEMA. The Civil defence in the interview conducted, cited poor logistic arrangement and inadequate funding as the major challenge of the outfit in carrying out fire risk reduction campaigns. This was also corroborated by the Fire Service official who attributed inadequate funding and poor cooperation from market traders to the low level of fire disaster preparedness

CONCLUSION

The study revealed that the surveyed markets are overcrowded, mostly unorganized with irregular erection of structures and largely inaccessible with several illegal electrical connections. These are the major causes of fire outbreaks which has increased in frequency and intensity in the past few years. Most of these incidents are recorded in the months of December and January , (the dry season and festive periods). Worse hit is Ogunpa Market, by far the most crowded and unorganised. Many losses were recored during each of these incidents thereby affecting the livelihoods of many. Majority of the respondents agreed that response of emergency management agencies, especially fire service have not been adequate thereby aggravating the lossess of the traders.

The consequences of market fire and its associated vulnerabilities can be addressed, its effects prevented or at worst considerably reduced with an adequate disaster management plan. However, an emergency action plan can only be effective and efficient when there is a clear, consistent and logical approach for a coordinated action among stakeholders in disaster management. In other words, markets in Ibadan metropolis

require an Emergency Management/Response Unit involving periodic sensitization and organization of awareness programs on the risk of fire outbreak and building a culture of safety and resilience in the market. Also, periodic organization of emergency simulation drills in the markets should be organised so as to improve the preparedness level of traders.

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