

An Assessment of the Awareness of Fire Insurance in the Informal Sector: A Case Study of Kumasi Central Market in Ghana

Leo Moses Twum-Barima

Department of Accounting Education, Faculty of Business Education
University of Education, Winneba, Kumasi Campus, Ghana
leo1gh@yahoo.com/lmtbarima@gmail.com

Abstract: *Markets in developing economies do not have well planned and proper layouts so they are always congested. Anytime fire breaks out in the market it becomes very difficult for fire tenders to get access to quench the outbreak so many goods are destroyed in the markets. This study assesses whether the traders are aware of fire insurance and have taken such policies to cover their goods and stalls. A sample of 95 traders was used and it was found out that majority (50.52%) of the traders did not understand the concept of insurance so they had wrong perception about it; the traders were aware of the causes of fire outbreak and ranked electricity power fluctuations as the major cause; the traders could use water and sand to quench fire but only a few of them could use foam, carbon dioxide and dry powder to control fire outbreak. Relevant recommendations have been made for these traders and policy makers to strategize in order to have better protection on the markets*

Keywords: *Fire insurance, fire outbreak, informal sector, electricity power fluctuations*

1. INTRODUCTION

Recently there have been many fire outbreaks in Ghana. Notably among them are the Ministry of Foreign Affairs, Kumasi central Market and SwedruMelcom Super Market. Anaglatey (2013) reports that barely 14 days in 2013, Ghana witnessed 254 fire cases in the country. These fire cases include market fires which is a common issue that Ghanaian markets face.

Fire outbreak has been a major problem for traders in Ghana. The problem is always compounded because of congestion (Anaglatey, 2013). As markets do not have proper layouts, accessibility by fire tenders is always difficult when there is fire outbreak because every major market in Ghana faces the problem of congestion. Due to this, fire hydrants have been obscured by stalls; lanes that fire trucks could use to access the markets are converted into stalls etc. All these come together to cause the kind of destruction that occurs during such outbreaks of fire. These have become rampant and the effect typically is that goods and structures are always destroyed with cost running into thousands of Ghanaian Cedis. These losses always become a burden for the traders because they do not have fire insurance cover for their goods.

Markets are very important in the economy of every country. Ghana, a West African country with a population of over 23 million (Statistical Service, 2010) like all countries in the world has many markets. Some are major and others are minor. Unlike markets in other countries across the world, Ghanaian markets are unique, their uniqueness lie in the fact that one would hardly find a market that trades in one particular group of wares. In a typical Ghanaian market, one can find everything (Ministry of Trade and Industry, 2010).

Trading begun when the first settlers arrived in the country. Like many African countries, the main method of trading was through the barter system. People used to exchange goods and services for commodities and services that were believed to measure up to what was being offered. As trade became more liberalized, people used to trade their goods and services for cowries which are known locally as “cedie”. This later became the country’s currency- the cedi (Ministry of Trade and Industry, 2010).

There are 10 administrative regions in Ghana with each having its own regional capital. Every region has at least one major market where peculiar goods and services offered at minor markets would be readily available and at a cheaper price (Ministry of Trade and Industry, 2010). Some of the major markets in the country are:

- Kotokoraba Market in Cape Coast – Central Region
- Market Circle in Takoradi – Western Region
- Kejetia in Kumasi – Ashanti Region
- Central Market in Kumasi – Ashanti region
- Kantamanto in Accra – Greater Accra Region
- Makola Market in Accra – Greater Accra Region
- Kintampo Market in Kintampo – BrongAhafo Region
- Central Market in Tamale – Northern Region (Ministry of Trade and Industry, 2010).

The Accra mall remains Ghana prime supermarket, the mall which started operations in the 2008 sought to improve the Ghanaian's shopping experience. It is located along the Spintex Road adjacent to the Tema Motorway (Ghana Ministry of Trade and Industry, 2010). Another big supermarket in the country is Melcom. The company was established in 1989. In 1991, the primary shop was opened in Accra Central. It has branches in almost all the regions of the country including the single largest shop in the nation – Melcom Plus in Kaneshie, covering an area of over 90,000 square feet (Ministry of Trade and Industry, 2010).

Apart from the traditional mode of trading, some amount of trading is done online though this is not widespread. The major online trading sites are:

- theflipbay.com
- bayGH.com
- mallgh.com (Ghana Ministry of Trade and Industry, 2010)

Many developing nations do not roll out strategies to protect their citizens working in the informal sector from abject poverty. Most of these workers in the informal sector are exposed to several risks such as illness, unemployment, fire, old age, etc. which undermine productivity level and the capacity to create wealth (Loewe, 2006). The workers of the informal sector have practically no insurance cover of any kind. As a result, whenever any unforeseen event strikes these people who may otherwise be above the poverty line sink into the poverty trap (Guha-Khasnabis and Ahuja, 2004)

In a typical Ghanaian market, most of the traders do not have formal education. They only learn the act of buying and selling from their parents, senior colleagues or friends and as a result the workers of the informal sector have practically no insurance cover of any kind (Guha-Khasnabis and Ahuja, 2004).

The informal sector has been described by Akotey, Osei and Gemegah (2011) as a “survivalist” economy. That is, its occurrence is the result of the natural desire of the individuals to survive by engaging in different economic activities. They add that the informal sector is characterized by: (a) ease of entry; (b) reliance on indigenous resources; (c) family ownership; (d) small scale operations; (e) labour intensive and adaptive technology; (f) skills acquired outside formal sector; (g) unregulated and competitive markets.

2. PURPOSE OF THE STUDY

The main purpose of the study is to investigate and gain insight into the fire insurance awareness level of the traders in Kumasi Central Market in order to strategize towards better protection against fire outbreak in the market.

3. THE CONCEPT OF INSURANCE

Insurance is a risk transfer mechanism by which an individual or organization can exchange his or its uncertainty for certainty (Akakpo, 2004). Larsen (2000) writes that insurance does not prevent risk from happening but provides the means by which individuals and entities exposed to risk can transfer the financial consequences of the risk to the insurer in return for the payment of premium. Anderson (1980) reiterates that insurance is the creation of pool in the form of premiums against risk which works well on the principle of numbers because the few who suffer the loss are compensated from the contribution of the many.

Gee (1985) differentiates between assurance and insurance contracts; the former being confined to life assurance business, the latter denotes insurance with contracts covering events which may or may not happen. He adds that insurance is a contract of indemnity against a contingency. Brown and Churchill (1999) posited that insurance reduces vulnerability as households replace the uncertain prospect of large losses with the certainty of making small, regular premium payments. According to Akakpo (2004), all assurance and insurance contracts are “uberrimaefidei” contracts. In that unless the insured discloses every material fact of which he has knowledge and which may affect the contract to the insurer, the contract will be void and has no effect.

4. CAUSES OF FIRE OUTBREAK IN GHANA

Fire insurance is a risk pooling arrangement by which the cost of fire outbreak to a single individual becomes a collective responsibility of all the people in the society. Fire is caused by several factors. Boateng (2013) posited that improper electrical fittings, use of substandard electrical materials, defective generators, power fluctuations resulting from frequent power outages and illegal tapping from the national grid are some of the possible causes of fire outbreak. Anaglatey (2013) says the rise in fire outbreak could be traced to intense harmattan, overloading of electrical appliance on the same fuse and improper electrical installation in homes and workplace. He continues that illegal, improper and old wiring system as well as cooking in the home and workplace with naked fire is some of the major causes of frequent fire outbreaks. Abu (2013) reports that 75% of fire outbreak in Ghana are caused by smoking, 15% out of ignorance and 10% out of accidents.

5. METHODOLOGY

The study geared towards the assessment of awareness of fire insurance in the informal sector. The research design was a case study that used the traders at Kumasi Central Market. Case study was used because an investigation about real life situation was being tested at the Central Market in order to examine whether the traders understand concept of fire insurance and also have taken fire insurance policies to cover their trading activities. According to Yin (1994) case studies are the preferred strategy when ‘how’ and ‘why’ questions are being posed, when the investigator has little control over events and when the focus is on the contemporary phenomenon within some real life context.

The data for the study was collected through the administration of structured questionnaire. The population of this study was made up of traders in Kumasi Central Market. A sample of 100 traders was selected using random sampling technique. The selection of sampling was independent of sex. The demographic characteristics of the subjects include age range of 26-65 years, working experience of 5-30 years of trading at the Kumasi Central Market. The instrument consisted of a 5 – prime Likert scale response option. Out of the 100 questionnaires administered, 95 were returned. The validity of the questionnaire was done through the use of an expert of the Ghana National fire Service and a pre – test reliability determination resulted in stability coefficient of 85% at Bantama Market in Kumasi. This was considered well enough for the study.

6. RESULTS AND DISCUSSIONS

6.1. The Understanding of Concept of Insurance

The findings of the study on whether the traders understand the concept of fire insurance in the Kumasi Central Market have been presented in Table 1 below. In Table 1, the findings on how the

traders understand or do not understand the concept of fire insurance have been analyzed into percentages to represent their views.

Table 1. Traders' understanding of the concept of fire insurance

Respondents	Strongly understand	Understand	Undecided	Do not understand	Strongly Do not understand	Total
Traders	10	15	22	18	30	95
Percentages	10.53%	15.79%	23.16%	18.94%	31.58%	100

Source: Field survey

In the Table1 above, 10.53% strongly understand, 15.79% understand the concept, 23.16% of the respondents are neutral, 18.94% do not understand and 31.58% strongly do not understand the concept of fire insurance.

This clearly shows that majority of the traders do not understand the concept. Taking the respondents who are undecided about whether they understand the concept or not out of the discussions, those who do not understand and who strongly do not understand the concept gives a total percentage of 50.52%. Those who strongly understand and who understand give a percentage of 26.32%. Since majority of the traders do not understand how the concept of insurance operates, it will be difficult for them to take fire insurance policies to cover their trading activities in the market so when any fire outbreak affects their trading wares they suffer a lot. This confirms what Loewe (2006) says that greater number of workers in the informal sector are exposed to several risks such as illness, unemployment, fire, old age, etc. which undermine productivity level and the capacity to create wealth.

7. THE AWARENESS OF CAUSES OF FIRE OUTBREAK

On the awareness of the causes of fire outbreak, all the traders strongly agree that they know the causes of fire outbreak in the Kumasi Central Market. So the traders were asked to rank the possible causes based on the review of literature in the study and the views of the traders have been presented in Table 2 below.

Table 2. Possible causes of fire outbreak in Kumasi Central Market

Causes	Responses	Percentages	Rankings
Power Fluctuations	25	26.32%	1
Cooking with naked fire in the market	18	18.95%	2
Overloading of electrical appliance	15	15.79%	3
Improper and old electrical wiring system	12	12.63%	4
Illegal tapping of electrical power from the national grid	10	10.52%	5
Use of substandard electrical materials	8	8.42%	6
Use of defective generators	7	7.37%	7
Total	95	100.00	

Source: Field survey

7.1. Power Fluctuations

From the Table 2 above, majority (26.32%) of the traders consider power fluctuations which is known in Ghana's local parlance as 'dumsodumso' as the major cause of the fire outbreak in the market. According to them, in the day time the electricity may go off whiles some traders may be having some of their electrical gadgets on especially ceiling fans to cool the atmosphere because the is congested and less ventilated. If the electricity power does not come when they are in the market so that if any bad thing happen they may be around to help but they go home without putting off their electrical gadgets, the electricity power may come with high voltage that can set fire to any electrical gadgets which may be on at the time the power is coming. Once fire is ignited, it burns the materials and wares they are selling.

7.2. Cooking with Naked Fire in the Market

From Table 2, a total of 18.95% ranked cooking food with naked fire in the market as a major cause of fire outbreak in the market. Traders use coal pots in cooking food especially super for their children and family members so that when they go home they can serve their family the

meals. Coal pot is a cooking device that uses burning charcoal to cook the food. According to Anaglatey (2013), after cooking if the fire is not properly extinguished before the ashes are dumped at the refuse collection bins at the market it poses a serious threat at the market. Some of the fire embers can ignite into fire once they get closer to any dry refuse that is combustible.

7.3. Overloading of Electrical Appliance

From Table 2, 15.79% of the traders ranked overloading of electrical appliances as the third major cause of the fire outbreak in the market. The extension sockets have the maximum capacity they can hold so when their limits are exceeded they explode by causing fire outbreak. These traders do not have technical knowledge in the use of these appliances so they just over load the sockets. From one socket, a deep freezer refrigerator may be connected at the same time, about five or more electrical appliances may be connected from the same source when the socket can no longer support the distribution of the electricity because it is above its limit it explodes by igniting fire in its environment.

7.4. Improper and Old Electrical Wiring System

From Table 2, 12.63% of the traders ranked improper and old electrical wiring system as the fourth major cause of fire outbreak in the market. According to Anaglatey (2013), some of the traders have not changed the wires they installed since they constructed the stalls. Such wires have become so old that some of them have become death traps. The rubbers covering the some of the wires have started peeling off so some of the wires have become exposed to the atmosphere. Also, some of the wiring systems were not done by competent people so they can easily catch fire anytime there is a power fluctuation. These old wires and improper wiring system pose a big threat to fire outbreak because once they get very close to any dry combustible material fire can easily ignite and set the whole market place ablaze.

7.5. Illegal Tapping of Electrical Power from the National Grid

From Table 2, 10.52% of the traders consider illegal tapping of electrical power from the national grid as the fifth cause of fire outbreak. Due to the high charges of electricity tariffs, many traders resort to illegal connections of electricity power in order to beat down the high cost of monthly electricity bill payments. So many traders do not use competent electrical engineers when it comes to connecting the illegal tapping. This practice often leads to shoddy work in laying out the wires and tapping the power from the electricity poles. The end results are often fire outbreak in the market place. Boateng (2013) warns that it is a bad practice so the traders should desist from it. He continues that culprits would be dealt with according to the laws of the land.

7.6. Use of Substandard Electrical Materials

From Table 2, 8.42% of the respondents ranked the use of substandard electrical materials as a sixth major cause of fire outbreak in the market. According to Boateng (2013), there are a lot substandard electric gadgets on the Ghanaian market which consumers and users of electricity products ignorantly buy and use them either at their homes or place of work. These substandard goods are just imitations of the good ones so in terms of quality they do not come near the real or original ones. These substandard gadgets appear cheaper to the traders so they prefer buying them to the original ones. These substandard gadgets easily get burst while they are being used. Most of the time, they explode into fire and can burn any combustible material which can burn the whole market.

7.7. Use of Defective Generators

From Table 2 above, 7.37% of the traders consider the use of defective generators as the seventh major cause of fire outbreak in the market. Generators provide electricity power for the traders when the supply of electricity from the national grid is cut off. Due to the nature of business of some traders hardly can they run their businesses without the supply of electricity power. Due to this, they always have standby generators in their stalls to help in case there is power failure. Boateng (2013) advises that these standby generators need constant and regulator servicing in order to prevent any fault so that they do not burst into flames while being in use. On the contrary, these traders do not get time to send their generators for regular servicing so even when

some of the generators develop some fault, they still use them which is a major cause of fire outbreak in the market.

8. THE USE OF FIREFIGHTING GADGETS

On the knowledge of firefighting gadgets to control fire outbreak at the market, the traders exhibited that they have little knowledge. Apart from pouring water and sand into burning fire they have little knowledge on how to use other fire extinguishers like foam, carbon dioxide, and dry powder to quench a burning fire. The traders' knowledge on fire control techniques have been presented in Table 3 below.

Table 3. Traders' knowledge on how to use firefighting gadgets to control fire outbreak

Respondents	Water	Sand	Foam	Carbon dioxide	Dry powder
Traders	95	95	5	7	8
Percentages	100%	100%	5.26%	7.37%	8.42%

Source: Field survey

From the above Table 3, all the traders can use water and sand to quench or extinguish a burning fire. The other firefighting gadgets like foam, carbon dioxide and dry powder only a few of the traders can use them. 94.74% of the traders cannot use foams to extinguish fire, 92.63% cannot use carbon dioxide to put out fire neither can 91.58% use dry powder to quench fire outbreak.

Apart from the traditional way of controlling fire by the use of water and sand, the traders have not been exposed to other firefighting tools. In the Kumasi Central Market, if there is fire outbreak, the availability of sand and water to control the fire is a big problem if help is not offered by the Ghana National Fire Service. This clearly shows that the traders by themselves can do little in case there is fire outbreak. One observation the researcher made was also that there was no single stall in which a firefighting cylinder was fixed. So in case fire breaks out and the traders do not get access to large quantity of sand and plenty volume of water then they cannot the outbreak.

9. TAKING OF FIRE INSURANCE POLICIES

The findings on whether the traders have taken fire insurance policies to protect their wares against fire outbreak in the market revealed that none of the sample members has taken such insurance cover. Although they are aware of such insurance product yet they have not taken such policy. It was revealed that even if they take such a policy, on the incidence of fire outbreak, they do not trust the insurance companies would pay them claims immediately they experience such a disaster unless they incur extra cost by hiring a lawyer and going to court to seek for redress which may take a long duration before they can get something.

10. SUMMARY OF THE FINDINGS

- The studies revealed that majority of the traders in the Kumasi Central Market do not understand the concept of insurance.
- The traders are aware of some of the causes of fire outbreak in the Kumasi Central Market and even ranked power fluctuations as the major cause of fire outbreak.
- Apart from water and sand, majority of the traders cannot use foam, carbon dioxide and dry powder to quench fire outbreak
- Traders have not taken fire insurance cover for their goods and stalls in the Central Market
- The traders do not trust the insurance companies to pay claims for fire damages on time unless they hire a lawyer to lead them in the law courts for redress.

11. CONCLUSION

The basic fundamental tool for economic development in every country is protection for the sectors which serve as the engine that pull all the financial resources and harness together them for development for the benefit of all. Traders are important because they bridge the gap between the producers and the final consumers and also break the bulk into smaller units that can suit the demands of consumers. Without them, the workers in the other sectors of the economy will have

to stop whatever thing they are doing and spend time to meet the producers of the commodities they want which can bring the economy to a halt. In this study, it was revealed that traders in the informal markets do not have any financial protection against so they find it difficult to come out of the poverty line and this confirms with what Guha-Khasnobis and Ahuja (2004) stated that in the informal sector people find it very difficult to come out of the poverty line because they do not have financial protection. As they try to work very hard, they are exposed to many risks like fire outbreak and natural disaster which can attack at any time and bring them to down to square zero.

RECOMMENDATIONS

In the light of this study, the following recommendations are made in order to curb the high rampant of fire outbreak in the Ghanaian markets:

- Ghana National Fire Service should organize regular educational seminars on the causes and prevention of fire outbreak in the market so that the traders can be more careful about their actions and consequences in the markets.
- The Ghana National Fire Service should also organize regular training programmes on fire control strategies so that the traders can learn how to use firefighting gadgets to control fire outbreak.
- The government of Ghana should enact laws to enforce every trader in the market to take fire insurance policy for their stalls and goods.
- There should be a law that can enforce these traders in the market to have fire combating cylinders that should be inspected on regular basis so that the traders whose cylinders expire can be asked to refill them so that when fire breaks out the traders can quench it themselves.
- In addition, the Electricity Company of Ghana should assess the electrical wiring and gadgets at the market place on yearly basis in order to issue certificate for validity.
- Special security force that has knowledge in fire combating techniques should be assigned to protect the markets at nights since most of the fire outbreaks happen at the night times.

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