

## BENEFITS OF FIRE INSURANCE AND CONSEQUENCES OF NONCOMPLIANCE IN GHANA: A CASE STUDY OF DANSOMAN COMMUNITY

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### ABSTRACT

*The topic of the study is Benefits of Fire Insurance and Consequences of Noncompliance. This study was carried out to determine the level of public awareness of insurance benefits and to identify the reasons for non-compliance with fire insurance policies. Convenience sampling technique was used in the collection of data. The study indicated that electrical faults, carelessness, improper use of LPG gas and illegal connections cause fire outbreaks. Most Ghanaians do not comply with fire insurance policy; hence they do not know the benefit of fire insurance policy. Ghanaians do not comply with fire insurance policy due to inadequate education on fire insurance policies and their benefits, insurance companies not being reliable, lack of enforcement of the Insurance Act 2006, Act 724 section 184, and lack of interest in the fire insurance policy. Also the economy experiences unemployment, loss of property, loss of lives, decreases in output and low level of investment whenever there are fire outbreaks. The study revealed that the majority of Ghanaians are not aware of the Insurance Policy Act and its associated benefits. It is recommended that active education about the benefits of insurance and strict enforcement procedures should be followed.*

**Key words:** *Benefits, Fire Insurance, Consequences, Dansoman-Community, Ghana*

## **INTRODUCTION**

The topic of the study is “Benefits of Fire Insurance and Consequences of Noncompliance in Ghana: A case study of Dansoman community”. The main goals of the study were to: (1) identify what causes the recent excessive fire outbreaks between 2000 and 2013 and (2) determine whether Ghanaians are aware of the Insurance Policy Act of 2006, Act 724 section 184 and its associated benefits. The study revealed that the majority of Ghanaians are not aware of the insurance Act and its associated benefits.

One cannot dispute the importance of insurance in both developed and developing countries. Fire insurance contract is an important and popular form of insurance for the business world. Insurance, in law and economics, is a form of risk management primarily used to hedge against the risk of a contingent loss (Wollner, 1999). A fire insurance contract is an agreement whereby one party in return of a consideration undertakes to indemnify the other party against financial loss suffered by the insured as a result of damage or destruction of the insured property by fire (Porter, 2007). A claim for the loss by fire can be entertained if there is an actual fire and the fire is accidental but not intentional (Radhdert, 1998).

Many a time, during sudden fire outbreaks, lives are lost, companies, institutions, as well as individual property owners involved suffer financial losses, there is a break in production, supply thus falls, contributions to government revenue fall and subsequently the GDP falls. Victims sometimes rely on government to use its already scarce resources to assist them. The informal sector which forms a greater percentage of the Ghanaian economy has not benefitted from most of the insurance policies in Ghana. And this has left the larger section of the population without any opportunity to save or pool a portion of their disposable income into an insurance reserve.

As directed by the Insurance Act 2006 (724) clause 183, every commercial building must be insured against collapse, fire, earthquake, storm and flood. Despite the existence of the law, many businesses involved in these catastrophic fires have been uninsured,

especially, in the informal sector (Dwamena, 2009). Investments such as homes, factories, machines and so on go far beyond the lifetime of investors to their third and even fourth generations. And loss of such investments affects not only the individual owners but the society as a whole.

Hardly a day passes by without news of a fire outbreak in some part of the country. There is no doubt, therefore, that these recent fire outbreaks in the country have generated a lot of discussion based on rumours, and with no scientific basis. Whilst some relate the fires to politics, sabotage or religious differences, others attribute them to negligence. It is needless to say that the threat of fire has become an inescapable part of our daily lives. Our work places, homes, recreational centres, churches indicate that no matter the situation one cannot do without electric power. Electrical power, therefore, plays a major role in the life of humans these days. Current fire outbreak statistics from the Ghana National Fire Service (GNFS) for the year 2009 reveal that as of January 25th 2010, electrical fires totalled 218, constituting 8.4% of 2,584 total fire outbreaks (Agbenorto, 2010).

In 2009, there was unquantifiable loss of property through fire outbreaks at prominent places such as the Ministry of Foreign Affairs, Ghana Broadcasting Corporation, Ministry of Information, Ecobank (Ring Road), with the Tema Oil Refinery being the most devastating of all. In addition, the fire outbreaks in Kumasi market which occurred in 2011 and 2012, brought about untold hardships to victims and their households. Despite the devastating nature of the fire outbreaks, it seems no one has learned any lesson from the accidents. Day in, day out, one fire after the other, occurs at various work places and homes. If much attention is not considered by the authorities, these fire outbreaks will cause incalculable damage to lives and properties at workplaces and in our various homes (GNA, 2009).

Many people have criticised the capabilities of fire fighters in the country saying they have not been able to protect the nation as far as fire outbreaks are concerned. Others believe that the service lacks essential facilities, and firemen can make the fire service

more effective by inspecting market places, homes and companies and making sure that the right procedures are followed. The issue of public education often comes in when there is a fire outbreak, but the issue receive only a few days of attention and it ends there until another fire breaks out (Agbenorto, 2010 ).

As a result of this alarming situation, the following and other questions have come to mind:

1. What might be the causes of the excessive fire outbreaks?
2. Are people aware of the fire insurance policy in Ghana?
3. Do they comply?
4. If so do they enjoy the benefits?
5. What are some of the effects if property owners do not comply?
6. Does the consequence of the non-compliance affect the economy of Ghana?

This research paper aims to find answers to these questions.

The objectives of the study are:

1. to identify the causes of fire outbreaks.
2. to determine the public awareness of the Insurance Act of 2006, Act 724 section 184.
3. to identify the reasons for non- compliance with insurance policies by property owners and the general public as a whole.
4. to identify the economic effects of loss of property through fire outbreak and allied perils (i.e. natural disasters such as floods, earthquakes, lightning, rainstorm, explosions).
5. to determine the public awareness level of insurance benefits.
6. to identify some of the benefits of compliance.
7. to determine the public awareness level of recent occurrences of fire outbreaks.

Based on the problem statement and objectives of the study, the research questions to help find solutions to are as follows:

1. What are the causes of fire outbreaks?
2. Are people aware of the fire insurance policy in Ghana?
3. Do they comply?
4. If so do they enjoy the benefits?
5. What are some of the effects if property owners do not comply?
6. Does the consequence of the non-compliance have an overall economic effect in Ghana?

This study is important because:

1. The study will enlighten the public about the Insurance Act passed by the Government.
2. Furthermore this study will equip the National Insurance Commission and Insurance companies with the public's reasons for non-compliance with insurance policies and suggest solutions to solve the problems of non-compliance.
3. The study will also enlighten the public about the benefits of insurance.
4. The study will help enhance the effectiveness of the law on fire insurance. In addition, necessary recommendations will be made based on the information obtained and this will contribute to the march towards attaining our vision 2020 goals.
5. To suggest policies for implementation.

## **EMPIRICAL REVIEW OF INSURANCE**

There are a few studies on the subject. Wo-Chiang (2009) researched into applying Generalized Pareto Distribution to the Risk Management of Commerce Fire Insurance. He focuses on modelling and estimating tail parameters of commercial fire loss severity. Using extreme value theory, he centralized on the generalized Pareto distribution (GPD) and compared with standard parametric modelling based on Lognormal, Exponential, Gamma and Weibull distributions. In an empirical study, he determines the thresholds of GPD through mean excess plot and Hill plot. Kolmogorov-Smirnov and LR goodness-of-fit test are conducted to assess how good the fit is. Wo-Chiang also takes into account bootstrap method to estimate the confidence interval of parameters.

Cabrales, et al (2001) analyze a mutual fire insurance mechanism used in Andorra, which is called La Crema in the local language. This mechanism relies on households' announced property values to determine how much a household is reimbursed in the case of a fire outbreak and how payments are apportioned among other households. The only Pareto efficient allocation reachable through the mechanism requires that all households honestly report the true value of their property. However, such honest reporting is not equilibrium except in the extreme case where the property values are identical for all households. Nevertheless, as the size of the society becomes large, the benefit from deviating from truthful reporting vanishes, and all of the non-degenerate equilibrium of the mechanism are nearly truthful and approximately Pareto efficient.

Olaleye and Adegoke (2009) researched into Homeowners' perception of insurance of real estate development in Lagos, Nigeria. The purpose of this paper was to examine the views held of property insurance by homeowners in Ire-Akari and Ikeja areas of Lagos State in Nigeria. It was also discovered that homeowners' attitude was influenced by the poor service culture of insurance companies and crime in the insurance industry.

## **METHODOLOGY**

The Dansoman community was chosen for the study. Dansoman is a vibrant, quite densely populated community with lots of businesses. There are lots of private and commercial shops, hospitals, clinics, markets and schools with two of the nation's private universities situated there.

## **SAMPLING FRAME**

Due to convenience sampling and as a result of budgetary constraint, the Dansoman community and its environs were chosen for the study. With reference to the study and in order to enhance the effectiveness of the study, a sample size which represents 10% of the overall population of the Dansoman community was chosen. 100 questionnaires were administered.

## **METHOD OF SAMPLING SOURCES OF DATA**

Convenience sampling technique was used in the collection of data where respondents of the questionnaires were chosen by the researcher. This approach was adopted because it is more convenient, easy, time saving and helps speed up the study. A household head/owner was surveyed in each of the buildings selected. Both primary and secondary sources of data collection was used in carrying out the study.

## **METHOD OF COLLECTION OF DATA**

The primary data were obtained through the administration of structured questionnaires. Two sets of questionnaires were drafted; the first set consisted of 19 structured open and close ended questions for the general public; and the second set consisted of 9 also open and close ended structured questions for insurance managers to solicit more information about knowledge of insurance and fire insurance, insurance benefits, knowledge about the insurance act of 2006, act 724, reasons for compliance and non-compliance, knowledge about fire outbreak, the economic effect of fire outbreak, and recent occurrences of fire outbreaks.

One major advantage of using primary data sources is that they appeared to be more reliable and brought out good cooperation from the respondents and resulted in obtaining firsthand information from the respondents and subsequently new findings.

Open ended questions enable the respondents to share their ideas about the subject and give the researcher firsthand information on the subject.

## **METHOD OF DATA ANALYSIS**

The information obtained from the questionnaire was coded for analysis. Computer software, statistical package for social sciences (SPSS) was used for analyzing the data. These data were presented in the form of tables and graphs.

## PRESENTATION AND ANALYSIS OF DATA

This section presents the analysis of data collected. The study examined the benefits of fire insurance and insurance Act of 2006, Act 724 section 184 and the consequent effects of non-compliance on the economy of Ghana. The fieldwork was carried out on the premises of the Dansoman community, a suburb of Accra. The questionnaire was designed in two forms thus:

1. Management of some selected insurance companies
2. The general public of the Dansoman community.

120 and 45 questionnaires were distributed to the general public and management respectively. Out of the 120, 100 were retrieved and out of the 45, 30 were retrieved. Questions on insurance, specifically fire insurance, were asked.

**Table 1: Sex distribution of respondents**

SEX	FREQUENCY	PERCENTAGE (%)
MALE	67	67
FEMALE	33	33
TOTAL	100	100

Source: Authors' field work survey, 2013

Out of the 100 respondents, 67 were males. The remaining 33 respondents were females. This indicates that there were more males than females.

**Table 2: Age distribution of respondents**

AGE	FREQUENCY	PERCENTAGE (%)
18 – 23	2	2.0
23 – 27	4	4.0
28 – 33	7	7.0
34 – 39	11	11.0



40 – 44	11	11.0
45 – 49	15	15.0
50 and above	50	50.0
<b>Total</b>	<b>100</b>	<b>100.0</b>

**Source: Authors' field work survey, 2013**

Out of the 100 respondents, 50% were above the age of 50, 15% were between the ages of 45 – 49, 11% and 11% were between the ages of 34-39 and 40-44 respectively. 7% of the respondents were between the ages of 28-33, 4% were between the ages of 23-27 and 2% of the respondents were between the ages of 18-23. This indicates clearly that the majority of Ghanaians who own properties are above the ages of 50.

**Table 3: Educational status of respondents.**

<b>LEVEL OF EDUCATION</b>	<b>FREQUENCY</b>	<b>PERCENTAGE (%)</b>
vocational / technical	8	8.0
Polytechnic	1	1.0
University	77	77.0
Professional qualification	14	14.0
<b>Total</b>	<b>100</b>	<b>100.0</b>

**Source: Authors' field work survey, 2013**

From table 3 above, responses showed that as high as 77% of the respondents have university education. 14% of the respondents have a professional qualification. 8% of the respondents have vocational/technical qualification and as low as 1% have the

polytechnic qualification. This indicates clearly that most of the respondents have university education.

Objective number 1 sought to find out causes of fire outbreaks. Item 2 from the management questionnaire and item 6 from the general public's questionnaire for the respondents provided answers to the question as presented below.

**Table 4: Causes of fire outbreaks**

<b>Causes Of Fire Outbreaks</b>	<b>Frequency</b>	<b>Percentage (%)</b>	<b>Cumulative Percentage (%)</b>
Electrical Fault	68	52.3	52.3
Improper Use Of LPG	19	14.6	66.9
Carelessness	35	26.9	93.8
Illegal Connections	8	6.2	<b>100.0</b>
<b>Total</b>	<b>130</b>	<b>100.0</b>	

**Source: Authors' field work survey, 2013**

Out of the 130 respondents, as high as 68 representing 52.3% claim that the cause of fire outbreaks is electrical fault. 19 respondents representing 14.6% say that improper use of LPG causes fire outbreaks. 35 respondents representing 26.9% say that fire outbreaks are caused by carelessness. And the remaining 8 respondents representing 6.2% say people intentionally set the fires. This gives a clear indication that most of the fire outbreaks in Ghana are due to electrical faults.

**Fig 1: Causes of fire outbreaks**

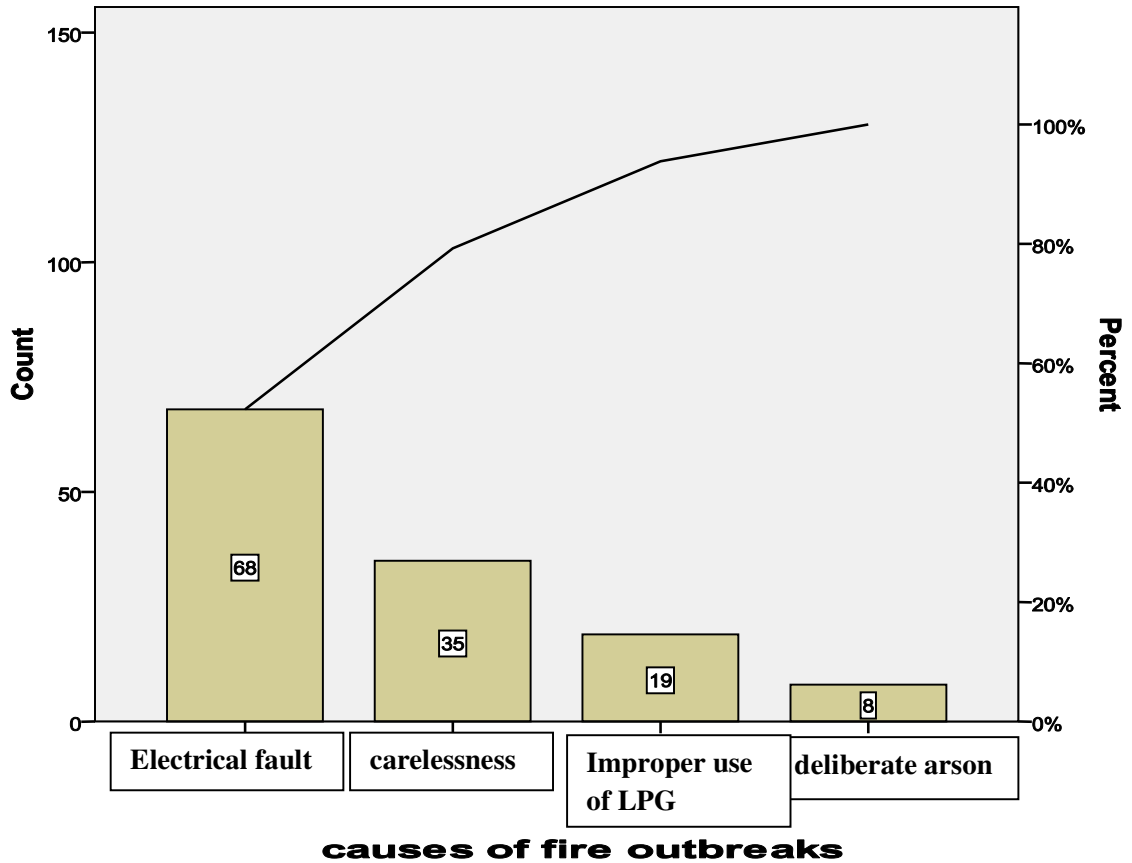


Figure 1 above also shows that most of the causes of fire outbreaks are electrical faults. The line represents the cumulative percentage. This analysis helps in answering research question 1, what are the causes of fire outbreaks?

As indicated in the tables above most of the causes of fire outbreaks are:

1. Electrical fault
2. Carelessness
3. Improper use of LPG gas
4. Illegal Connections

Objective number 2 sought to find out the public awareness of Insurance Act of 2006, Act 724 Section 184. Item 13 of the questionnaire for the respondents provided the answer to the question as presented in the table below:

**Table 5: public awareness of Insurance Act**

<b>PUBLIC AWARENESS</b>	<b>FREQUENCY</b>	<b>PERCENTAGE (%)</b>
YES	30	30.0
NO	70	70.0
<b>TOTAL</b>	<b>100</b>	<b>100</b>

**Source: Authors' field work survey, 2013**

A look at Table 5 shows that out of the 100 respondents, 70% said no to the question meaning they are not aware of the Insurance Act of 2006, Act 724 Section 184 while the remaining 30% said yes to the question meaning they are aware of the Insurance Act of 2006, Act 724 Section 184. This indicates clearly that the majority of Ghanaians are not aware of the Insurance Act.

With the help of SPSS (Statistical Package for Social Sciences), using the chi-square test procedure, the observed frequencies differ from the expected values. The Asymptotic Significant of (0.000) shows the estimated probability of obtaining a chi-square value greater than or equal to (16.000). This shows significantly that the public is not aware of the Insurance Act of 2006, Act 724 section 184.

Objective number 3 sought to identify the reasons for non-compliance with insurance policies. Items 11 and 6 from the general public and management's questionnaires respectively for the respondents provided answers to the question as presented below:

**Table 6: Are you a beneficiary of fire insurance policy**

<b>RESPONSES</b>	<b>FREQUENCY</b>	<b>PERCENTAGES</b>
Definitely yes	3	3.0
Definitely no	97	97.0
<b>Total</b>	<b>100</b>	<b>100.0</b>

**Source: Authors' field work survey, 2013**

A look at Table 6 above shows that out of 100 respondents, as high as 97% answered 'no' to the question as to whether they were beneficiaries of fire insurance policy while 3%

answered by saying they were beneficiaries. This shows obviously that majority of Ghanaians are not beneficiaries of fire insurance policy.

**Table 7: Overall Reasons for non-compliance with insurance policy.**

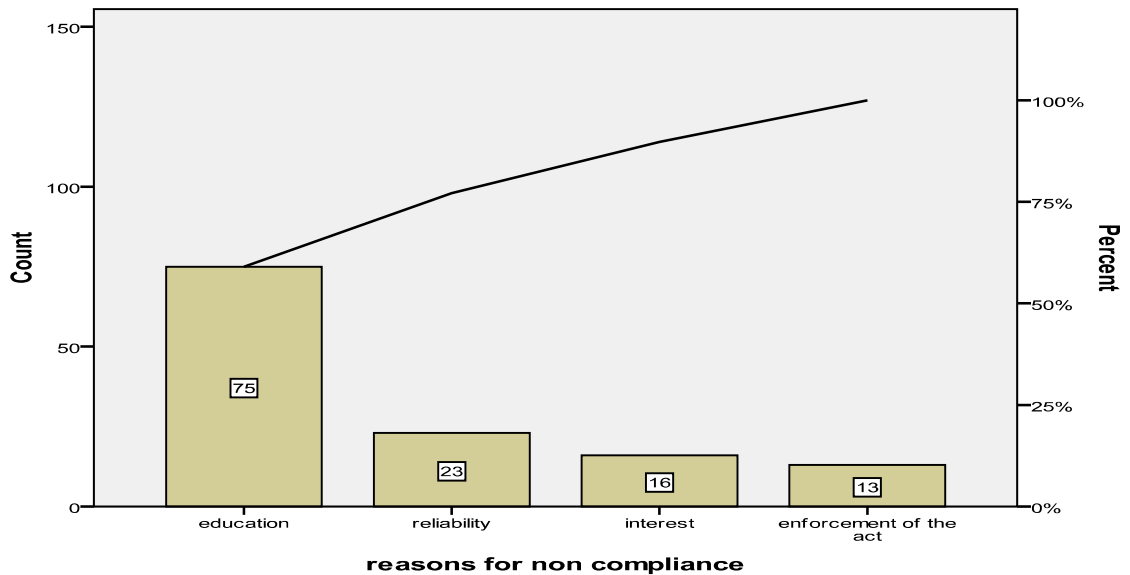
<b>REASONS FOR NON COMPLIANCE</b>	<b>FREQUENCY</b>	<b>PERCENTAGES</b>	<b>CUMULATIVE FREQUENCY</b>
Education	75	59.1	59.1
Interest	16	12.6	71.7
Enforcement of the act	13	10.2	81.9
Reliability of Insurance Companies and Insurance policy	23	18.1	<b>100.0</b>
<b>Total</b>	<b>127</b>	<b>100.0</b>	

**Source: Authors' field work survey, 2013**

Table 7 gives the explanation of people's view of non-compliance with insurance policy in Ghana. Out of 127 respondents, as high as 75 representing 59.1% responded that inadequate education about fire insurance policy is the cause of non-compliance with fire insurance policy, while 16 representing 12.6% seem to have no interest in the fire insurance policy.

16 representing 10.2% also talked about lack of enforcement of the Insurance Act of 2006, Act 724 Section 184. And the remaining 23 representing 18.1% talked about reliability of insurance companies and the insurance policy. Thus, overall, inadequate education and reliability of insurance companies and insurance policy cause much of the non-compliance with the fire insurance policy.

**Fig 2: Reasons for non-compliance**



The Pareto graph above also shows the reasons for non-compliance with the fire insurance policy. Each bar shows the level of each percentage. The line also shows the cumulative percentage.

This analysis also helps in answering research question 2 which states, “do they comply?”

A critical look at Table 6 shows clearly that Ghanaians do not comply with the fire insurance policy. This shows that the non-compliance of the insurance policy is due to:

1. Inadequate education.
2. The insurance companies not being reliable.
3. Lack of enforcement of the insurance Act 2006, Act 724 section 184.
4. Lack of interest in the fire insurance policy.

With reference to objective number 3, most Ghanaians do not comply with fire insurance policy, hence they do not know the benefit of fire insurance policy. This also answers research question 3.

Objective number 3 sought to find out the economic effects of loss of property through fire outbreaks and allied perils. Item 8 and 9 from the management’s questionnaire and item 20 from the general public’s questionnaire for the respondents provided answers to the question as presented below.

**Table 8: Overall Economic effect due to fire outbreaks and allied perils.**

<b>ECONOMIC EFFECT</b>	<b>FREQUENCY</b>	<b>PERCENTAGE (%)</b>
UNEMPLOYMENT	26	20.0
LOSS OF PROPERTY	75	57.7
LOSS OF LIFE	10	7.7
DECREASE IN GDP	4	3.1
RETARDTION OF INVESTMENT	15	11.5
<b>TOTAL</b>	<b>130</b>	<b>100.0</b>

**Source: Authors’ field work survey, 2013**

Table 8 shows the economic effect due to fire outbreaks and allied perils. From the above table, and the data obtained from the research, fire outbreaks have the following consequential economic effect:

1. Unemployment.
2. Loss of property.
3. Loss of lives.
4. Decreases in GDP.
5. Retards Investments.

With reference to table 8, it can be shown that loss of property accounted for the highest economic effect. This also helps to answer research question 4 which states “what are some of the effects if property owners do not comply?” In addition this also answers yes to research question 5 which states “does the consequence of the non-compliance affect the economy of Ghana?”

## **LIMITATION OF THE STUDY**

The study was limited to only the Dansoman Community and this might affect the findings of the study.

## **RECOMMENDATION**

Some of the most important lessons to be learnt from the data reviewed here are:

1. The government must ensure the enforcement of laws and regulations concerning the Insurance Act of 2006, Act 724 to promote compliance.
2. There is the need to intensify education and increase awareness of the Insurance Act of 2006, Act 724.
3. Education on the effects of fire outbreaks and the need for fire insurance should not be concentrated only on the cities and towns but also on the rural areas as well because they also play a major role in national development.
4. In addition, the insurance companies should take it upon themselves as a cooperate social responsibility to educate and create a high level of awareness of fire insurance and its importance.
5. Insurance companies should prove themselves reliable to erase the erroneous impressions people have formed and further create interest in the general public.
6. Insurance companies are advised to ensure the prompt payment of claims as this will help to increase the level of interest.
7. The general public must also change their wrong perception about fire insurance.

## **CONCLUSION**

The following conclusions were drawn from the empirical evidence shown in the findings. The study indicated that electrical faults, carelessness, improper use of LPG gas and illegal connections cause fire outbreaks. Most Ghanaians do not comply with fire insurance policy; hence they do not know the benefit of fire insurance policy. Ghanaians do not comply with fire insurance policy due to:

- Lack of education
- The insurance companies not being reliable



- Lack of enforcement of the insurance Act 2006, Act 724 section 184
- Lack of interest in the fire insurance policy.

Above all, the economy experiences unemployment, loss of property, loss of lives, decreases in GDP and low level of investments whenever there are fire outbreaks.

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