

## **Insurance, A Relief to the Victims of Flooding**

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**Abstract:** *It has been a known fact from several studies from both developed and developing world that people constantly fall victim of natural disaster. Even in the developed countries where technologies are used as a mechanism to forewarn people about the incidents of disasters, some numbers of people were still recorded as victims of flood disaster.*

*The magnitude and occurrence of flooding were observed to be increasing due to climate change and anthropogenic factors, victim records are also increasing.*

*Therefore, this study examines the magnitude of havoc wrecked by flooding, measures problems encountered, as well as inform the victims about possible assistance to alleviate their problems.*

*Methodology: data used in this research are both primary and secondary data. In primary data; questionnaire were used to elicit information from victims on; Persistence of exposure to flood, various problems encountered, and havoc rendered by flood in the area. Secondary data; from other related researches were used to augment the field data. The data were analysed using descriptive statistic; percentage, and (chart and graph). It was concluded that large number of people in the area were suffering from flood disasters and had no knowledge on insuring their various properties, particularly those that were exposed to persistence flooding because their houses were built in the endemic area of flooding. Insuring their houses against flooding will alleviate their problems.*

**Key-words:** *Alleviate, Flood, Problems, Insurance, Victims*

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### **1. INTRODUCTION**

Disaster disproportionately affects poor countries and poor communities. More than half of the deaths resulting from natural disaster occur in low human development countries, even though only 11% of the people exposed to hazards live in them. Poor countries suffer far greater losses relative to their GDP than richer countries (IFRC World disaster report 2002). Poverty and vulnerability to the impact of hazard do not necessarily go hand in hand, but poorer people tend to be more exposed to hazards as they often live in marginal areas such as steep-sided ravines in Port au Prince that are vulnerable to earthquakes and land-slides, and low-lying islands that are prone to flooding in the delta region of Bangladesh. Disaster can, in themselves, induce poverty, making the better-off poorer and the poor the destitute. Some argue that one casual factor in creating poverty is incidence of recurring disaster.

When dealing with floods, we can either attempt to keep them from occurring (prevention) or recognize that they will occur and modify our lifestyle to deal with them effectively (adjustment). David, M. (2010).

Floods make an enormous impact on the environment and society. Floods destroy drainage system in the cities, causing raw sewage to spill out into bodies of water. Also, in cases of severe floods, building can be significantly damaged and even destroyed. This can lead to catastrophic event on the environment as many toxic materials such as paint, pesticide and gasoline can be released into the rivers, lakes bays and ocean killing maritime lives. Floods may also cause millions of dollars worth of damage to a city, both evicting people from their homes and running businesses. Floods cause significant amount of erosion to coasts leading to more frequent flooding if not repaired.

Floods in history have wrought great calamities on human, destroying settlements, properties and lives and inflicting great sufferings (Ologunorisa E.T. 2006). The recurring of floods has overtime impoverished wealthy people and rendered them poor and rendered poor destitute. Failure of many victims to make a resolving decision against persistence exposure to flood had led to loss of lives, buildings, and costly properties.

Studies had revealed that present awareness of people about insuring their lives and properties against disaster, flood in particular had alleviated their problems of many years, many recovered the loss properties, many were empowered to change their home base from area liable to flood to new area free from flood from the assistance offered them by Insurance Company.

**2. OBJECTIVES**

The objectives of this study are to: examine the intensity of havoc the flood had wrecked in the study area, Identify the various problems the victims of flood in the area had encountered, and create awareness to the victims about various ways the individual problem could be alleviated by the Insurance.

**3. HYPOTHESES**

H<sub>1</sub>- that flood wrecked much havoc in the area.

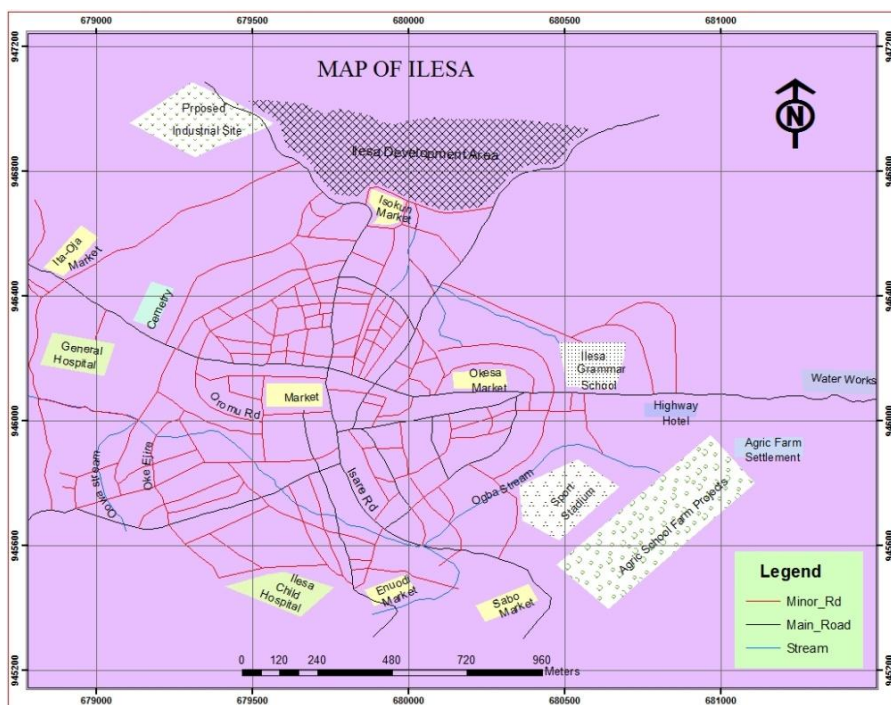
H<sub>1</sub>- that flood victims suffered various problems in the area.

H<sub>1</sub>. that insurance is a relieving agent to flood victims

**4. STUDY AREA**

The study area is located in Ilesa comprising East and West local government areas of Osun State. It lies between latitude 7<sup>o</sup>35’ and 7<sup>o</sup>40’N and between longitude 4<sup>o</sup>13’ and 4<sup>o</sup>38’E. (Adeyemi,2011).

The area is underlain by Precambrian complex rocks made up of igneous and metamorphosed rocks. The land surface of the area is gently undulating and well drained. Oora stream flows majestically from the south East of the town to the south west passing through many streets. In terms of climate, the study area belongs to the Koppen’s Af humid tropical climate characterized by double maxima rainfall distribution. The rainy season lasts from March to November. The mean annual temperature is about 29<sup>o</sup>C while the mean annual rainfall equals 162cm (Adeyemi, 2011). The relative humidity is usually above 80% in the early hours of the day.



**Fig. 1. Map of Ilesa** Source: Adapted from Ilesa Town Planning, 2008

## **5. METHODOLOGY**

Data sources for this research were through both primary and secondary. In primary data, questionnaire was used to collect information on; persistence of exposure to flood, various problems encountered from flood, and havoc rendered in the area by flood. The secondary data were collected from related research to augment primary data.

Data analyses were done using descriptive statistics; percentage, charts, and graph were used to analyse the data collected to describe the magnitude of various problems of victims and the extent of havoc in the area.

## **6. LITERATURE REVIEW**

Ayoade, (2006) described a hazard as a naturally occurring or human-induced process or event with potential to create loss or danger to humans and their welfare. He noted all hazard possess the capacity to cause damage including loss of life and property. Almost any point in time, a hazard is threatening communities, a community, their or its property and even their or the lives of the inhabitants, Few of these events is recorded in the international media due to their local impacts as their impacts are only local in nature. However, the events like floods in Bangladesh and Haiti in 2010 drew significant international attention.

Floods, droughts and other water related hazards have major impacts on socio-economic well-being of countries. For this reason it is pertinent that to control the menace resulting from loss effect of floods on the individual wealth as well as nation's wealth, better put the menace of changing the economic status from better to worse. Citizen must be cognisant of the redeeming solution this horrible and life devastating problem by securing or adopting insurance knowledge to insure property even life against floods, property like fixed assets especially houses, cars and some valuable and sophisticated owned gadget. This revealed in many studies would deliver citizen or individual and nation from sudden impoverishing by floods.

Flood in history have wrought great calamities on humans, destroying settlements, properties and lives, inflicting great suffering (Ologunorisa, 2006). He revealed flood remains one of the major natural disasters affecting society and ranked flood first out of sixteen natural disaster types responsible for either \$ 1million damage or at least 100 persons killed or injured.( DHA, 1994): Altogether foods accounted for about 30% of all natural disasters and 40% of fatalities. Also posits that data from past statistics of world disasters show that floods and droughts account for 54% of significant damages, 65% of the persons affected and 79% of death.

Economic losses following the 1993 flood in the Mississippi River drainage basin totalled billions of dollars, and indirect lost in the form of wages and production cannot be accurately calculated. The greatest economic losses occurred in cities directly located on the flood plain. David, M.(2010).

In 1928, the Saint Francis dam in Los Angeles was filled with 12.5 billions of water- enough water for one year for population of 1.2 million people. However, on March 12 1928 the dam broke and unleashing a 78 foot wall of water. It obliterated houses, ranches automobiles animals, and people. In roughly one hour more than 500 people were killed Santa Paula was overrun by water.

On Friday April 18 1997, the Red River flooded over the dikes into Grand Forks, North Dakota. At the end of Saturday, the 19<sup>th</sup>, the flood waters had spread over a large area of Grand Forks and East Grand Forks. Roughly 60,000 people were forced out from their homes and down Grand Forks were left in flames. The damage was so extensive that it was weeks people could return and rebuild their homes- and their lives.

(Ologunorisa, 2004) Opined that flood is caused by rainfall, snow, melting-ice, and hurricanes. He stated further that common feature of flood is destruction of lives and property. In several countries, a distinction is made between direct and indirect damage. The direct losses include those which result into loss of lives and property. While indirect losses consist of damage resulting from limitation or breakdown of human activities during flood.

## 7. RESULT OF DATA ANALYSES

### 7.1. Persistence Exposure to Flood

	Localities in the area	Total ranking	Mean ranking	Position
A	Isare	270	1.8	5 <sup>th</sup>
B	Odoiro	675	4.5	1 <sup>st</sup>
C	OdoOja	390	2.6	4 <sup>th</sup>
D	OkeEse road	525	3.5	2 <sup>nd</sup>
E	Oromu	420	2.8	3 <sup>rd</sup>

Source; Adeyemi, 2011

### 7.2. Flood Havocs in the Area

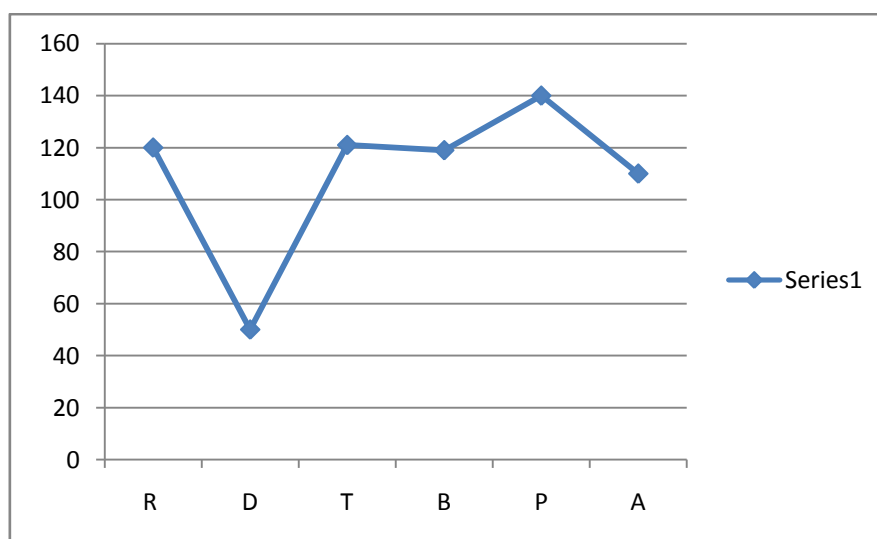
	Havocs wrecked	Frequency	Percentage
a	Rendered motor park useless	120	80
b	Destroyed Electric poles and Wires	50	33.3
	Typhoid due to water pollution from flooding	121	80.7
d	Blocked roads led disruption of social and economics activities	119	79.3
e	Pollution of drinkable water sources	140	93.3
f	Odour from flooded area	110	73.3

Source; Field Data 2009

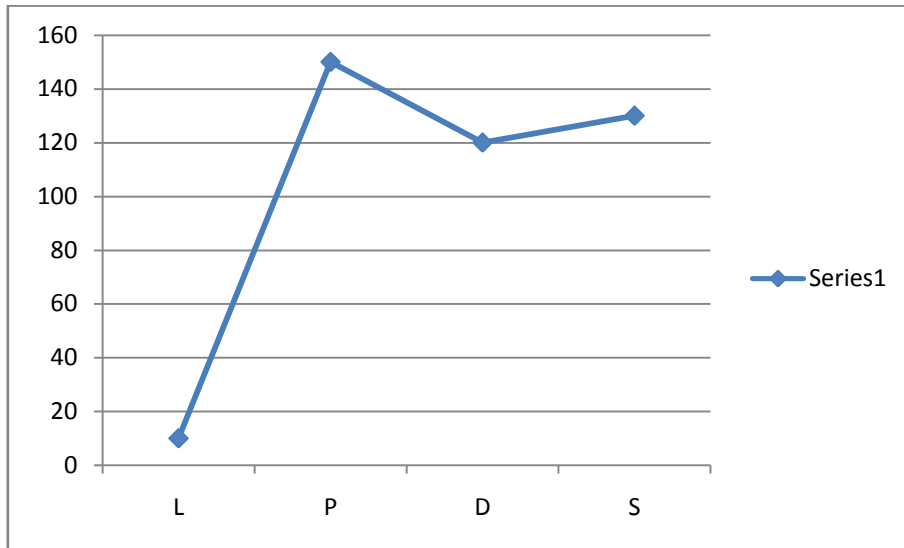
### 7.3. Problems Encountered By the Victims

	Problems	Frequency	Percentage
a	Loss of lives	10	6.7
b	Loss of property	150	100.0
c	Damage/collapse of buildings	120	80.0
d	Sinking of houses	130	86.7

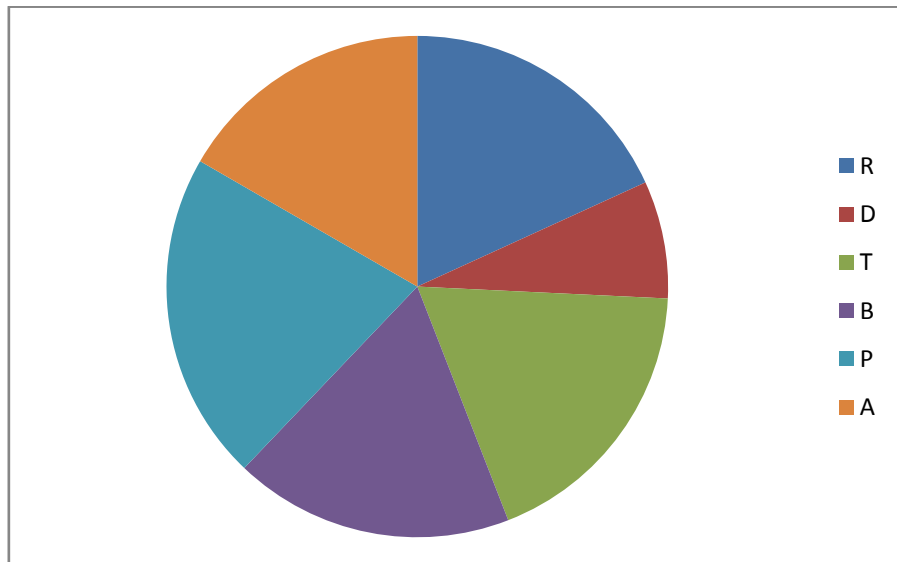
Source; Field Data 2009



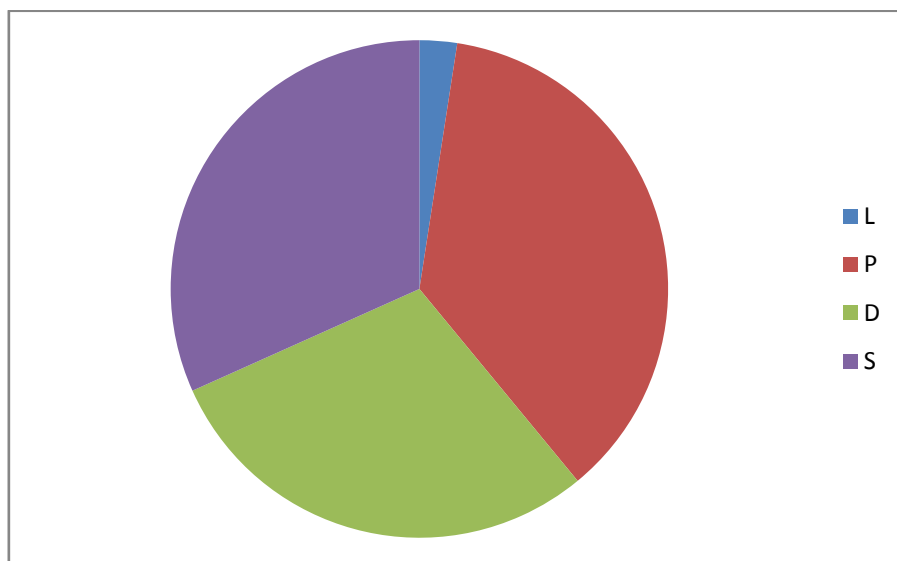
Havocs wrecked in the Area



*Problems encountered*



*Havocs wrecked in the Area*



Problems encountered

**NB;** R-Rendering motor park useless, D-Destruction of electric poles and wires, T- Typhoid due to water pollution from flooding, B-Blocked roads led to disruption of social and economic activities, P- Pollution of drinkable water sources, A- Atmospheric pollution.

L- Loss of lives, P- Loss property, D- Damage/collapse of building, S-Sinking of houses

## **8. DISCUSSION OF RESULTS**

### **8.1. H<sub>1</sub>Havoc wrecked in the area**

Considering the table ‘‘Havocs in the area’’ above, the results show that; Rendering motor park useless has 80%, which means that the places of motor park almost taken over by floods that commercial transport activities could not function during flooding. Destruction of electric poles and wires has 33.3%, which that almost one-third of total number of electric poles in the area were destroyed and many places remained in total darkness and suffered from inability to make use of electricity over some period. Typhoid due to pollution from flooding has 80.7%, which means that about four-fifth of the population combat the typhoid sickness because all the water in the area rendered undrinkable from pollution because of floods. Blocked roads led to disruption of social and economic activities has 79.3%, which means that about two-third of roads were blocked by flooding as such there was almost complete paralysis of social and economic activities in the area, that is, social and economic activities like holding a community meeting as well as market were not in operation because of floods. Pollution of drinkable water sources has 93.3%, which means their drinkable water sources such as well pipe-borne water etc. were polluted by flooding and this is indeed a fact that dovetail with percentage of people contracted typhoid. Atmospheric pollution has 73.3%, this occurred in form of odour water logged places, food materials spoilt flooding, animal killed by flooding, wastes material carried all over by flooding which rendered the air of the area polluted, it added to another means through which typhoid was probably contracted by the people in the area.

Both the line graph and pie chart above show different forms of havocs and their magnitudes, for instance, P- pollution of drinkable water sources is the highest magnitude follow by, T- typhoid due to water pollution from flooding thereafter, R- rendering motor park useless, and others in order as follow B- blocked roads led to disruption of social and economic activities, A- atmospheric pollution, and D- destruction of electric poles and wires.

### **8.2. H<sub>1</sub> Problems Encountered By the Victims**

Considering the table ‘‘Problems encountered by the victims’’ the results show that; Loss of lives has 6.7%, which means that some few numbers of lives were lost to flooding in the area majority of which occurred in the various flooded houses. Loss of property has 100%, which means that virtually every individual in the area lost their property of different values and worth ranging house hold materials like mattress, electronic gadget to vehicles to floods. Damage/collapse of buildings has 80%, which means that about four-fifth of the houses in the area were one way or the other destroyed by floods in different magnitude from the mere door broken to collapse of houses and some houses were indeed sinking down the ground because the areas concerned are complete flood zone so the solidity of the ground could no longer hold the house and foundation was rightly sinking.

Both the line graph and the pie chart also show the magnitude of problems encountered thus; P- loss of property has the highest magnitude follow by S- sinking houses, D- damage/collapse building and lastly L- loss of lives.

### **8.3. Persistence of Exposure to Flooding**

Considering the table ‘‘Persistence of exposure to flooding, the result show the rank and the position of each locality in the area in terms of vulnerability that is extent to which each of them experience floods. OdoIro has the mean rank of 4.5 and 1<sup>st</sup> position in term of persistence exposure. OkeEse road has mean rank of 3.5 and 2<sup>nd</sup> position in term of persistence exposure. Oromu has mean rank of 2.8 and 3<sup>rd</sup> position in term of persistence exposure. OdoOja has mean rank of 2.6 and 4<sup>th</sup> position in term of persistence exposure. And lastly Isare has mean rank of 1.8 and 5<sup>th</sup> position in term of persistence exposure. The analyses of the position of each locality in term of persistence of exposure explain the severity or magnitude of effect of flood in each

locality and in this regard the severity of havocs wrecked in the area and problems encountered by the victims are proportionate to the position of persistence exposure in each locality. In other word the OdoIro which has the 1<sup>st</sup> position in term of the persistence of exposure has is the place with highest severity of havocs as well as problems encountered by the victim and so on

### 9. RECOMMENDATION AND CONCLUSION

#### 9.1. Insurance the Relieving Agents to Flood Victims

Studies had revealed that present awareness of people about insuring their lives and properties against disaster, flood in particular had alleviated their problems of many years, many recovered the loss properties. Many were empowered to change their home base from area liable to flood to new area free from flood from the assistance offered them by Insurance Company.

Insurance had been known in some developed country to be functioning tremendously in term of recovering people from tragedy of flood so also, if insurance service could be extended to recovering people from disaster, most especially the common one in this part of the world that is, flood, many lives would have been saved from death and many individuals that were wealth and had become penury in the phase of flood would have recovered their wealth.

Considering the analyses above; the victims suffered in two ways which according to this study will be divided into: General suffering and personal suffering.

General suffering can be considered under ‘‘Havocs wrecked in the area’’; all the havocs as analysed in their magnitude devastated the entire area and continually inflicting problems on the people of the area most especially the concerned people who are really a victim. These havocs are considered general because they either have to with the locality or the entire area and therefore insurance may not have any assistance for such rather the government.

Personal suffering can be considered under ‘‘Problems encountered by victims’’; all the problems as analysed in their magnitude devastated individuals, concerned victims are directly injured by various problems in its various magnitude and subjected those individuals into either temporary or permanent state of indigence. Insurance in its service is very relevance in this case even though the awareness and response of the people matters.

For instance, loss of lives that occurred in this study was as a result of persistence exposure of the victims probably because of their in ability to abandon their house and build another house away from flood zone. This is a problem insurance would have helped them to solve by empowering them financially. Therefore insurance service is capable of relieving the victims from any problem they may encounter from flood disaster.

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