VICTIMS AWARENESS AND PERCEPTION OF ENVIRONMENTALLY INDUCED DISASTER IN KOGI STATE, NIGERIA

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Abstract

Environmentally induced disasters are spatially and temporally bound in any part of the world and especially in Nigeria. There has been an increase in the occurrence and prevalence of environmental disaster in Kogi State which has led to displacement and impacted negatively on victims' livelihood of the inhabitant of the study area. Unfortunately, many of the inhabitant of the study area do not have access to firsthand Information about the spatial, temporal and resultant effect of the environmentally induced disaster occurrences in their vicinity and as a result, they lack the prevention and preparedness information in mitigating the effect of these disaster at the time of occurrence. This paper examines victims' awareness and perception to environmental disaster in Kogi State. A multistage sampling technique was employed to select a total of 450 disaster victims. Structured questionnaire was used to elicit information from the disaster victims, Also, focus group discussion (FGD) was used to support information extracted from the questionnaire. The finding show variation in each of the communities' vulnerability, occurrence of disaster, risk preparedness socio-economic status as well as past experiences of disaster victims has great implication on their level of awareness and perception. The study therefore suggests among other recommendation that increased public awareness, integration of risk assessment and preparedness orientation for the community to enhance better understanding and attitudinal change will influence the community perception of vulnerability in the study area. The achievement of this will bring about reduction in loss of lives, livelihoods and properties as well as total safeguarding of the environment.

Keywords: Environmental Disaster, Awareness, Perception and Kogi State

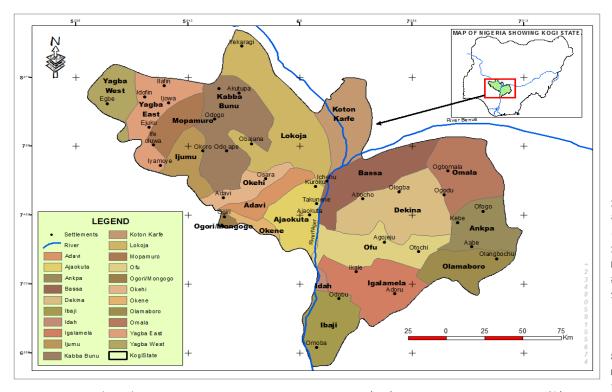
Introducton

Globally, there has been at increase in the rate of environmental disaster occurrence in the last decade. According to Yande (2009), nine of every ten recorded disasters are environmental related. World Disasters Report (2016) observed that the greatest humanitarian challenge in recent time has been forced displacement across the world. According to the report, in 2014 more than 19.3 million people in 100 countries fled their homes in response to disasters stemming from natural hazards, mostly within their own countries but sometimes across international borders. Since 2008, such disasters have displaced an average of 26.4 million people each year, which is equivalent to 72,131 people per day (World Disasters Report, 2016). More than ninety per cent of the people exposed to disasters live in the developing world and indeed more than half of the disasters occur in countries with a low human development index (Galaz and Moberg, 2008). Therefore, the African nations are not exempted by the floods and other environment induced disasters.

In Kogi State, there are documented records of seasonal flood, erosion, windstorm among others. The aftermath of this environmental degradation include undermining of food production and security, famine, increased social costs, decline in the quantity and quality of fresh water supplies, increased poverty, reduction in the land's resilience to natural climate variability and decreased soil productivity. Therefore, there is a need to examine the level of awareness as well as perception of disaster victims in Kogi State.

Study Area

Kogi State is in the North –Central Zone of Nigeria. It lies between longitude 5°15' E and 8°00' E latitude 6°30'N and 8°45' N on the map of Nigeria and covers an area of 28,313.53 square kilometers. It is popularly called the "Confluence State" due to the fact that both rivers Niger and Benue meet there. This implies that the study area shares both the ecological and environmental characteristics of both rivers. The 2018 projected population of the State is 3,555,090 at a growth rate of 1.07 percent and represents 2.4 per cent of the total population of Nigeria. Most part of the State is situated in the valley and the floodplains of the confluence of the Niger-Benue Rivers (Figure 1).



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vulnerability conditions can also change with time on their own through certain inherent community coping mechanisms or other practices (ICIMOD, 2009). Disaster impact is a function of interplay of various variables, however the physical and social system of the disaster victims are mostly affected. The vulnerability of the social and physical aspect of the victims goes a long way to show the level of preparedness and mitigation effort put in place by each individual and community. The manifestation of the social impacts during disaster occurrence can be seen in form of occupation dislocation, family separation and education retrogression among others. The physical impacts on the other hand are usually viewed from lost of lives and destruction of properties, farmlands and assets damages as well as inhibit development. In most times the pre-impact conditions are a function of hazard exposure, physical and social vulnerability while the emergency management interventions and event-specific conditions interplay to determine both physical and social impacts of individuals or communities.

Generally, scholars have defined resilience as the ability to rebound after a hazardous event (Klein *et.al.*, 2003; Cutter *et.al.*, 2008). Vulnerability is commonly considered to be composed of pre-hazard event characteristics while resilience refers to post-hazard event characteristics (Cutter *et.al.*, 2008). The concept of resilience has as its starting point as the recognition that there is huge heterogeneity in people's responses to all manner of environmental adversities (Rutter, 2012). Accordingly, resilience can be defined as reduced vulnerability to environmental risk experiences, the overcoming of a stress or adversity, or a relatively good outcome despite risk experiences (Rutter, 2006). Thus, it is an interactive concept in which the presence of resilience has to be inferred from individual variations in outcome among individuals who have experienced significant major stress or adversity (Rutter, 1987). Adger *et.al*, (2005), identify critical factors in determining social resilience related to natural hazards to include institutions for collective action, robust governance systems, in addition to diverse livelihood choices. Thus, the level of awareness and perception of the vulnerable to environmental disasters is key to mitigate as well as cope with disasters event in case of occurrence and in most time based on their socio-economic status and past experiences.

Methodology

The basic data collection tools used for this study are questionnaire and Focus Group Discussions (FGDs). The sample frame for this study was disaster victims in Kogi State. The study adopted multi stage sample technique. Purposive Sampling was used to select nine (9) LGAs namely; Lokoja, Kogi/Koton Karfe, Ajaokuta, Ofu, Omala, Bassa, Idah, Ibaji, and Igalamela in Kogi State. These LGAs' are regarded as disaster hot spots in the study area due to the recurrent of flood, erosion, rainstorm and communal clashes in the study area (Kogi State Emergency)

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Management Agency Report, 2014). The study employ simple percentage, chi-square and content analysis in the analyses of the data collected.

Results

Demographic Characteristics of Disasters Victims

Based on the sampled population, 358 (80%) of the respondents are males while 92(20%) are females (Table 1).

Table 1: Gender Distribution of the Respondents

		Male	•	Female		Total	
S/N	LGA	Frequency	%	Frequency	%	Frequency	%
1	Ajaokuta	42	84	8	16	50	100
2	Bassa	41	82	9	18	50	100
3	Ibaji	43	86	7	14	50	100
4	Idah	36	72	14	28	50	100
5	Igalamela	35	70	15	30	50	100
6	Kogi	39	78	11	22	50	100
7	Lokoja	41	82	9	18	50	100
8	Ofu	41	82	9	18	50	100
9	Omala	40	80	10	20	50	100
Tota	l	358	80	92	20	450	100

Source: Author's Field Survey (2018).

The age result of the distribution of respondents in table 2 reveals that about 98 percent of the respondents fall within the age bracket 18-60 years while only 2 percent falls above 60 years. The study area is mostly populated by active age ranged between 18-45 years. This is due to the fact that they mostly rely on farming for economic activity as such needs productive age to prosecute their farming activities. This was evident in areas such as Jamata in Lokoja LGA, Ayah in Ibaji LGA, and Geregu in Ajaokuta LGA among others. The result of the analysis of the age of disaster victims shows that mean age of respondents is approximately 40 years with standard deviation of 17 (Table 3). The standard deviation shows slight variation in the age of disaster victims in the study area. This suggests that bulk of the disaster victims fell within very active and productive age. Therefore, environment related disasters will have reduced their productivity and also affect their livelihood since persons affected may be forced to move or migrate to other areas in search of greener pasture. And any time it occur employment and labour is significantly impacted resulting to economic losses.

Table 2: Age Distribution of the Respondents

			18-30		31-40		41-50		51-60			Total	
Sn	LGA	F	%	F	%	F	%	\mathbf{F}	%	\mathbf{F}	%	F	%
1	Ajaokuta	1	2	26	52	15	30	8	16	-	-	50	100
2	Bassa	9	18	21	42	14	28	6	12	-	-	50	100
3	Ibaji	6	12	21	42	13	26	10	20	-	-	50	100
4	Idah	6	12	14	28	21	42	9	18	-	-	50	100
5	Igalamela	6	12	19	38	25	50	-	-	-	-	50	100
6	Kogi	14	28	17	34	17	34	2	4	-	-	50	100
7	Lokoja	8	16	21	42	16	32	5	10	-	-	50	100
8	Ofu	5	10	20	40	12	24	10	20	3	6	50	100
9	Omala	9	18	17	34	14	28	10	20	-	-	50	100
Gra	nd Total	64	14	176	39	147	33	60	13	3	1	450	100

Source: Author's Field Survey (2018). * **F** is frequency

Table 3: Mean of Age Distribution

Class	Mid-point(x)	Frequency	FX	(X-X)	(X-X)	F(X-X)
18-30	24	64	1536	24	576	36864
31-40	35.5	176	6248	136	18496	3255296

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41-50	45.5	147	6688.5	107	11449	1683003
51-60	55.5	60	3330	20	400	24000
61-70	65.5	3	196.5	-37	1369	4107
Total		450	17999			5003270

Source: Author's Computation (2018). Mean Age: 40; St Dev: 16.67

Mean is fx/x = 39.5 = 40

Standard deviation (S) = $\sqrt{\sum FX^2/\sum F}$

 $S = \sqrt{5003270/17999} = \sqrt{277.97} = 16.67$

The results of the analysis show that about 22 percent of the respondents did not have more than primary education, 61 percent have secondary education while only 17 percent of the respondents have tertiary education (Table 4). Also, the survey result shows that Bassa and Ofu LGA's have the lowest level of education in the study area of 52 percent and 36 percent respectively. It can also be deduced that the level of education determines the level of opportunities available to improve livelihood strategies and reduce the level of poverty. It affects the level of skill acquisition, exposure to new ideas and managerial capacity during and after the occurrence of environmentally induced disasters.

Table 4: Educational Qualification of Respondents

	ic 4. Education	No formal Education		Prima	ary	Second	Secondary		Tertiary		
Sn	LGA	F	%	F	%	F	%	F	%	F	%
1	Ajaokuta	1	2	6	12	32	64	11	22	50	100
2	Bassa	12	24	14	28	24	48	-	-	50	100
3	Ibaji	-	-	5	10	37	74	8	16	50	100
4	Idah	-	-	14	28	29	58	7	14	50	100
5	Igalamela	-	-	6	12	31	62	13	26	50	100
6	Kogi	-	-	3	6	36	72	11	22	50	100
7	Lokoja	1	2	4	8	29	58	16	32	50	100
8	Ofu	7	14	11	22	28	56	4	8	50	100
9	Omala	5	10	9	18	29	58	7	14	50	100
Gra	and Total	26	6	72	16	275	61	77	17	450	100

Source: Author's Field Survey (2018). * **F** is frequency

Perception of Victims to Disasters

The perception of the respondents to environmentally induced disasters occurrence in the study area was based on the victims past experiences as shown in table 5. The survey result of the respondents' show that 32 percent are of the opinion that flood is a major environment disaster in the study area. While 22 percent of the respondents believe that erosion is more prevalence in the area and 23 percent agreed that land degradation is an issue in the study area. The result of the analysis reveals that flood occurrence was perceived as the major environment induced disaster in Ajaokuta, Ibaji and Igalamela, while erosion is perceived to be more prevalence in Idah and Kogi. Whereas land degradation is more pronounce in Lokoja (Table 5). This result is similar to those reported for coastal lowland cities in Nigeria that they are particularly vulnerable to flooding (Raheem, 2011). This implies that human activities also substantially contribute to disaster in the State. It was also observed that a form of environmental related disaster can lead to another for instance flooding can result to either erosion or land degradation likewise erosion can result to land degradation. The observation shows that occurrence of disaster vary over space.

Table 5: Perception of Respondents to Form of Disasters Occurrence in the Study

				Erosi	Erosion		Land		d &	Total	
		Floo	d		Degradation		Eros	ion			
Sn	LGA	F	%	F	%	F	%	F	%	\mathbf{F}	%
1	Ajaokuta	20	40	5	10	15	30	10	20	50	100
2	Bassa	9	18	13	26	9	18	19	38	50	100

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3	Ibaji	25	50	7	14	11	22	7	14	50	100	
4	Idah	11	22	18	36	7	14	14	28	50	100	
5	Igalamela	19	38	10	20	9	18	12	24	50	100	
6	Kogi	15	30	17	34	10	20	8	16	50	100	
7	Lokoja	18	36	7	14	19	38	6	8	50	100	
	3			11	22	13	26	11	22	50	100	
8	Ofu	15	30									
9	Omala	13	26	9	18	12	24	16	32	50	100	

Source: Author's Field Survey (2018). * **F** is frequency

The study went further to analyse whether the variation observed in perception of respondents on the form of environmentally induced disaster in study area occur by chance or not. To verify this Chi-square analysis was carried out. Since X²calculated (48.88) is greater than X²table (13.85) at 95% level of significant (Table 6). This implies that the variation observed in perception of respondents on the form of environmental related disaster in study area do not occur by chance. Furthermore, the observed result also implies that since there is a significance statistical difference between occurrences of disasters in each of the LGAs as have been observed in the Table 6 and tested in the analysis. The implication is that there is difference in the environmental related disasters each LGA faced. Therefore, interventions should be based on the prevalence of each type of disasters in the communities and LGAs.

This clearly shows that variation in communities' vulnerability gives an impression that interventions should be community-based rather than tailored through the general and broad based decision that characterized disaster risk management in the country. This implies that where flooding is the issues, there is a need to address it with flooding mitigation measures and this is also applicable to other environmental related disaster issues.

Table 6: Chi - Square Analysis on the Form of Disasters Occurrence in the Study Area

				Ero	sion	Land		Flood	&	X^2CAL	X^2TAB	df	P
Sn	Flood			Degradation		Erosio	Erosion						
	LGA	O	E	O	E	O	E	O	E				
1	Ajaokuta	20	16.1	5	10.8	15	11.7	10	11.4				
2	Bassa	9	16.1	13	10.8	9	11.7	19	11.4				
3	Ibaji	25	16.1	7	10.8	11	11.7	7	11.4				
4	Idah	11	16.1	18	10.8	7	11.7	14	11.4		13.85	24	0.05
5	Igalamela	19	16.1	10	10.8	9	11.7	12	11.4				
6	Kogi	15	16.1	17	10.8	10	11.7	8	11.4				
7	Lokoja	18	16.1	7	10.8	19	11.7	6	11.4				
8	Ofu	15	16.1	11	10.8	13	11.7	11	11.4				
9	Omala	13	16.1	9	10.8	12	11.7	16	11.4				
,	Total	145	10.1	97		105		103		48.88			

Source: Author's Computation, 2018

Content Analysis through Focus Group Discussion

According to DFID report (2017) in most areas where environmental disasters usually occurs. People with low income, less privilege and low status people are usually affected. The reason for this according to the 2017 report was because development is far away as those that live in ghetto, flood plains, flood upsurge areas and also areas that are prone to environmental disaster occurrences. For instance in Kogi States, nine local governments were known to be environmentally endangered areas. According to the FGD conducted at Girinya, one of the village Chief mentioned thus:

" Every year in this community, we always experience flood. This flood sometimes last for days and sometimes many of us will be forced to move out

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of our house. At times we spent months in our neighbours place and this makes our life to be miserable."

The village Chief further added

"The occurrence of this flood happens at a time we never expected. It happens at the farming season when most of us would have spent our money on cultivation and planting. This makes most of us to suffer, because no money for us to survive".

Village Chief/Girinya/FGD/56years/July, 2018.

From the above statement, it is affirmed that when flood which is one of the environmentally induced disaster happens, people usually suffers. According, to one of the FGD participants, she mentioned thus:

"If not because I have built my house in this Girinya, I would have relocated to Lokoja area, where I can have access to government care. We don't have access to good roads or any facilities here and when the flood happens, all our road are bad, some of us even incur loss from farm produce and hence we are poor".

Female participant/Girinya/FGD/43years/July, 2018

Similarly, one of the tenants in the area who came from From Niger State to farm in Girinya said

"I have suffered more than enough in this community and I only came back to come and harvest my crops. I suppose to harvest two hectares of cassava but now since the flood has sent us parking from this community, we don't have choice than to relocate"

He added that

Once I am done with this harvest I will go back to my State, before I will know the next thing to do with my family".

Migrant Tenant/ Girinya/ FGD/ 35 years/July, 2018

Further analysis also reveals that the frequency of environmental disaster in the area is unprecedented as it occurs every year. According to a respondent he said:

"I have been staying here since 1992 but since 2010, we have been having series of challenges especially flooding due to the overflow from river Niger. We have had flooding about four times and on each of this time, my properties have been regularly destroyed, thereby making my living at Girinya a major challenge".

Female respondent/Girinya/FGD/40/July, 2018.

As noted by one of the respondents usually called Baba, he mentioned thus:

"We are very unfortunate in this area, our Local government does not even know whether we exist or not. All our farm produce, roads and every other facilities we have here has been destroyed by flood. I am only one of the few people that came back and pack my destroyed belongings. If only I can sell them and relocate to other more profitable areas".

Baba/ Girinya/FGD/38years/July 2018

From the above discussion, it is evident that occurrence of environmental disaster is common in this area. This disaster usually damage houses and especially caused people to be displaced and rendered homeless and more vulnerable.

As observed by one of the local hunter during the FGD interaction, he mentioned thus:

"Once it is rainy season in this area, my style of work changes. I usually move from one occupation to another so as to survive. During rainy season, you can't go to far and especially someone like me that plant vegetable farming. Once it is rainy season, I became a fisherman and I restrict my farming to the land close to my area, just to plant few things."

He further added that

"While I can find it easy to play around many work to survive, many other people cannot and as a result, they either relocate, turn to beggars or be involving in laboureres kind of job to survive".

Local hunter/Girinya/FGD/47/ July 2018

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On the issue of spatial pattern of internal displacement due to environmental disasters many of the respondents gave a divergent view. According to a woman who usually sells Vegetables (Okro) to the laboureres in Adankolo she said:

"When I started my food business some ten years ago, I was making a whole lot of money to the extent that I bought a land and I have one Okada but since year 2012 things have changed. This is because most residents has left or ran away and even those labourer who usually work as Artisans (Bricklayers, welder, furniture makers etc) are no more available because of issues of flooding, bad roads and inaccessibility to the site where people want to build". For the food I sell in my shop has run away. Most of them have relocated to a better place like Ajaokuta, Lokoja"

Mama Mariam/Adankolo/FGD/45/July 2018

This above discussion correspond with the work of Chowdhury et.al.,(2012) that migration is a natural process influence by certain environmental forces that cannot be controlled. The effect of such migration is felt in the vulnerable communities especially on the people livelihoods. Further analysis also shows that the issue of disaster victims has a pattern of movement.

One of the youth of Adankolo community said:

"Most people who cannot bear the wahala from the issue of flooding and upsurge of water from river Niger, usually move to nearby villages or unaffected neighborhoods until the problem is over."

Youth of Adankolo Community/FGD/38/ Jamata/July 2018.

With the observation by the respondents, it is essential to conclude that environmental related disasters causes total displacement of people from their comfort zone to a place of mere survival. As observed by Fasona et.al., (2014), the greater and more varied the asset base, the more sustainable and secure the livelihood. Other respondents during one of the FGD said thus

"When flood happens like this, people usually stay in schools, church or mosque. Some people who have relatives in the town of Lokoja, Ajaokuta will go and stay with families pending the time the flood will be over". Male Respondent/FGD/44years/ Adankolo/July, 2018.

The assertion shows that there are certain factors that influence the decision of people to move to another location during flooding or not. These factors includes: income, household size, severity of environmental disaster as well as availability of a place to stay.

Another respondent maintained thus:

"Eniti Sango ba ti oju re ja, ko ni ba won bu oba Koso. Omiyale ni ilu Jamata tidi Oun ti ole je ki eyan ta du ki ya re, ko si salo si ibo miran to jina bi ori oke".

Meaning "If Sango display in your presence, you will never dreamt of abusing the god of thunder (Sango). Flood in Jamata is something that will make someone sell all his properties and run away to a far place like on mountain to start a new life."

Farmer/ FGD/48/Adankolo/July 2018

The above assertion also supported the submission of a man fondly called Baba agba, he maintained that:

"I have moved my family to another place, because I have two wives and ten children. Due to the issue of flooding, I took them to a more secured place and I choose to stay here alone because of my poultry and fish farming business."

Baba Agba/FGD/54years/Adankolo/July 2018

On the issue of livelihood characteristics of the disaster victims, many of the respondents said that when flood and erosion usually occurs their livelihood characteristics is usually threatened. In a submission by one of the respondent.

"Aside few people that works with the Local government officials, most residents in Geregu are farmers, fishermen, traders, artisan among Female respondent/FGD/Trader/42years/Geregu/July 2018

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Another respondent also opined thus:

"Gully erosion has affected one of the houses I built in Geregu. As a result, it has reduced the amount of income to my purse. All the tenants in that my second house has left and no one want to live in a dilapidated area." Baba/Landlord/FGD/50/Geregu/July 2018

From the above analysis, it can be deduced that the poverty nature of people, also affect their livelihood. Although, Yande(2009) observed that poverty does not necessarily equal to vulnerability but being poor makes people or community more vulnerable to disasters because they will lack the necessary resources such as physical, social and required knowledge to prepare for and respond to such threats and shocks cause by environmental disaster. In another FGD conducted at Bagana, a respondent asserted thus:

"I involves in fishing business but I normally experience loss occasionally when flood affects my pond which is constructed along one of the stream in our locality." He added that: If everything goes well, I normally get up to twenty five thousand as profit during harvest but if the harvest falls during flood time, it is a big loss to my fishing business".

Haruna/Fisherman/FGD/Bagana/45years/July 2018

Further discussion during the FGD also affects shows that environmental disaster also affects some livestock rearing business in the area. As observed by a man called Mallam, he expressed thus:

" I don't usually take my cows out during rainy season especially in July, I usually bring all their grass from far away forest. When asked the reason for this, he added that: you can't predict when flood will just happen and base on the loss I experienced in 2012, I have taken those measures to reduce loss of my income and cattle." Mallam/Cattle reare/Bagana/51years/July 2018

Depending on the intensity of the disaster, the vulnerability of the exposed population and the availability of assistance, environmentally induced mobility may be arranged in a continuum ranging from forced to voluntary (Bate,2002). Same evidence shows that the spatial distribution of pre existing migrant networks and other farms of social capital are relevant to estimate.

Many of the participants for the FGD programme opine thus:

"In Odeke particularly, many of the farmers loss the farm lands due to erosion. Also, during flooding, our children sometimes could not go to school, our women cannot go to farm. Many things usually go wrong and most times all economic activities is put on hold. Likewise, there are losses of lives due to such disaster".

Okada Rider/FGD/35 years/Odeke/July 2018

Another respondent who was not happy with the way people are migrating from there are Ollah, he maintained thus:

"Most youths in this our area usually go to the town to complete their education, most youths in this our area usually go to the town to complete their education, most youths in this our area usually go to the town to complete their education, most school student population have reduced because once flood happen many students can not go to school.

Headmaster/Ollah/FGD/51years/July, 2018

Discussion with some of the disaster victims further shows that many of the victims survive via alms and donations from neighbours, religious bodies, NGOs among others. According to one man who spoke in Igala language but interpreted in English maintained that:

"Before we moved down to one of the IDP camps, we usually sleep on the floor, no blanket, no food, mosquito bite was inevitable and we were just leaving like a church rat".

Igala man/FGD/trader/43/Egabada/July 2018

According to Pruss-utsun and Carvalan (2006), almost twenty four percent of the disease burden and twenty three percent of all deaths in the world result from environmental factors. According to a respondent she maintained thus:

"Malaria, typhoid,dysentery, fungi infection as a result of flood is inevitable. Many people usually complain of skin rashes. We have also recorded cases of elephantiasis, schisotomiasis". Female Nurse/FGD/42 years/Shintaku/July 2018.

The risk usually associated with environmentally displaced people as observed by Cernea (2003) includes joblessness, homelessness, increase morbidity and mortality as well as food insecurity. Another respondent also maintained that:

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"Most of the aids and emergency provision that carries for there are usually from individuals such as Church, Mosques or from NGOs."

He added that

"It is only NEMA from the Federal and State level that has ever brought relief materials for there. The relief materials are usually in form of food stuff, foams, utensils, clothings, toiletries and drug." Community Leader/Gbobe/FGD/57/July, 2018

Another respondent also asserted thus:

"When flood happened in my area in 2014, the roof of my house was removed. I stayed with my friend for two months, while my family went to stay in a mission house. Government promised us heaven and earth that they will help us. But we never saw anything. It was one NGO that brought us relieve material and help me in part of fixing my house for me."

He added that

"Government at the local level can't help the flood victims and there are to many protocol to get relieve materials or emergency response from State government. Getting response from the State government is by connection and belonging to a right party."

Baba Mary/Civil Servant/FGD/Itobe/48years/July 2018

Most of the urban flooding occurs in low-lying terrain especially where little or no provision has been made for surface drainage or where drainage has been blocked by refuse. It is important for disaster to be reduced in this area, people must follow building patterns, certains provision must also been made by house owners to construct a high platform before main building will be erected. As suggested by most respondents more drainages and dreding of river Niger should be made and also provide another land for people to build their house especially those that have been found to build their house on flood plain areas.

Conclusion

The study observed that variation exists in the awareness level and perception of respondents towards environmental disasters occurrence and prevalence in the study area. The level of their awareness is influenced by the victims socio-economic status and past experiences as well as cultural belief system. Based on the catastrophic effect of this disaster and especially in relation to their livelihood survival, there is a need to put efforts at tackling these disasters such that each community disaster peculiarity will be tackled with its need. The study therefore recommends increased public awareness to enhance better understanding and attitudinal change which will change the citizen perception of vulnerability in the study area. Also, participatory rural appraisal and communities decision making involvement should be encouraged and sustained in order to give the victims of this environmental based disaster opportunities in making suggestion as to the cause, solutions and preventions of all this environmentally related issues.

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