RESIDENTS' ASSESSMENT OF THE IMPLEMENTATION OF POST FLOOD-DISASTER NEEDS ASSESSMENT IN IBADAN, NIGERIA

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ABSTRACT

The implementation of Post Disaster Needs Assessment (PDNA) is a widely accepted exercise as nations globally embraced its principles, strategies and methodologies in enhancing the recovery and reconstruction planning after the occurrence of devastating disaster. The need to further the welfare of victims of disaster affected communities and speedy recovery of the overall performance of the halted socio-economic activities made the implementation of PDNA a worthwhile exercise. The Federal Government of Nigeria and different state governments since the colonial era till date, have commissioned and implemented PDNA at the instance of unprecedented disaster at various times in line with this assertion. As a result, this paper explored residents' assessment of the implementation of PDNA with respect to August 2011 flood disaster in Ibadan, Nigeria. Using the concept of marginality and mattering, this research administered 104 questionnaires to randomly selected residents in the purposively selected areas within the eleven local government areas of Ibadan to elicit data on issues bothering on 2011 flood disaster, process, composition and implementation of PDNA. The collected data were later subjected to descriptive and inferential analysis. The study established strong positive relationship between the recovery of socio-economic activities of residents in the affected communities and the rate of implementation of PDNA with 'r' value of 0.67. The paper concluded with recommendations among others, that implementation of PDNA should be timely with active involvement of the flood affected communities in the overall PDNA process.

Keywords: Flood-Disaster, Mattering, Needs Assessment and Ibadan.

INTRODUCTION

Since the early flood disaster of over 2000 years till now, various types of natural disasters such flash floods, storms, forest fires, tsunamis, volcanoes, earthquake, hurricanes sandy, hurricanes irene and typhoons have continued to constraint the survival of man on the planet. The unprecedented destruction and suffering that usually accompanied the occurrences of the disasters across regions, nations and the globe generally, with the vulnerable such as displaced persons, women, children and the elderly suffering the worst consequences necessitated Post Disaster Needs Assessment. However, Nhu *et al* (2011) viewed that population growth, rapid socio-economic development, urbanization; pressures on natural resources and climate change have increased the exposure and vulnerability of the population to hazards and disaster risks in recent decades globally.

With the last decade witnessing severe disasters globally, according to, Ferris, Petz and Stark (2013), notable global disasters recoded in the last five years include the 2010 earthquake in Haiti which left more than 200,000 dead, 2010 floods in Pakistan

which affected 20 million people and the 2011 Japanese earthquake/tsunami/nuclear accident, where damages soared over $360 billion. Others are the typhoon bopha in the Philippines, where 1,100 people died in floods and landslides with hundreds still missing, hurricane sandy in the United States, killing 131 people and causing between $20 and $50 billion in economic losses. Furthermore, 2012 was regarded as the year of Recurring Disasters as it witnessed earthquakes (Iran, Philippines and Guatemala), floods (Pakistan, Russia, China, Bangladesh, India), cold waves (Europe, Peru), cyclones (Madagascar, Haiti) and drought (Sahel, USA).

The conduct and implementation of post disaster needs assessment commenced over two thousand years ago after the first-ever recoded flood (Ogunsesan *et al,* 2011). Since the early period till date, the successful implementation of Post Disaster Needs Assessment (PDNA) is of utmost importance to optimum recovery and restoration process of the affected communities and victims of disaster related incidences. PDNA strategies with citizen participation is widely practiced in disaster prone nations of the world such as Cuba, Pakistan, Philippines, Thailand, Sri Lanka, Bangladesh, Samoa, India, China, Vietnam and Fiji among numerous Asian and American countries (Akanmu, Ogunsesan and Ogundiran, 2014). This is aimed at restoring damaged infrastructure and recovery of losses incurred by victims, displaced population and affected communities. The contributions and inputs of United Nations Development Programme, United Nations Children Emergency Funds, Red Cross Society, World Bank, European Union, World Health Organisations, Food and Agricultural Organisations and other international development partners are also recognized in facilitating PDNA processes.

The increasing rate of hydro-meteorological disaster such as flood in various urban centers in the Nigeria emphasized the conduct of PDNA and related exercises in the country by federal and state governments. Specifically, the August 2011 flood disaster in Ibadan was considered unprecedented in the last five decades (IITA, 2011) considering the heavy downpour and accompanied destruction in the eleven local government areas of Ibadan. Communities which include Apete, Oke-Ayo, Eleyele, Odo-ona Elewe, Agbowo, Bodija, University of Ibadan, Oluyole, Mobil, Ogbere, Idi-Obi, Bashorun, Ajibode and Onipepeye were adversely affected. Similarly, the flood disaster of 2012 in Nigeria revealed several challenges regarding the nation's disaster preparedness and the need to strengthen Nigeria's Disaster Risk Reduction (DRR) mechanism in the country (Mohammed, 2013).

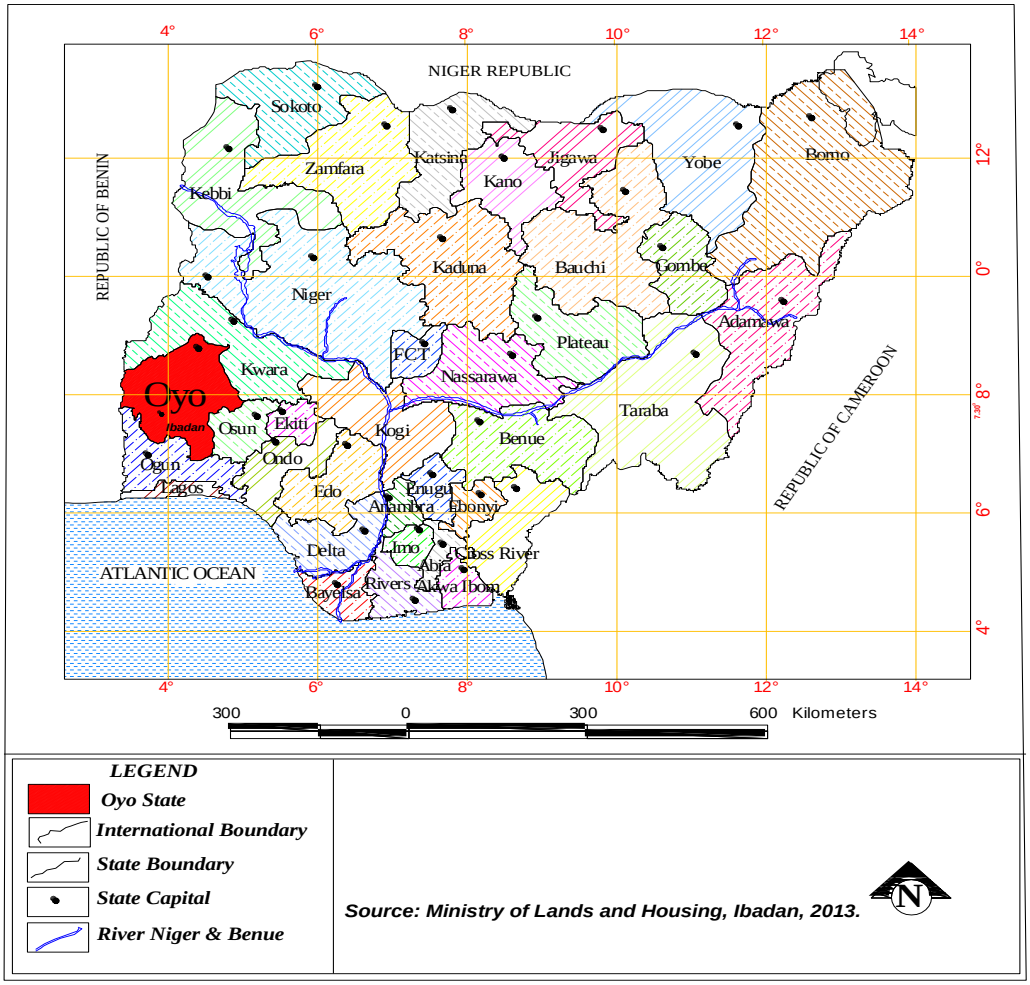
The persistent occurrences of flood disaster in Ibadan especially in 1948 (Adeoye *et al,* 2009), 1980, 2011 and even 2012 with devastating socio-economic impacts on the affected communities and residents despite commissioned and implementation of Task Force over the years queried the functionality in implementation of such report in Ibadan, and other major urban centers in the country. Therefore, this paper examined residents' assessment of the implementation of Post Disaster Needs assessment in Ibadan with respect to August 2011 flood vis-à-vis the extent of the restoration and recovery of socio-economic activities of the affected communities such as Apete/Oke-Ayo/Eleyele/ Odo-ona Elewe, Agbowo/Bodija/U.I,

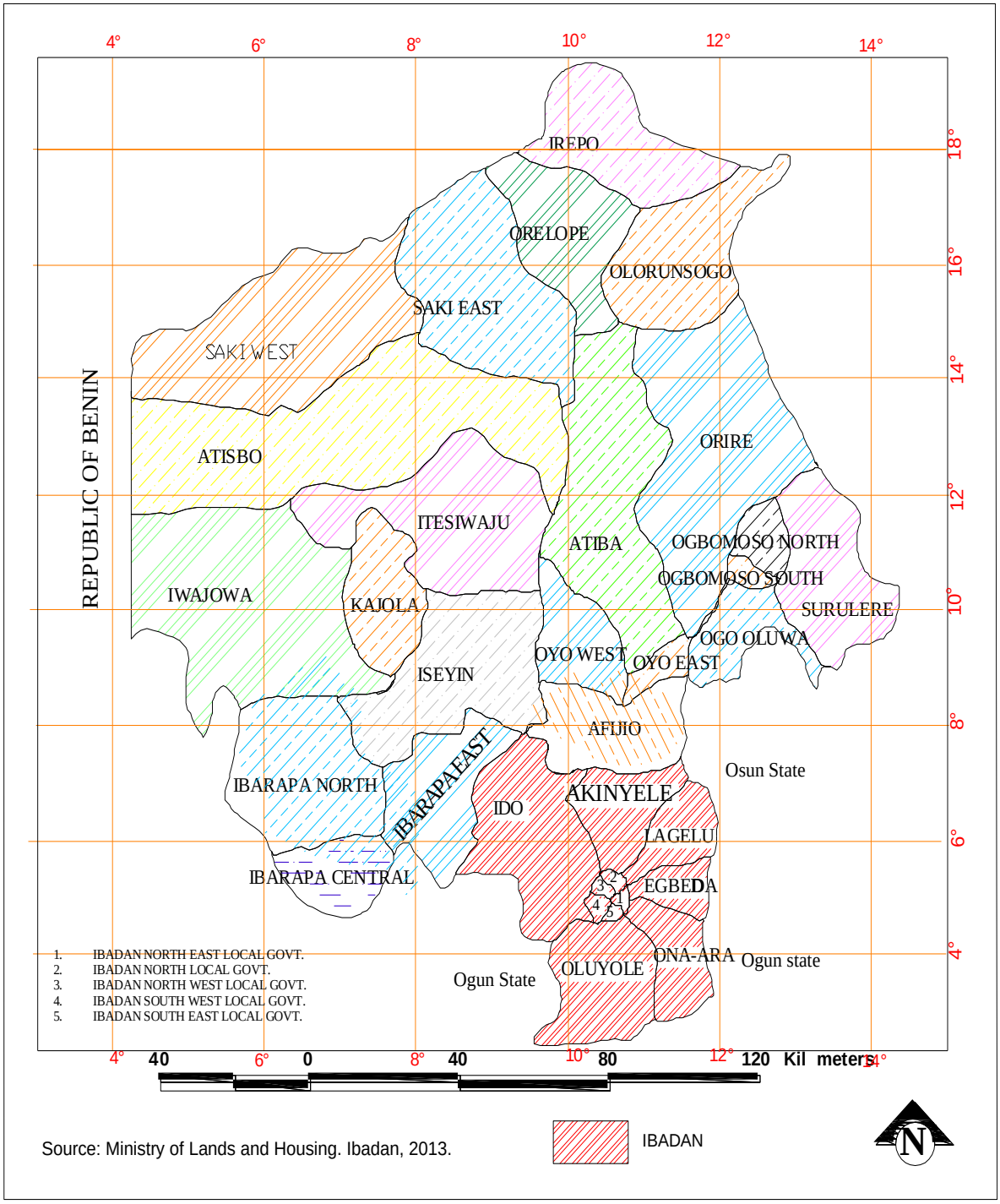
Oluyole/Mobil, Ogbere/Idi-Obi and Bashorun/ Onipepeye making the eleven Local Government Areas of Ibadan.

DESCRIPTION OF THE STUDY AREA-IBADAN

Ibadan, a forest site with several ranges of hills, varying in elevation from 160m to 275m was created as a war camp for the warriors coming from Oyo, Ife and Ijebu as a result of its strategic defense opportunities. The emergence of Ibadan historically, resulted from the insecurity cum intra-tribal war of the 19th century (1825-1983) and military Jihad originating from Sokoto Sultanate that provoked huge movement of people form the north to the south (Fourchard, 2000). Administratively, Ibadan is made up of eleven local government areas namely Ibadan North-West, Ibadan North, Ibadan North East, Ibadan South-East; and Ibadan South-West. Others are Akinyele, Oluyole, Lagelu, Egbeda, Ona Ara and Ido.

The physical and geographical characteristics of Ibadan shows that the city has an estimated area of 3,123.32km^2 (45,312.50 hectares), inhabited by 2,603,502 (NPC, 2006). It is bounded in the North by Afijio, on the East by Osun State, on the West by Ibarapa-East and in the South by Ogun-State (Figures 1, 2, 3 and 4). The major rivers that drain these landforms are River Ona, River Ogbere, River Kudeti, River Ogunpa and other important tributaries.

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Source: Ministry of Lands and Housing. Ibadan, 2013.
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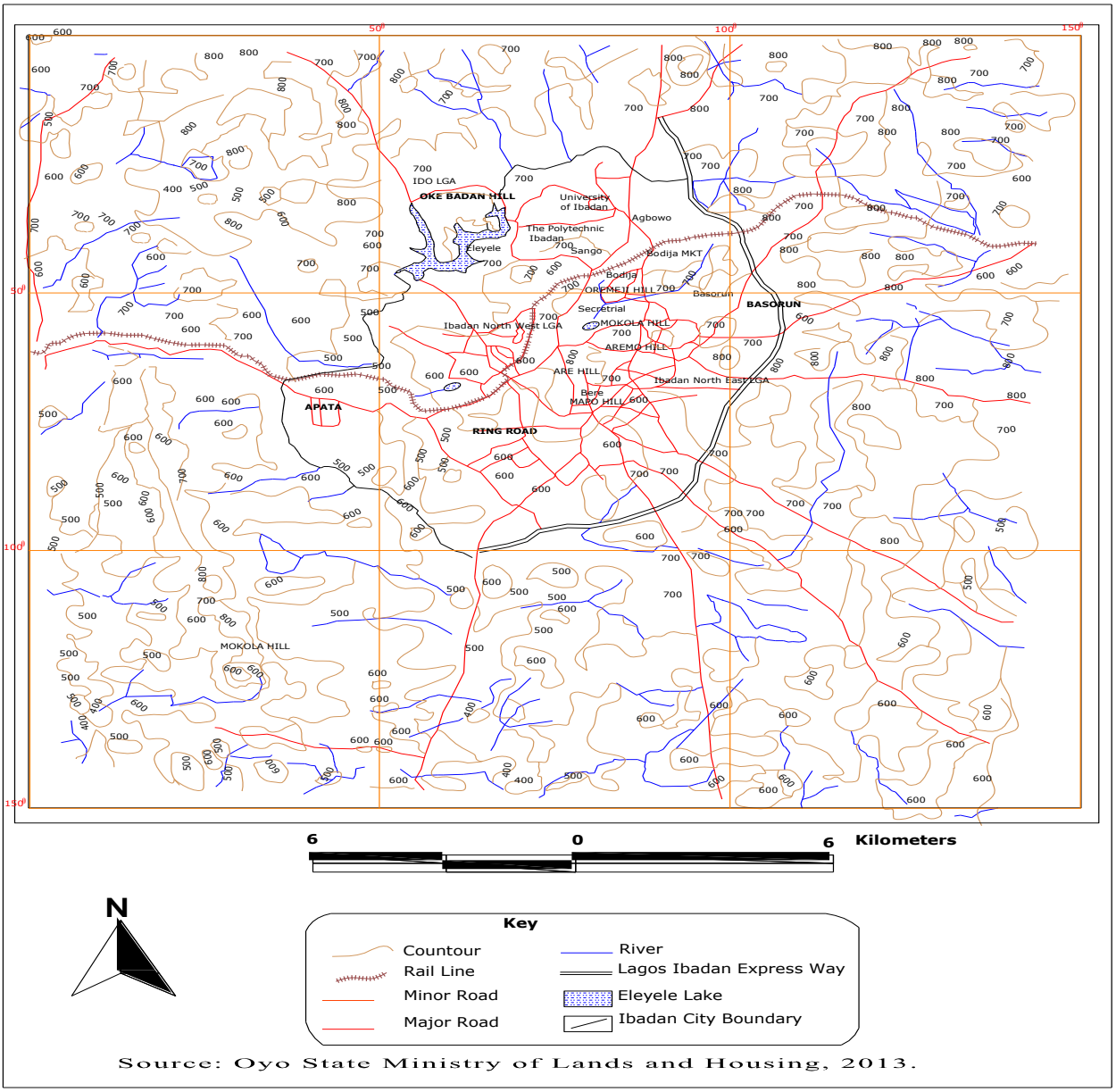
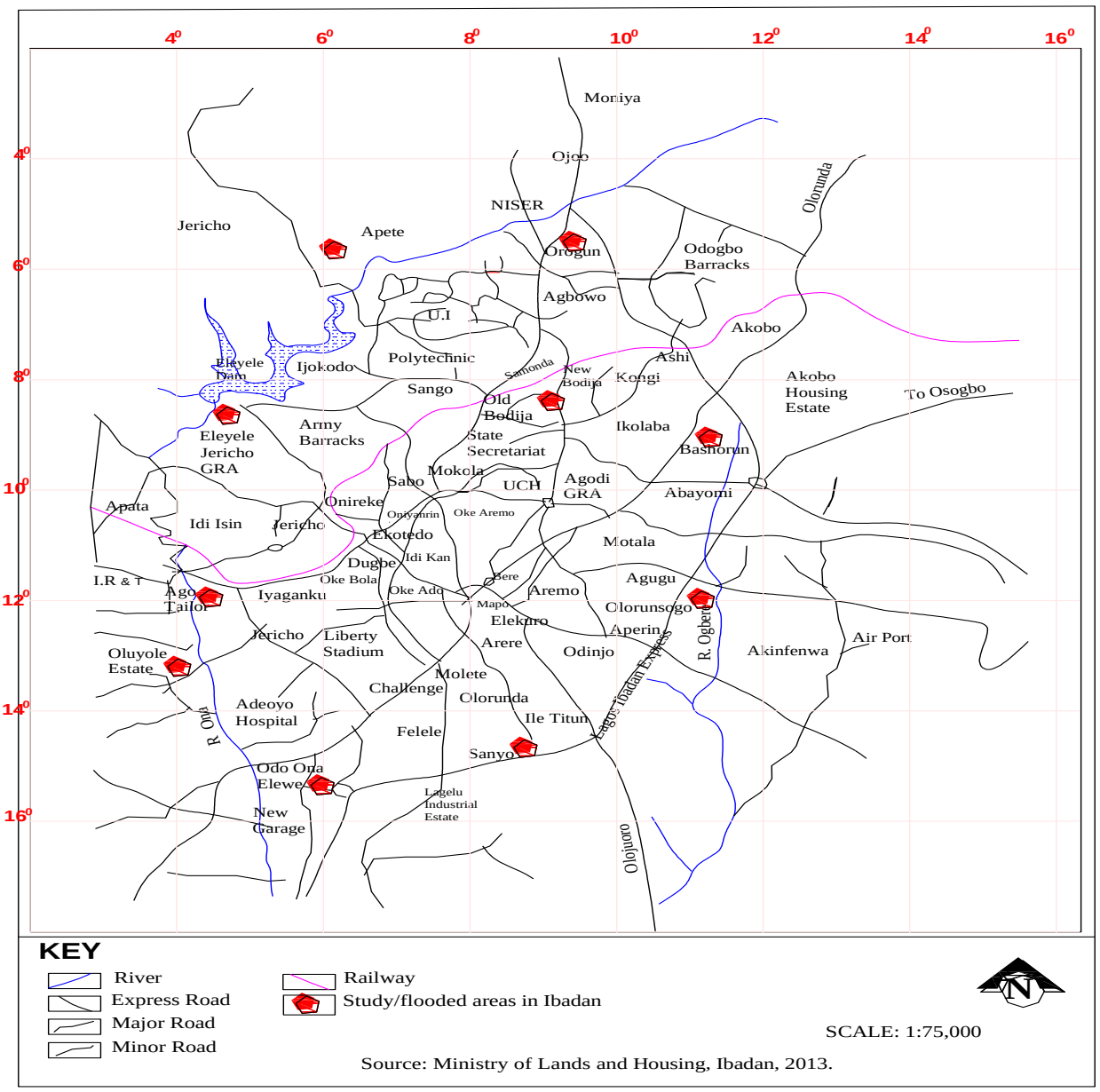


Source: Oyo State Ministry of Lands and Housing, 2013.



MATERIALS AND METHODS

This paper relied mostly on the administration of questionnaire to the randomly selected residents and purposively selected community leaders in the study area. Precisely, 22 units of questionnaire were administered on the selected community leaders and 104 residents in the eleven local government areas of Ibadan. The questionnaires sought for data on their flood disaster experiences and the issues surrounding the preparation and implementation of Post Flood Disaster Needs Assessment in the study area, especially as it affects their locality.

The consultation of both local and international journals and publications on disaster and post disaster needs assessment compliment the questionnaire administration. The journals and publications provided theoretical base and insights to Post Disaster Needs Assessment, especially as practiced in other developed parts of the world. This

gives the details of the context, principles, procedures and strategies involved in the Post Disaster Needs Assessment. The collected data were later subjected to simple descriptive analysis.

CONCEPT OF MARGINALITY/MATTERING AND LITERATURE REVIEW

Abegunde (2014) noted that the concept of marginality and mattering propounded by Schlossberg (1989) emphasized the inclusion of members of community in decisions and programs that would have effect on them. With this, the success or failure of a programme is directly related to the level to which members of the community feel they matter in the schemes of things. In this model, mattering is the feeling that one belongs and matters to others; while marginality is the feeling that one does not fit in. When members of community feel that they belong in the implementation of programme to be implemented in their community, it is proposed such projects are more likely to be successful. Like the concept of group behavior, this concept is of the view that people support what they help create, when they felt to be recognized, and emphasized the involvement of residents and communities in both the preparation and implementation of Post Disaster Needs Assessment.

For instance, in Samoa, Post-Disaster Needs Assessment (PDNA) is a joint initiative of a cross-agency group comprising the World Bank, the Asian Development Bank, United Nations International Strategy for Disaster Reduction, the United Nations Economic and Social Commission for Asia and the Pacific (Government of Samoa (2009). These Organisations working jointly with the Government, supported with the technical support from the Global Facility for Disaster Reduction and Recovery and a number of multilateral and bilateral agencies and NGOs. Essentially, residents are more likely to want to participate positively to and support the community if they feel they helped to create it. Thus, the success or failure of Post Disaster Recovery Plans and Programmes is directly related to the level to which residents and communities feel they matter in the schemes of things by the government.

The implementation of the first-ever Post Disaster Needs Assessment in Nigeria might have necessitated the establishment of the Fire Service in 1906 by colonial government (Baas et al, 2008). It also led to the establishment of the River Basin Development Authority in the country in the 1972 (Akanmu, 2001) due to the devastating drought experienced in the Northern part of the country in 1972. Citing the importance of PDNA, the International Federation of Red Cross and Red Crescent Societies (IFRCCS, 2010) are of the view that the assessment information helps decision-makers take account of the priorities of the affected population and decide how best to use existing resources for relief and recovery, response planning and implementation as well as providing information on the progress of recovery, highlighting areas requiring further analysis and intervention.

However, PDNA should be broad and include critical elements such as water supply and sanitation, nutrition, food aid, shelter and site planning, health services (IFRCSS, 2001), others include information on personal and household needs; agricultural, economic and infrastructure damage; and the political and security situation. PDNA, according to the Government of Samoa (2009) is drawn upon the findings of various assessments carried out in the immediate aftermath of the disasters by the government, the Inter Agency Standing Committee cluster teams and

nongovernmental organizations of which, it greatly benefited from these initial assessments. Thus, the implementation of Post Disaster Needs Assessment as a strategy intended to help coordinate recovery efforts across different sectors and with risk reduction focus (Bollin and Khanna, 2007).

OVERVIEW OF FLOOD DISASTER IN IBADAN (1948-2011)

The first flood disaster witnessed in Ibadan was dated 1948, though with scanty or no record on the depth of the rainfall, damaged properties, losses and estimated loss of lives (Akanmu, Ogunsesan and Ogundiran, 2014). Similarly, expect the Ibadan flood disaster of 1960, 1973, 1978, 1980 and 2011; all other flood disasters (1951, 1955, 1963, 1982, 1984, 1985, 1986,1987,1990,1994, 1997, 2007 and 2010) experienced in the ancient city of Ibadan were with little or no recoded data on the estimated loss and damages (Table 1). However, the persistent re-occurrence of flood disaster and their accompanied wanton destruction of lives and properties since 1948 is call for urgent regular conduct, implementation and review of Post Disaster Needs Assessments at various levels and over a period of time.

Similarly, Table 1 shows the repetitive nature and extent of loss and destruction orchestrated by flood disasters in Ibadan since the colonial era in 1948 till date (2011); although, the 26th August 2011 rainfall was most intense between 6:10pm and 7:20pm when 75 per cent of the rain fell {International Institute of Tropical Agriculture (IITA), 2011}, yet the heavy downpour started at 4:40pm, but continued until 8:00pm and with intermittent drizzling until 11:00pm. The International Institute of Tropical Agriculture) adjudged the downpour to be the highest in more than five decades in Ibadan; as it hit an all-time high of 187.50 mm accompanied by wind gusts reaching 65kmh-[1].

However, the first few hours of the flood witnessed a presumed absence of decisive necessary action as there were non-issue of a preliminary disaster early notification to alert that a disaster has occurred (Akanmu, 2014), in specific locations and magnitude; coupled with mere absence of temporary priorities such as search and rescue and on-site first aid. The more than six-hour rain led to flooding, toppled trees, damaged critical infrastructures and facilitated loss of several lives across the eleven local government areas of Ibadan. It took the Oyo State Government fourteen days to constitute (September 9, 2011) Task Force on Flood Prevention and Management for Ibadan, rather than within 48 and 72 hours used by governments in other parts of the world where such devastating flood/disaster occurred.

The report of the Task Force, according to Okwuofu (2011) showed among others that, many lives were lost; infrastructure and properties damaged and 2,105 buildings were washed away in Ibadan due to flagrant violation of spatial planning regulations. Therefore, the committee estimated that, it would cost N4.31billion to build 25 bridges and culverts damaged across the 11 local government areas in Ibadan.

RESULTS AND DISCUSSION

The extent of implementation and review of Post Disaster Needs Assessment reports is matter of concern to current flood induced disaster, especially as in this period of

climate change and adverse weather condition being experienced globally. Since the affected communities are the host to flood disaster in Ibadan, it is not unusual seeing such communities evaluating their losses and damages after flood disaster.

The field survey conducted (Table 2) shows that communities engage in post disaster needs assessment, though through rudimentary approach and scope. Based on this, close to half (46.2 per cent) of the sampled residents reported their loss and damage through community meeting, while less than a quarter (21.2 per cent) undertook inventory of their loss. Almost one-fifth (19.2 per cent) reported such losses to the established community's committee on flood disaster, while 13.5 per cent reported theirs to the executives of community development/ landlord associations. This emphasized the importance of community development associations in achieving the felt-need, self-growth and self-help as well as the first point of contact during and after disaster occurrence.

However, the rate of devastation of flood disaster necessitated the initiation and implementation of measures by communities to minimize the immediate impacts on their socio-economic welfare and activities (Table 3). Through this initiation, less than one-third (31.7per cent) of sampled residents engaged in repair of electrical installations, and less than one-quarter (24.0 per cent) were into reconstruction of damage culverts at community level. More than one-third of the sampled residents (38.5per cent) collectively involved in provision of temporary bridges in their communities, while small proportion (5.8 per cent) appeal to NGOs and other donor institutions to aids their communities.

Furthermore, Table 3 shows that slightly less than two-third (62.5per cent) residents of the communities affected by recent flood disaster in Ibadan heard of government constitution of Task Force of Floods on mass media. Less than a quarter (23.1per cent) was informed of such through their friends, while below one-tenth (6.7per cent) got aware of the Task Force through their neighbours. Those who got the notice through community association accounted for 7.7per cent of the sampled residents in the study area. Moreover, it is noteworthy that neither members of the affected communities nor their leaders in the associations were among the Task Force established by government. Thus, it can be deduced that little or no consideration was given to the affected residents and communities in the formation or composition of Task force by government on the matters that have direct impact on them.

With respect to submission of memoranda, it was observed (Table 3) that more than half of respondents (51.0 per cent) did not submit memoranda despite that their communities were affected by the incidence; less than a quarter (21.2per cent) submitted on their loss and damage, while more than one-tenth (13.5per cent) submitted for restoration and reconstruction (11.5 per cent) of the damaged infrastructure. The remaining 2.9 per cent did request for compensation arising from devastating floods in Ibadan. This is an indication that some residents appear to have little or no interest in government established Task Force, while other showed the degree of variations in their loss and damages.

On the outcome of the Task Force on Ibadan flood disaster, Table 4 depicts that more than half (57.7per cent) of the residents in the affected communities were dissatisfied with the outcome of the Task Force. Slightly higher than a quarter (31.7per cent) are satisfied, while remaining one-tenth (10.6per cent) are very satisfied with the recommendations of the panel. The high rate of dissatisfaction might presumably be connected to weak or absence of linkage with residents and their communities by the government. In addition, majority of the residents sampled in the communities (70.2per cent) appeared to have been excluded in the post disaster reconstruction programmes by the government. The partial involvement of more than a quarter (29.8per cent) of residents was assumed to be on mere discretion in monitoring the progress of such on-going projects in their areas.

The residents' assessment of the rate of progress and completion of the Post Flood Disaster Needs Assessment Projects in their communities were presented in Table 5 using variables such as roads, bridges, culverts, electrical installations, demolitions, compensation, resettlement and refuse control and management in Ibadan. Accordingly, slightly more than half of the respondents (56.7per cent) are of the view that road reconstruction in their communities are 25-50per cent completion, while more than one-quarter (28.8per cent) assessed such to be 1-24per cent completion stage. Only 6.7per cent and 7.7per cent of the sampled residents assessed such road projects to have reached 75-100per cent and 51-74per cent completion stages respectively. This shows the perceived slow pace of reconstruction and restoration of the damaged and collapsed infrastructure in the study area.

On the reconstruction of the collapsed bridges, only less than one-tenth (6.7per cent) of sampled residents assessed that to have reached 51-74per cent completion, while more than one-third (43.3per cent) adjudged such to be between 25 and 50 per cent completion stage. More than a quarter (39.4per cent) of residents adjudged bridge reconstruction in their communities to be 1-24per cent completion and the remaining one-tenth (10.6per cent) is still expecting government intervention in their communities. On the culvert reconstruction, less than two-third (40.4per cent) residents assessed it to be 25-50per cent completion stage, more than one-third (38.5per cent) rated it to be 51-74per cent completion and one-tenth (9.6per cent) of the sampled residents assessed it to be 75-100 per cent completion in their communities. The remaining 11.5per cent residents adjudge such to be 1-24per cent completion stage in their areas. Therefore, it can be deduced here that the rate of bridges reconstruction stage is lower than that of culvert, presumably due to the magnitude of damage as well as the huge technical and financial requirements for their restoration among other numerous factors.

With respect to the channelization of the drainages in the affected communities of the study area, slightly more than a quarter of respondents (27.9per cent) assessed the completion stage to be 25-50per cent, one-third (38.5per cent) adjudged it to be 1-24per cent completed and less than a quarter (23.1per cent) of the sampled residents have theirs to have reached 51-74per cent completion stage. The remaining one-tenth (10.6per cent) assessed the completion stage to be 75-100per cent in their areas. However, the restoration of electrical installations damaged by flood disaster in the study area was assessed by more than a quarter (39.4per cent)

of respondents to have reached 1-24per cent completion stage, while nearly half (47.1per cent) residents adjudged such to have reached 25-50per cent completion stage. Also, 9.6per cent and 3.8per cent of respondents have the electrical installations to be 51-74per cent and 75-100per cent completion stages respectively. However, it is of note that, both the communities and affected individuals were at the forefront in the procurement of damaged electrical poles and replacement of damaged cables and wires in their homes, streets and communities at large.

While government did not make any provision for compensation and resettlement exercises for the victims in the affected communities, Table 5 shows the efficiency of government in carrying out demolition exercises. Structures presumed and adjudged to be obstructing flow of stream and river channels in the study area were demolished with more than half (57.7per cent) of residents sampled gave the demolition exercises to be 51-74per cent completion in their communities. 3.8per cent of residents also adjudge demolition exercise of such structures/buildings to be 75-100per cent completion stage, while less than a quarter (22.1per cent) assessed such to have reached 25-50per cent completion stage. The remaining 16.3per cent is of the view that demolition progress in their area is 1-24per cent completion rate.

Moreover, on the control of refuse disposal, more than one-third (40.4per cent) of residents give a progress rate of 1-24per cent, while 7.7per cent assessed it to have reached 51-74 per cent completion stage in their communities. Half of the sampled population in the study area gives 25-50per cent rate of progress in the control of refuse disposal to the drainage channel in their area by the government and the remaining 1.9per cent residents give 75-100 per cent progress report on the control of refuse disposal.

Based on the above analysed variables, residents gave various rates for the restoration of their socio-economic activities in their communities in which more than a quarter (32.7per cent) assessed it to be 1-24per cent, while almost half of the respondents assessed it to be 25-50per cent restored and the remaining respondents who are slightly higher than one-tenth (14.4per cent) give 51-74 per cent restoration stage. Hence, there seems to be a connection and relationship between the restoration and recovery of socio-economic activities of the flood affected communities and the implementation rate of the Post Disaster Needs Assessment projects in such areas. This position was later hypothesized and tested with 0.675 results for the correlation coefficient and F-ratio of 11.47 at 0.05 significant levels.

CONCLUSION AND RECOMMENDATIONS

This paper has examined the implementation and challenges of Post Flood Disaster Needs Assessment with particular reference to the 2011 Flood disaster in Ibadan, Oyo State. The historical occurrence of floods and heavy downpour in the study area was traced to have commenced around 1948. Also, government responses to such devastating floods were presumed to have dated back to the colonial era in the country and Ibadan in particular. The paper observed the persistent constitution of Task Force/committee/panel by government at different levels and periods on occurrence of disaster in Ibadan over the years.

However, such composition of the need assessment committee was usually outside the first 12-36 hours after the disaster occurrence as practiced in other disaster-prone parts of the world; where early notification is followed, by a more complete disaster needs assessment usually within the first 12-36 hours after the disaster occurs. Also, the outcomes and recommendations of previous Task Forces established appeared to be partially implemented or jettisoned for reasons unknown. Supporting this view, Akanmu, Ogunsesan and Ogundiran (2014) observed that the 1980 flood disaster should not have been re-experienced in Ibadan in 2011 and even beyond, provided the recommendations of the previous Task Force and other statutorily established committee reports on Needs assessment were implemented and enforced according to specifications and time frame. Supporting this notion, Feyisipo (2012) submits that it took the Oyo State Government 32 years before beginning the dredging of rivers after the popular Ogunpa flood.

The current global climate change, weather variability and associated disaster calls for systematic review and incorporation of reports of previous Task Force or Disaster Investigative Panels in the country into current realities. However, the dwindling government revenues, adverse political influence, slow response rate and non-inclusion of the affected communities in the Needs Assessment Panel and implementation are among the perceived challenges to the successful implementation of Post Disaster Needs Assessment in the country. These are contributing massively to slow pace of restoration and recovery processes of the victims and communities of flood disaster in the study area and the country at large. Therefore, the followings are among the notable recommendations for improved recovery and restoration of flood disaster victims and communities within the framework of Post Disaster Needs Assessment:

- The regular reviews of previous and present Post Disaster Needs Assessment in the country so as to accommodate and anticipate changes occasioned by the present climate change, population growth and socio-economic realties as well as the timely implementation of the findings of PDNA.

- Global methodologies and template for the conduct and process of Post Flood Disaster Needs Assessment should be embraced by various levels of government in the country. additionally, the repeated devastating flood disaster in other urban centers in the country call for the Federal Government in collaboration with State Government to jointly undertake National Post Flood Disaster Needs and Implementation Assessment in the country through the use of global methodologies and template as terms of reference.

- The slow pace of reconstruction of critical infrastructure such as bridges, culverts, roads, drainage channels and non-provision for compensation and resettlement of flood victims, and those whose houses/buildings were demolished in accordance with the reports of the Task Force in Ibadan is not in best socio-economic interest and at variance to international best practices. Also, communities and individuals procurement of damaged electrical cables and poles should be complimentary and not mandatory as practiced in many flood ravaged areas of Ibadan.

- The involvement of communities, community leaders and Community Based Associations in subsequent Post Disaster Needs Assessment committee is very imperative to the success of the recommendations to be anticipated from such committee. This shall enable the community to have sense of belonging and responsibility in the matters affecting them.
- It is high time that the recommendations of government investigation panels have human face on the affected residents and communities. That is, such recommendations should balance environmental consideration with the yearnings and aspirations of the communities and victims of the disaster. This will go a long way in minimizing the resistance of affected communities to assumed harsh recommendations such as forced eviction occasioned by demolition exercises.

- Local Government Council should be more proactive, responsive, collaborative and supportive to communities affected by flood disaster. It should efficiently partner with state government, civil organizations and community based associations to achieve early restoration and recovery process. Therefore, Local Government Council should intensify on her constitutional responsibility of construction and maintenance of local roads, culverts and drainages as well as environmental sanitation in their area of jurisdictions.

- Individuals, residents and community associations should cultivate the habit of submitting memoranda to any panel of investigation constituted by government on matters affecting their communities. This shall make such established panel to incorporate their views and aspirations in their proceedings, finding and recommendations.

- With the residents' assessment of the socio-economic recovery of their communities from flood disaster questioning the implementation of the Task Force's recommendations in their restoration and recovery process, there is need for community participation in future Needs Assessment. The involvement of communities, community leaders and Community Based Associations in subsequent Post Disaster Needs Assessment committee is very imperative to the success of the recommendations to be anticipated from such committee. This shall enable the community to have sense of belonging and responsibility in the matters affecting them.

- However, the goal of Post Disaster Needs Assessment is defeated when recommendations provided were not timely implemented and restoration/recovery of affected communities and victims are not achieved in the shortest possible period. By this, the establishment of the Assessment Implementation Index for evaluating the performance and progress made in the implementation of Flood Disaster Needs Assessment Report becomes necessary. This will usher inn prioritization of Assessment Needs and Implementation with timing and sequencing of recovery and reconstruction. Lastly, the state and local government in the county should have embraced

spatial planning with executing capacities and viable apparatus towards minimizing future impacts of flood disaster in their area of jurisdictions.

Table 1: Historical Occurrence of Major Flood in Ibadan Since 1948

S/N	Date of Occurrence	Depth of Rainfall	Estimated Value of Damaged (₦)	Estimated Loss of Lives
1	1948	*	*	*
2	9-10 July , 1951	161	*	*
3	16-17 June, 1955	153.2	*	*
4	16-17, August 1960	178	Ten of thousands	*
5	27-28 August, 1963	130	*	*
6	1973	*	More than 100,000	3
7	20 April, 1978	147	Over 2,000,000	2
8	31 August, 1980	274	More than 300,000,000	Over 500 deaths and 50,000 displaced
9	1982	*	*	*
10	1984	*	*	*
11	3 July 1985	130	*	*
12	April, 1986	*	*	*
13	June/July 1987	*	*	*
14	21 September, 1987	178.3	*	*
15	1990	*	*	*
16	1 October, 1994	120.20	*	*
17	April 1997	151	*	*
18	7 June, 2007	126.2	*	*
19	1 October, 2010	118.0	*	*
20	26 August, 2011	187.5	Over 3billion	hundreds

Sources: Adeoye *et al* (2007); Agbola *et al* (20011), Ajayi *et al* (2012) and IITA (2011)
* Not available.

Table 2: Methods of Community Assessment and Recovery Measures

Methods of Community's Assessment			Recovery Measures in Place		
Variables	**Frequency**	**Percentage**	**Variables**	**Frequency**	**Percentage**
Meeting	48	46.2	Temporary bridge	40	38.5
Committee	20	19.2	Culvet construction	25	24.0
Reporting to the executives	14	13.5	Electrical installations	33	31.7
Individual inventory	22	21.2	Appeals to NGOs	6	5.8
Total	**104**	**100.0**	**Total**	**104**	**100.0**

Source: Authors' Field Survey, 2013.

Table 3: Notice of Task Force and Submission of Memorandum

Notice of Task Force			Submission of Memorandum		
Variables	**Frequency**	**Percentage**	**Variables**	**Frequency**	**Percentage**
Through media	65	62.5	None	53	51.0
Friends	24	23.1	Compensation	3	2.9
Neighbours	7	6.7	Reconstruction	12	11.5
Community meeting	8	7.7	Restoration of loss	14	13.5
Other specify	-	-	Loss and damage	22	21.2
Total	**104**	**100.0**	**Total**	**104**	**100.0**

Source: Authors' Field Survey, 2013.

Table 4: Satisfaction Rate with Government Panel and Community Involvement

Satisfaction Rate with Government Panel			Community Involvement		
Variables	Frequency	Percentage	Variables	Frequency	Percentage
Very satisfied	11	10.6	None	73	70.2
Satisfied	33	31.7	Partial	31	29.8
Dissatisfied	60	57.7	Other specify	-	-
Total	**104**	**100.0**	**Total**	**104**	**100.0**

Source: Authors' Field Survey, 2013.

Table 5: Residents' Assessment of the Completion Rate of PDNA Projects

Variable Name	Rate of Completion	Frequency	Percentage
Road reconstruction:	1-24per cent completion	30	28.8
	25-50per cent completion	59	56.7
	51-74per cent completion	8	7.7
	75-100per cent completion	7	6.7
	Total	104	100.0
Bridge reconstruction	1-24per cent completion	41	39.4
	25-50per cent completion	45	43.3
	51-74per cent completion	7	6.7
	Still expecting	11	10.6
	Total	**104**	**100.0**
Culvet reconstruction	1-24per cent completion	12	11.5
	25-50per cent completion	42	40.4
	51-74per cent completion	40	38.5
	75-100per cent completion	10	9.6
	Total	**104**	**100.0**
Stream channelization	1-24per cent completion	40	38.5
	25-50per cent completion	29	27.9
	51-74per cent completion	24	23.1
	75-100per cent completion	11	10.6
	Total	**104**	**100.0**
Electrical installations	1-24per cent completion	41	39.4
	25-50per cent completion	49	47.1
	51-74per cent completion	10	9.6
	75-100per cent completion	4	3.8
Demolition exercises	1-24per cent completion	17	16.3
	25-50per cent completion	23	22.1
	51-74per cent completion	60	57.7
	75-100per cent completion	4	3.8
	Total	**104**	**100.0**
Control of refuse disposal	1-24per cent completion	42	40.4
	25-50per cent completion	52	50.0
	51-74per cent completion	8	7.7
	75-100per cent completion	2	1.9
	Total	**104**	**100.0**
Restoration of socio-economic activities	1-24per cent	34	32.7
	25-50per cent	55	52.9
	51-74per cent	15	14.4
	75-100	-	-
	Total	104	100.0

Source: Authors' Field Survey, 2013.

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