

Community Involvement: A Panacea for Challenges Experienced in Post Disaster Housing Reconstruction in Kogi State-Nigeria

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Abstract: Housing reconstruction which is supposed to give succour to the disaster affected people often fail due to some challenges. This study considered the major challenges that are peculiar to the Post Disaster Housing Reconstruction (PDHR) settings in the study area since each setting is confronted with different impediments. This was done through a self-administration of structured questionnaires to 257 flood victims directly or indirectly involved in the reconstruction projects. Findings indicated massive corruption, unethical conducts of professionals, and non-engagement of beneficiaries or communities during reconstruction. These indicators are potential threats to the realization of PDHR projects. Thus, offering communities the opportunity to meaningfully contribute in reconstruction affairs that is to shape their lives in terms of housing and livelihoods, will in no small level reduce challenges experienced in PDHR and deliver a more sustainable and resilient PDHR development where satisfaction and acceptability of the project will be evident.

Keywords— Floods impact, PDHR projects, community involvement, sustainable strategy, Lokoja-Nigeria

1. INTRODUCTION

Housing is usually viewed to be the most valuable asset for people in developing countries. In any flooding, houses are principally the component that is most extensively damaged, and repeatedly represent the greatest portion of the loss in the overall impact of a disaster on the national economy (Lyons, 2009). For example, Roosli et al. (2015) reported that during 2014, flooding in Malaysia, housing was the sector that experienced extreme damage. In an attempt to describe the precise scenario of the 2014 floods in Malaysia, Mohamed et al. (2017) expressed that it is not out of place for one to say that the speed of the flood water in the affected regions flowed so fast with vitality equivalent to that of Tsunami, displacing anything that obstructs its channel of flow including buildings (residential and non-residential houses) and other infrastructures.

Similarly, Richard et al. (2017) and Jinadu (2015) reported that Nigeria is not excluded from the flood devastation on housing. In October 2012, a flood devastated some States in Nigeria that included Kogi. The flood of 2012 is considered as the worst since Nigeria became independent in 1960. The discoveries of the Post-Disaster Needs Assessment (PDNA) conducted immediately after the floods reported that 11 States were ravaged by the floods as shown in Table 1. The experience of the 2012 floods cannot be forgotten in a hurry since the effects are overwhelming and always fresh in the minds of the victims as well as the Federal government of Nigeria. In Kogi State alone, more than 500 thousand people were displaced; nine out of the 21 local government areas were affected by the flood, including Lokoja the State headquarters.

As Altay and Green (2006) identified less than 10% interest of research on managing disaster recovery projects as

compared to the much more (90%) interest of research on mitigation, preparedness and response periods of disaster risk management. This is an indication of poor comprehension and little attention on managing disaster recovery projects as brought forward by researchers such as Kim and Choi (2013) and Chang et al. (2012). Man and disaster are inseparable, and not even proper planning can absolutely eliminate disaster regardless of the form. The aftermath of any disaster is recovery activities accompanied by rehabilitation (short-term) and reconstruction (long term) with the target of restoring vital support facilities and return regularity to life such as reconstructing residential and non-residential facilities and harmonising the activities of government (Altay and Green, 2006, Moe & Pathranarakul, 2006).

National Emergency Management Agency (2013) reveals the vulnerability of Kogi State poorer residents to disasters as a result of the lesser capacity and fewer resources to prepare and recover. The life-threatening physical and socio-economic shocks of 2012 floods became a crucial matter of interest among stakeholders in disaster management where safe actions on victims' rehabilitation, recovery and risk vulnerability reduction were swiftly taken to mitigate flooding impacts in the future. However, the implementation of some of the resolutions was incompetently done due to corruption manifesting through the diversion of resources for personal interests (Jinadu, 2015). The consequences of poor implementation are leaving the affected population vulnerable to the menace of flooding now and in the future. This record among others supports the justification for conducting this research with the year 2012 flood as a central focus to bring long term respite to the residents by developing strategies that will offer a disaster resilience community in the study area and other similar communities. Housing reconstruction is a crucial element of post-disaster recovery initiatives in developing

countries, and thus, the need arises to recognise what approach makes it effective or achievable in the aftermath of disasters.

To this end, this research reported Post Disaster Housing Reconstruction (PDHR) in Lokoja from the perspective of the flood victims in those areas because Sadiqi, Coffey & Trigunarsyah (2012) established that most of the time, emergency relief efforts are usually seen as being successful, but the same cannot be said of PDHR projects because they often fail to meet the set objectives. Hence answer was sought to the following research question: What are the major challenges experienced in PDHR in the study area?

To successfully solve these complications, community participation is increasingly being sought. The contribution of disaster-affected communities in housing reconstruction is serious to the accomplishment of the programme (Lawther, 2009) and cannot be overemphasised. Ophiyaandri et al. (2013) stressed that it is the community who understands what they need and at the same time, tell what is best for the community. Hence, the contribution of the community in PDHR projects must be guaranteed (Hayles, 2010). It is in this light that the current study is making the proposition of community involvement in practicality to accomplish PDHR goals as well as safeguard its sustainability.

2. LITERATURE REVIEW

The global occurrences of natural disasters are greater than before causing damage, loss and disturbance to lives, built and social assets, and economy. Disasters usually destroy houses and claim many human lives; the lucky survivors in a disaster-affected location often opt not to leave their residences or home region (Baldry & Thurairajah, 2010). Hence, the requisite for reconstruction arises and may possibly provide the opportunity to build back better (Labadie, 2008; Mannakkara & Wilkinson, 2013). Because of the peculiarities attached to PDHR as being more complex, dynamic and unpredictable, there is a need for stakeholders to focus more interest on development. Davis (2014) indicated that the 21st Century is emerging to be more stakeholder focussed. Quite several research work have recognised the importance of effective stakeholder engagement in reconstruction project (Yang et al., 2009; Shafique & Warren, 2015).

One of the most intricate responsibilities being faced by recovery managers in the aftermath of disaster regardless of the form is to decide on and execute the correct approaches to housing reconstruction. Jha et al. (2010) opined different methods through which PDHR can be achieved in terms of a household's degree of control over the reconstruction procedures. International Recovery Platform (2007) and Jha et al. (2010) advised that the choice of reconstruction approaches to be engaged should be based on context. It should also give attention to many fundamental factors such as; broader political environment and operational criterions, cultural background, cost of reconstruction, improvement in housing and community safety, reinstatement of livelihoods, hopes and priorities of the most affected individuals.

Experience shows that planners and developers of PDHR projects tend to reposition and resettle disaster-affected communities (Sadiqi et al., 2017). Housing reconstruction projects constructed by donors (international/ national NGOs or governments), predominantly those that demand relocating affected communities, are usually decided by an inflexible top-bottom approach, which is symbolized by complete absence of community consultation and community involvement in the planning and physical execution of reconstruction developments (Andrew et al., 2013). Besides the intrinsic contests such as rigid short time limit, organizing broadly dispersed affected communities, fiscal constrictions as well as validating housing quality (Roseberry, 2008; Olshansky, 2006), reconstruction projects are susceptible to swindle and corruption that can lead to massive losses of project funding (Lyons, 2009; Alexander, 2013).

In a post-disaster situation, Smirl (2008) notifies that donors (governments as well as NGO staffers) can potentially become prone to swindle and corruption specifically when rushed disbursement of bulky sums of recovery funding and dispersal of relief assistance was poorly coordinated and unsatisfactorily supervised. Furthermore, Tas, Tas & Cosgun (2011) reported that quick disaster recovery led to hurried design where sensitive elements such as the local climate and environment, socio-cultural aspects and user's identity were being ignored alongside construction scheduling and output were also affected due to inappropriate selection of materials, ineffective engagement of labour, poor workmanship and administration. All of these factors compromised the quality of the reconstructed houses.

The preceding review showed that issues inhibiting PDHR cut across four sensitive sections, namely; reconstruction approaches, stakeholders consultation, resilience strategies, and resource mobilisation strategy. These identified factors capable of affecting the overall intentions and objectives of reconstruction and recovery efforts in the study area. However, housing reconstruction is not the same as traditional construction due to the plethora of problems that people will have to contend with at the same time (Davidson et al., 2007; Siriwardena, Haigh & Ingirige, 2009). This study will consider the major challenges that are peculiar to the PDHR settings in the study area since each setting is confronted with different obstacles and recommend the one factor that can influence the identified challenges to enhance the satisfaction of beneficiaries and sustainability of the PDHR projects.

3. RESEARCH METHOD

A quantitative approach was adopted in this research. The survey tool used was a structured questionnaire that was designed drawing on the factors derived from the literature. The respondents of this study were the 2012 flood victims in Lokoja who the authors believed would possess the required experience that will guarantee reliable information for the study. As such, this category constitutes the population of the study. A total of 400 questionnaires were self-administered to these flood victims on a 5-point Likert scale from 1 to 5, where

1 symbolises 'very Less' and 5 represents 'very high'. A total of 301 was returned and 257 used for the analyses as shown in Table 2. The reliability of the questionnaire scales for this study was tested using Cronbach's Alpha. A reliable Cronbach's alpha of more than .70 was achieved in the construct. Thus, the questionnaire scale is proven to be highly reliable and could help measure what it is purposed for. The data obtained were analysed using mean scores and ranked which formed the basis for the conclusion reached and the recommendations made.

4. DISCUSSION OF FINDINGS

Table 1 reveals the profiles of respondents with 257 numbers of cases presented after data screening. Gender distribution showed that about 63% of the respondents were males, and 37% were females. The result indicated more than 88% of the respondents were aged between 26 years to 65 years therefore, giving confidence to reliable information. In addition to this, more than 52% attended a higher education level with equivalent to the first degree and above, while about 48% have attended at least primary school. This is an indication that the majority of the respondents have requisite qualification and training for efficient delivery of responsibilities.

Table. Profile of Respondents

Attributes	Frequency	Percentage (%)
QUESTIONNAIRE ADMINISTRATION		
Questionnaires Administered	400	-
Questionnaires collected	301	75
Questionnaires screened	257	64
GENDER		
Male	162	63.0
Female	95	37.0
AGE		
Under 26	16	6.2
Between 26 to 35	62	24.1
Between 36 to 45	76	29.6
Between 46 to 55	64	24.9
Between 56 to 65	25	9.7
66 years and above	14	5.4
EDUCATIONAL QUALIFICATION		
Living certificate	33	12.8
Secondary certificate	28	10.9
ND/NCE	61	23.7
B.Sc./HND	105	40.9
Masters and above	30	11.7

4.1. The Major Challenges Experienced with the Reconstruction Strategy Used.

A mean ranking was conducted on the major problems experienced as observed from the PDHR by the respondents in the study area. The ranking order for the observed factors was done from highest to lowest using the mean and standard deviation possessed by an individual factor as presented in Table 2.

Table 3. Major challenges experienced

SN	Variables	Mean	Std. Deviation	Rank
1	Problems with stockpiling of supplies	4.09	.928	1
2	Problems with the distribution of basic provisions such as water, food, clothing, shelter, medical care	3.94	1.075	2
3	Problems with evacuation techniques used	3.86	1.000	3
4	Problems with the rescue of survivors	3.79	.919	4
5	Problems with transportation networks	3.61	1.496	5
6	Problems with political pressure for quicker reconstruction	3.47	1.330	6
7	Problems with the restoration of urban infrastructures and services	3.42	1.236	7
8	Problems with compromises on essential elements of the reconstruction programme	3.39	1.141	8
9	Problems with unethical conducts of professionals during reconstruction	3.29	1.131	9
10	Problems with victims rebuilding on their own ways	3.25	1.343	10
11	Problems with insufficient workforce across local organisations	3.20	1.293	11
12	Problems with the removal of debris	3.19	1.243	12
13	Problems with speed of reconstruction	3.14	1.231	13
14	Problems with return of the evacuees	3.13	1.184	14
15	Problems with bureaucracy during reconstruction	2.97	1.256	15
16	Prevalent emotions such as abuses to reconstruction workers	2.82	1.250	16

As revealed in Table 3, there is mean rank of "4" revealing that the high capacity of stockpiling of supplies meant for reconstruction by the donor's agencies, distribution of basic amenities like water, food, shelter, evacuation techniques, transportation networks and political pressure for quicker

reconstruction were faulted. These problems can be classified under logistic and chain supply issues which have always been an attribute of humanitarian operations. Housing reconstruction programmes count on the ability to acquire, transport and receive supplies at the point of need and inadequate provision of resources for PDHR significantly borders the prospects for successful implementation of the reconstruction works. This might be a contributing factor to the reasons why the intervention is yet completed as identified in the introduction section of this study. This finding is in absolute reconciliation with earlier researches (Chang et al., 2010; Ahmed, 2011; Lyons, 2009; Malalgoda et al., 2011; Alexander, 2013). It is obvious that there was massive corruption during PDHR in the study area.

Furthermore, the reconstruction model adopted was inappropriate due to non-recognition and non-involvement of the affected community. Sadiqi et al. (2017) reported that from the large proportion of PDHR interventions already implemented, unsuccessfulness can be traced to non-engagement of community. This is affirmed in the findings on past PDHR projects that such projects are highly susceptible to failure without the active involvement of the affected community (Johnson et al., 2006; Lemanski, 2008; Galtung & Tisné, 2009; Hayles, 2010; Ophiyandri et al., 2010). Several authors have faulted approach to reconstruction of PDHR. According to Shaw & Ahmed (2010), reconstruction is habitually delivered in such a manner that essentially addresses the implementer's requirements rather than the affected population requirements and this makes these projects often insatiable because community desires are swallowed up by the constructors' bigger benefits such as speed and project costs (Lloyd-Jones, 2006; Brun & Lund, 2008; Alam, 2010).

PDHR projects that are void of community participation often result in ugly outcomes. Nadiruzzaman & Paul (2013) stressed that negative impacts were prominent and obvious on the affected communities in Bangladesh over the reconstruction approach initiated by the government of Bangladesh because of non-recognition for community participation.

There is less issue connected to the speed of reconstruction and bureaucracy during reconstruction as presented in Table 2. Perhaps, because the affected community were not or actively involved in the reconstruction activities.

5. CONCLUSION

There is an observable increase in the frequency of floods in recent times. The appalling nature of destruction emanating from natural disasters has become a global concern and is putting stakeholders on the quest to develop a strategy that will enhance the efficiency and effectiveness of post-disaster undertakings. Shafique & Warren (2016) confirmed that researches had taken a new dimension from laying emphasis only to restore normal life in disaster-affected areas but stepped further to address the development as an opportunity to offer a safer, sustainable and resilient built environment.

Affected community's influence on any decision relating to the disaster relief measures provided is crucial to unbiased and positive results producing post-disaster recovery. This gained unalloyed supports from scholars in sustainability and resilience who are making impacts in the built environment and have agreed that involvement of beneficiaries is imperative for the achievability of PDHR targets (Davis, 2014; Bornstein et al., 2013; Guarnacci, 2012; Shafique & Warren, 2016). This is valuable as each PDHR has special goals to be achieved, and only those with background knowledge can be of trustworthy support and guide. Hence, offering beneficiaries the opportunity to meaningfully contribute to reconstruction affairs that are to shape their lives in terms of housing and livelihood, will in no small level minimise problems experienced in PDHR projects. This is expected to deliver a more sustainable and resilient PDHR development where satisfaction and acceptability of the project will be evident, and the donor will have value for his money.

6. REFERENCES

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