Submitted: February 20, 2029 Accepted: May 27, 2010

SOCIAL SUPPORT IN THE AFTERMATH OF FLOODING: A STUDY AMONG URBAN POOR DWELLERS IN ACCRA

KORDIE, G.A., 1 DE- GRAFT, A.A. 2 AND CUDJOE, S.N. 2

¹University Library, UDS, P. O. Box TL 1882, Tamale-Ghana ²Regional Institute of Population Studies, University of Ghana, Legon *Corresponding author: godsadjei@gmail.com

Abstract

Every community has varying perceptions on disaster and therefore develop different mitigation efforts to overcome it. Social support is considered to be an important factor influencing an individual's reaction to stress. This study is purely a qualitative research that aims at assessing the availability of social support for urban poor dwellers in the aftermath of a flooding incidence. Data was gathered through focus group discussions which involved a total of fifty-three (53) participants comprising of a minimum of six (6) people in each group in two urban poor communities. The results revealed the existence of the major forms of social support, formal and informal support, although very negligible. Regarding the sources of the support, the only formal support available was stones from the Assemblyman. Informal support from friends and religious bodies was also available for flood victims in Agbogbloshie. Flooding had a severe impact on the lives of these victims ranging from their social and economic lives to their psychological health. It is therefore recommended that, in order to help flood victims recover from this sudden distressing event, some form of tangible formal support in monetary terms be provided to them.

Keywords: Disaster, flooding, social support, urban poor dwellers, Accra

Introduction

Climate change has been found to increase the vulnerability of urban poor dwellers throughout Africa (Action Aid International, 2006; Okyere et al., 2012) especially changes in rainfall due to its exposure to severe weather events and it's over reliance on natural resources (O'Brien, 2003). According to Armah et al. (2010), Sub-Saharan Africa is deemed to be most vulnerable to climate variability including flooding in the world. floods Although are sometimes considered as unavoidable (Wong and Zhao, 2000) because they are perceived as an act of nature; hence the activities of humans are highly neglected as reasons for their occurrences. However, the Government of Canada (2010) posited that indeed there are natural forces, such as volcanic shifting and solar activities that have contributed to climate change, the recent warming has been largely attributed to human activities such as burning of fossil fuels that has greatly led to the increased levels of atmospheric carbon dioxide which is largely the

prevailing force of climate change and for that matter flooding.

The aftermath of these floods usually results in both direct tangible impacts such physical damage to houses. infrastructure, sweeping away properties, bridges etc., and indirect tangible impacts for instance, traffic disruption and loss of industrial production (Messner et al., 2007). There are also other social impacts such as loss of life, financial loss, epidemics, loss of community cohesion (Adedeji et al., 2012) which are difficult to quantify in the actual cost of damage and recovery.

Aside the aforementioned impacts, Liu et al. (2006) and Feng et al. (2007) also found that these floods do not only cause economic and property losses but also impacts their victims both physical and psychological injuries. As a result, people with flooding experience have been found to show more fear and are more worried about their lives and properties as compared with those with no experience of flooding (Shaw et al., 2005). Meanwhile, research has shown that flood victims in developed countries have a higher amount of wealth and depend on their insurers whereas victims in developing countries depend on social support from families, friends, religious bodies and the government to alleviate their losses (Aboagye, 2012). Social support according to Kanaisty and Norris (2004) is a network of family, friends, colleagues, and other acquaintances a person can turn to, whether in times of crisis or simply for fun and entertainment. This has been considered an important factor influencing an individual's reaction to stress, because, these networks provide important linkage between the individual and their social structures, functioning as resources for information, material compensation and physical help (Armah *et al.*, 2010). It can be categorized into formal and informal support. Formal social support refers to those support received from professional social systems, for instance from the government (National Disaster Management Organization), non- profit organizations, medical systems while informal social support is the support received from either friends, colleagues, family and relatives during the aftermath of the floods.

Social support plays a vital role in reducing the effect of the sudden distressing experience for flood victims. Very little is known about climate-related adaptation in the social context and the few studies available have alluded to the subtle impacts that go beyond economic performance and food security, to include the sense of belonging, respect and sociocultural heritage, all of which are attributes of social capital (Tschakert and Tutu, 2010).

The study communities have been identified as most affected by floods, therefore the motivation to find out whether these flood victims receive any form of support to cushion them in the aftermath of the flooding incidence. Also, understanding the relationship between vulnerability to flooding and available social support can be a very effective tool in developing measures to address this problem. Hence, the relevance of this study cannot be over-emphasized.

More so, even though there is literature on the perennial flooding in Ghana (Aboagye, 2012; Arthur and Arthur, 2011), there is still paucity of knowledge on the relationship between social support and victims perceived vulnerability to flooding. It is therefore imperative with this gap in mind to undertake this study, which is primarily

aimed at understanding the relationship between social support particularly the type of support received and victims perceived vulnerability to flooding with the view of making recommendations to policy makers on what policies to formulate to effectively assist vulnerable urban dwellers.

Methodology Study Area

Two urban poor communities in the Accra Metropolitan Assembly were selected. These are Agbogbloshie and James Town located in Central Accra in the Ashiedu Keteke District under the Accra Metropolitan Assembly (A.M.A) and lies within latitude 0° 14′ 30″ and 0° 12′ 40″ W and longitude 5° 31′ 55″ and 5° 33′ 45″ N (Figure 1).

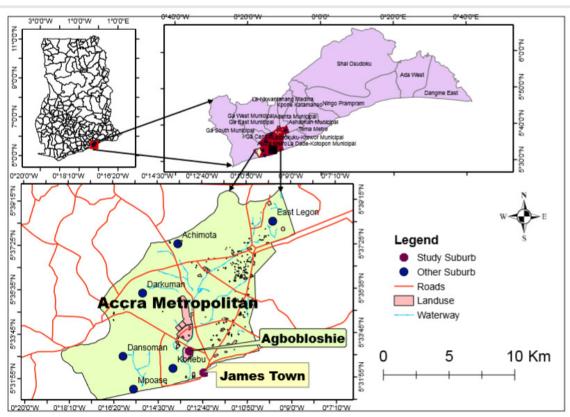


Fig. 1: Map of study area

Although there is great similarity in the socioeconomic structure of the two communities, their ethnic composition varies greatly. Agbogbloshie is a multiethnic community with majority of its inhabitants being economic migrants from the various parts of Ghana. It covers a land area of about four acres and has a human population of about nine thousand (Ghana

Statistical Service, 2012). Because of the positioning of the community, which is situated in a major market area, majority of its inhabitants are engaged in trading activities ranging from food to non-food items. Most of the houses in the community are mobile (wooden-walled structures/ kiosk) as a result of factors such as increased housing demand, land

and construction cost. There is a lot of sanitation problems associated with closed unplanned structures coupled with the fact that there is no health facility in the community. Commercial activities in the community have resulted in the creation of both liquid and solid waste which consequently blocks the few available drainage systems, thereby resulting in flooding anytime there is a downpour.

James Town on the other hand is purely an indigenous Ga community with traces of some minor ethnic groups such as Akan and Hausa, therefore the major mode of communication in this community is the Ga language. It has a human population of over seventeen thousand people with compounds usually consisting of six to twenty people (Ghana Statistical Service, 2012).

James Town unlike Agbogbloshie has a community clinic and a few pharmacies. It is a coastal community and the predominant economic activity of the people is fishing and fish processing. Most often, the men are engaged in fishing, whiles some of the women process the fish and others serve as fishmongers. Unlike Agbogbloshie Jamestown is structurally planned, with its residential structures mostly cement-walled with few places designated for recreational activities. This notwithstanding, there is a place for butchering livestock within the centre of the community which creates unpleasant smell for its inhabitants.

Reconnaissance Visit

Although the study sites were not completely new to the researcher, a familiarization visit was made to the sites to help the researcher establish good relationship with the community members as well as to gain access to community facilitators useful during the research

period. Some opinion leaders, for instance the leaders for the youth groups were also interacted with to help in the organization process.

Materials and Methods Observation

Personal observation in each of the communities was recorded during the research period. This helped understanding how members of the communities relate with one another, issues on sanitation, economic activities and community cohesion. The preknowledge gained through observing was very helpful during the focus group discussions to either confirm or probe further some responses given respondents.

Focus group Discussion

This study employed focus group discussions with community members with the intention of understanding their perceptions of vulnerability to flooding and awareness to the support available to them. Focus group was used in the collection of data because of its unique nature of community involvement in addressing circumstances and challenges that are important to members of the community. This data collection method was also chosen because, it is both rigid and flexible thus giving the researcher the opportunity to design questions that are semi-structured in nature that allows him/her control over the line of questioning while at the same time making room for the respondents to narrate or elaborate on pertinent issues.

Segmentation Approach

Each community was divided into two areas, flood prone area and non-flood prone area to separate all people who are vulnerable to flooding from the nonvulnerable ones. This segregation was informed by the author's observation during the reconnaissance visit and informal communication among some local gate-keepers in the communities who disclosed that some particular areas flood anytime there is a downpour. In Agbogbloshie, residents located around the area called 31st December and those around the Presbyterian Church were classified as one group that is vulnerable to flooding. All other parts of the community were classified as nonvulnerable group. In James Town, all residents towards the Korle Lagoon were classified as vulnerable to flooding as suggested by literature (Sam Jr., 2009) and confirmed by some elders of the community, and others far from the lagoon classified as non-vulnerable to flooding.

A purposive sampling technique was used in selecting participants from the flood-prone areas in each of communities to form the focus groups. The rationale behind this sampling approach was to enable the researcher to get the required people who will give meaningful contribution with regard to the topic. Members in the non-flood prone areas were on the other hand randomly selected since they form the majority of Two focus population. discussions were organized in each of the flood prone and non-flood prone areas, namely, male group and female group making four groupings in each community and a total of eight focus groups in the two communities.

This segregation was necessary because, a homogeneous group results in less intimidation and therefore enables each participant in a group to fully engage in the discussion.

Sample Size

Six to nine individuals were involved in each of the eight focus groups conducted making a total sample size of fifty-three participants. Each discussion was audio-taped in the respondents' local languages (Ga and Akan) and later transcribed into English language with the help of an expert.

Data Analysis

Developing a Coding Frame

The transcripts were examined, organized and categorized into various codes. All basic themes and the number of times each appeared in the discussion was brought together by the use of a coding frequency. A coding frame was then conceived theoretically and guided by basic themes identified in the transcripts. Both deductive and inductive codes that explore the understanding of the themes were developed using Attride-Stirling's (2001) thematic network approach. This thematic network approach is a qualitative research analytical tool that provides a clear series of steps for carrying out thematic analysis of a qualitative material. Attride-Stirling's (2001)thematic network represent a web-like illustration that gives a pictorial view of how the basic themes come together to represent an organizing theme and by uniting several organizing themes bring into being the core of the thematic network called the global theme. A thematic analysis was used to analyze the data. To shield participant's identity, pseudonym names have been used in the analyses.

Results and Discussions

The figure below shows a pictorial demonstration of the main objective of this research, which is examining the availability of social support for urban poor dwellers in the aftermath of a

flooding incidence. Under the global theme social support, two organizing themes emerged. They are the type of support and the source of support received.

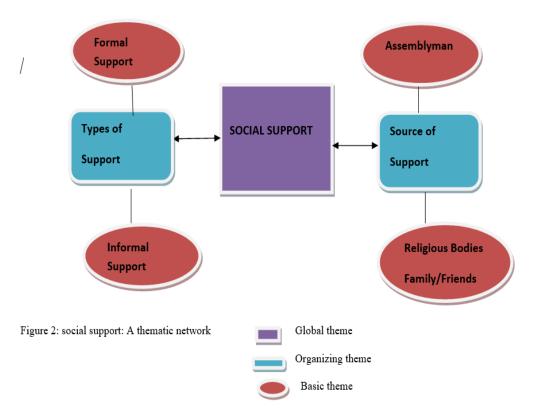


Fig. 2: Social support: a thematic network

Prevailing Social Support in the Community

Social support is a very crucial element in the lives of many affected flood victims. It facilitates the emotional recovery of these affected persons. Two types of support prevailed in the study area. These are both formal and informal support in the forms of material, physical and emotional support.

Research has found that in the aftermath of natural disasters, the nature of help received can be likened to a pyramid with its broad base being help from informal support systems like family members, followed by support from friends and religious bodies and its narrow

apex being the aid provided by formal agencies and professional services.

Formal Support

Formal support is the type of support received from the government and other formal institutions, such as non-governmental bodies and associations. These supports come in the form of relief items such as food, drugs, blankets, medical equipment, emergency lights and clothing usually distributed by NADMO and World Health Organization (WHO, 2008; Karley, 2009).

Out of the eight focus group discussion organized, receipt of formal support came up in only two groups. These groups were the female group who experience flooding and male group who do not experience flooding both in Agbogbloshie.

Unlike in more affluent regions of the world where formal aid offered by the government and relief agencies is a common feature (Kanaisty and Norris, 2004), respondents from the two groups in Agbogbloshie who receive formal support, only receive it from assemblyman. This was material support in the form of stones which is given only when election is approaching, with the purpose of allowing easy passage through the community. Although this form of support existed for flood victims in Agbogbloshie, they however expressed that it does not in any way help them in their recovery process.

Aside the provision of stones, male respondents who although do experience flooding in Agbobloshie confirmed the receipt of some equipment needed to embark on clean-up exercises also from the Assemblyman in the aftermath of the flood incidence. They lamented that the government (NADMO), the main organization responsible for natural disasters in Ghana and non-profit organizations come to their aid. A study by Okyere et al. (2012) confirms that the actions taken by government and other non-profit organizations in responding to the aftermath of floods is often ineffective. This was how Grace, a female respondent from Agbogbloshie put it:

'.....when election is coming; as for that one the Assemblyman will come here. Then they will bring stones here for everyone to collect some to his/her house and even that if you don't hurry up, you will not get some'.

It is worth mentioning that among the respondents who received support in Agbogbloshie, there was some form of disparity even in the distribution of the stones. Priority was often given to those individuals who are affiliated or related to the source of the support at the disadvantage of the others. This was in conformity to Armah *et al.* (2010) who discovered that there is some form of neglect in the distribution of support in the aftermath of natural disasters which exacerbate people's vulnerability, and moreover the act of giving and receiving support in the aftermath of floods usually takes place in an already existing sociopolitical and cultural community (Oliver-Smith 1996). Therefore, interactions among members are usually complex.

'.....I have never received any help since I was born, if maybe you are a family member to the assemblyman fine, but if you are not a family member, no help' (Angela).

Contrary to Agbogbloshie, no group in James Town admitted receiving formal support, which suggested that, they were not severely affected by the floods as compared to those in Agbobloshie. This conforms to the revealed literature that, the first and most familiar rule governing the emergent supportive communities is rule of relative needs where precedence is given to such victims who experience the greatest exposure to the negative impact of the disaster (Kaniasty **Norris** 1995). However. and notwithstanding ones' needs, certain either placed in people are advantageous or disadvantageous side in receiving post-disaster support (Kaniasty and Norris, 1995).

Informal Support

All sources of support from families, friends, colleagues and religious bodies were classified as informal sources of support. This type of support according to literature helps flood victims to recover

faster due to its nature of immediate response (Okyere *et al.*, 2012), and Adedeji *et al.* (2012) attributed this to the immediate response from family as compared to the relatively slower time required acquiring benefits or compensation from the formal sectors such as the government or some non-profit organizations.

The forms of support received were material support, emotional support and physical support. The material support was in the form of clothing received from some religious bodies, while the emotional support on the other hand was sympathy calls respondents received from friends. This could probably be due to the fact that they did not want to mention all the support they receive for fear of being denied extra support from other sources.

On the other hand, it can be due to the fact that the males are placed on the disadvantageous side in the distribution of support. As stated by Kaniasty and Norris (1995), that certain people are either advantageous placed the on disadvantageous side in receiving support following a disaster which however contradicts the finding of Feng et al. (2007) which revealed that there is a higher level of social support in males than in females, which they attributed to the fact that males often have higher educational levels than females and may therefore have better social intercourse skills during the flooding period. In relation to the physical support received, vulnerable female group in Agbobloshie recounted they sometimes send their little ones to live with some friends until the flood waters subside. Although respondents added it was not so effective because they could not stay for long before they overstay their welcome.

This was asserted by Arthur & Arthur (2011) who found that most flood victims in Ghana relocate to live with families until the flood subsides. Akosua Tuntum, a female flood victim in Agbogbloshie shared her experience:

'.....I think at times we get help from the church when they hear about it, but no A.M.A. or NADMO come to our aid......'

However, contrary to the responses obtained from flood victims in Agbogbloshie, no respondent in James Town reported receiving informal support. It can however be said from the discussion that, although James Town is a homogenous community, there was more communal living in Agbogbloshie, a heterogeneous community as compared to James Town.

'.....we don't receive any support, even the Town Council came and looked; when they go they never come back.....' (Eno, James Town Vulnerable Female, 2013).

Conclusion

It was revealed from the study that two types of support existed for flood victims in Agbogbloshie. They were formal support from the Assemblyman, and informal support from family, friends and religious bodies. There was however no relationship between the type of support received and ones' vulnerability to flooding. Meaning that there was no difference in the perceptions of people who said they receive some support and those who do not receive any support. Because, as mentioned earlier, the respondents in Agbogbloshie who receive some form of support stated that this support does not in any way help them in their recovery process.

It was also discovered that respondents from James Town do not

receive any form of social support after flooding events.

Recommendation

It is recommended that more drainage systems be constructed by the Accra Metropolitan Assembly in Agbogbloshie because, they suffered most as a result of drainage problem floods. Also, there should be some form of substantial formal social support for flood victims in the research communities since available support for flood victims in the area was negligible.

Acknowledgement

The authors acknowledge the funding received from the International Development Research Centre (IDRC) under the Africa Adaptation Research Centre (AARC) to be the full sponsors of this project.

References

- Aboagye, D. (2012). The Political Ecology of Environmental Hazards in Accra, Ghana. *Journal of Environment and Earth Science*. www.iiste.org 2(10): 157-172.
- Actionaid, (2006). Climate Change, Urban Flooding and the Rights of the Urban Poor in Africa: Key Findings from Six African Cities.1-8.
- Adanu, S.K. (2004). The Need for Changes in Urban Planning, Case Study of Accra, Capital City of Ghana. 40th ISoCaRP Congress.1-10.
- Adedeji, H.O., Odufuwa, O.B. and Adebayo, H.O. (2012). Building Capabilities for Flood Disaster and Hazard Preparedness and Risk Reduction in Nigeria: Need for Spatial Planning and Land

- Management. Journal of Sustainable Development in Africa, 14(1): 45-58.
- Armah, A.F., Yawson, O.D., Yengoh, T.G., Odoi, O.J. and Afrifa, A.K.E. (2010). Impact of Floods on Livelihoods and Vulnerability of Natural Resource Dependent Communities in Northern Ghana. *Water*, 2: 120-139.
- Arthur, J.L. and Arthur, I.A.Y. (2011).

 Movement under Environmental
 Disasters: The Case of Flooding
 and Bushfires for Selected Periods in
 Ghana. Center on Migration,
 Citizenship and Development.
 Bielefeld, 97: 1-20.
- Attride-Stirling, J. (2001). Thematic Networks: An Analytic Tool for Qualitative Research Commission for Health Improvement. 385-405.
- Feng, S., Tan, H., Abuaku, B., Wen, S., Liu, A., Zhou, J., Li, S., Yang, T., Zhang, Y., Li, X. and Li, G. (2007). Social Support and Posttraumatic Stress Disorder among Flood Victims in Hunan, China. *Ann. Epidemiol*, 17(10): 827-833.
- Ghana Statistical Service (2012). 2010
 Population and Housing Census.
 Summary Report on Final Results.
 (Online). Available
 at:http://www.statsghana.gov.gh/d
 ocfiles/2010phc/Census2010_Sum
 mary_report_of_final_results.pdf
 [Accessed: 20th March, 2018].
- Government of Canada. (2010). Canada's
 Action on Climate Change:
 Information on Climate Change.
 (updated online 28-09-12).
 Available at:
 http://www.climatechange.gc.ca/def
 ault.asp?lang=En&n=F2DB1FBE-1

- Kaniasty, K. and Norris, F. (1995). In Search of Altruistic Community: Patterns of Social Support Mobilization following Hurricane Hugo. *American Journal of Community Psychology*, 23: 447-477.
- Kaniasty, K. and Norris, F.H. (2004). Social Support in the Aftermath of Disasters, Catastrophes, and Act of Terrorism: Altruistic. Overwhelmed, Uncertain, Antagonistic and Patriotic Communities. Bioterrorism: Psychological and Public Health Interventions, ed. R.J. Ursano, A.E. and C.S. Norwood Fullerton. Cambridge University Press, 200-229.
- Karley, K.N. (2009). Flooding and Physical Planning in Urban Areas in West Africa: Situational Analysis of Accra, Ghana. *Theoretical and Empirical Urban Research in Urban Management*, 4(13): 25-41.
- Liu, A., Tan, H., Zhou, J., Li, S., Yang, T., Wang, J., Liu, J., Tang, X., Sun, Z. and Wen, W.S. (2006). An Epidemiological Study of Posttraumatic Stress Disorder in Flood Victims in Hunan China. *The Canadian Journal of Psychiatry Original Research*. 51(6):350-354.
- Messner, F., Penning-Rowsell, E., Green, C., Meyer, V., Tunstall, S. and van der Veen, A. (2007). Evaluating Flood Damages: Guidance and Recommendations on Principles and Methods. FLOOD site Project, T09-06-01. 1-178.
- National Disaster Management Organization (NADMO), (2010). Building a Culture of Disaster Prevention. Available at: http://www.nadmo.gov.gh/Articles

- /THE%20OFFICIAL%20NEWSLE TTER%20OF%20THE%20NATIO NAL%20DISASTER%20MANAG EMENT%20ORGANISATION%2 0(NADMO)%20NO.%201%20VO LUME%204%20JANUARY%20% 20JUNE%202010.pdf>.Accessed [20/02/2013].
- O'Brien, K., Sygna, L. and Huagen, E.J. (2003). Vulnerable or Resilient? A Multi-Scale Assessment of Climate Impacts and Vulnerability in Norway. Climate Change. 00: 1-33. Netherlands.
- Y.C., Yacouba, Okyere, Y. Gilgenbach, D. (2012). The Problem of Annual Occurrences of Floods in Accra: An Integration of Hydrological, Economic and Political Perspectives. Interdisciplinary Term Paper Zef Doctoral Studies Program 1-50.
- Oliver-Smith, A. (1996). Anthropological Research on Hazards and Disasters. *Annual Reviews of Anthropology*. 25: 303–328.
- Sam Jr., A.P. (2009). Focus: Flooding in Accra Research Report. [(online) Last updated 22:33
 CET)]. Available at: < http://www.modernghana.com/new s/223780/1/flooding-in-accraresearch-report.html>. [Accessed: 26-03-13].
- Shaw, D., Huang, H.H., Ho, C.M. and Lin, S. (2005). Modeling Flood Loss and Risk Perception. The Case of Typhoon Nari in Taipei. Socio-Economic System Division, National Science and Technology Centre for Disaster Reduction, Taipei, pp. 1-20.
- Tschakert, P. and Tutu, R. (2010). Solastalgia: Environmentally-Induced Distress and Migration due

to Climate Change among Africa's Poor. In T. Afifi and J. Jäger (Eds.) Environment, Forced Migration and Social Vulnerability. International Organisation for Migration. Springer, pp.57-72. World Health Organization (WHO) (2008). Floods in Western Africa:

Health Relief Arrives. Available at:http://www.who.int/en/. [Accessed. 12-02-2013, 16:04GMT].

Wong, K.K. and Zhao, X. (2000). Living with Floods: Victims' Perceptions in Beijiang, Guangdong, China. *Area* 33(2): 190-201.